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ISLE OF WIGHT NATURAL HISTORY AND ARCHAEOLOGICAL SOCIETY

Objects
The promotion and advancement of the study of the flora, fauna, geology and archaeology of the county.

Activities
The Annual General Meeting, General and Sectional excursions, meetings and lectures are arranged throughout the year.

Publications
Proceedings and *Isle of Wight Bird Report* are published annually. Bulletins and Programmes produced biannually. All publications are issued free to members.

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(Forms of application and other information obtainable from the General Secretary or society website: www.iwnhas.org)

Contents

A PRELIMINARY REPORT ON THE ARCHAEOLOGY OF CHALE MANOR, CHALE ISLE OF WIGHT.

Lisa Fisher, University of Sussex 2006.

In April 2006, I chanced upon a magnificent medieval building, complete with tithe barn and probable Elizabethan outbuildings. It would appear to be a complete, surviving farm of some antiquity, which is quite uncommon in the south east. I decided that further investigation was needed to attempt to date the building and to discover its medieval origins. In the summer of 2006 I returned with David Staveley, from the Brighton and Hove Archaeological society, to conduct a Geophysical survey. With the help of three additional members from the Isle of Wight Natural History and Archaeology Society, we completed two Resistivity surveys in the grounds of the house. This report is intended not as a final, conclusive report, but as a continuation of surveying methods already started by Alan Champion, in 2001. This report is the start of a buildings archaeology survey, which will result in further study and may possibly culminate in future excavations on site.

I am grateful to Simon and Helen Rodley, the current owners, for giving me permission to survey their house and for their ensuing enthusiasm and support. I also wish to extend my thanks to Dr. Alan Champion and his wife Sharon, without their help I would never have got this project off the ground. Their seminal book on Chale manor has been of enormous value to all involved. As the book has not been commercially published, anyone wishing to read further Historical information on Chale manor is advised to seek out the copy held by the IWNHAS library. I also am indebted to the members of IWNHAS who helped with the geophysics survey and with publishing this report, namely Mike Cahill, Richard Pratt, Jackie Hart and Alan Phillips. In addition, Rebecca Loader from the Isle of Wight County Archaeology services and Vicky Basford is also to be thanked for her support and help with this project and finally, David Staveley and his excellent 'Snuffler' software.

Site location and history

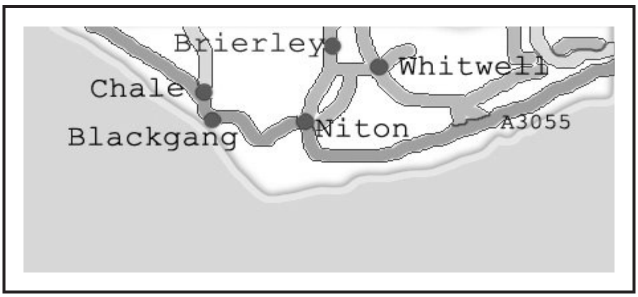

Fig.1. Location of Chale on the South coast of the island.

'Chale is a village on the southwest corner of the Isle of Wight, 8½ miles south-southwest of Newport and 7 miles west of Ventnor. It lies at the foot of the southwest slope of St Catherine's Hill, part of Chale Down, which is now owned by the National Trust. The Down is composed of Lower and Upper Greensand with a cap of Chalk and has sweeping views of Chale and Chale Bay.

The name Chale is derived from the Anglo-Saxon, coele, meaning ' throat' probably in the sense of a gorge or ravine, due to its proximity to the chine known as Blackgang Chine. The present manor house is described as being built circa 1330 and is one of the oldest domestic buildings on the Island.' From 'Chale – the Book', by Dr. Alan Champion and Sharon Champion.

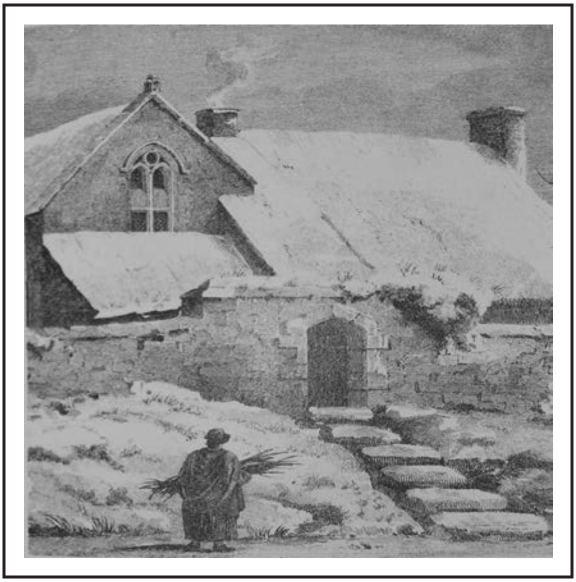

Fig.2. Early engraving of the manor from Sir H.C. Englefield, in The Beauties of the Isle of Wight 1816.

Chale Manor history

Chale manor nestles on the southwest slope of the St. Catherine's Down and with commanding views from the house it would have maintained an important seat on the island from an early age. Such views have changed little over the centuries.

Norman activity follows closely on the heels of the conquest and by the time Domesday was written, William Fitz-Stur held the manors of Chale and Gotten (from Domesday; IOW 6) when it held 1 hide for 1 virgate, land for one plough with four smallholders who have one plough and four slaves with one acre of meadow. It is thought that The Fitz-Sturs came over from Normandy at the time of the conquest, in the train of William Fitz-Osbern, William of Normandy's cousin. Fitz-Osbern was chief Lord of the Isle of Wight and he bestowed the manors upon his loyal followers, the Fitz-Sturs (Champion, p5.). William Fitz-Stur's daughter received the manors of Chale and Gotten as her dowry, when she married Hugh Gernon. Hugh Gernon is thought to have originally built a house on the site of the present stone building (although not proven to be Chale manor). He also built the church of St.Andrews in Chale in 1111 and 1112-3 (Champion, p.9) which gives evidence that he had a house in the vicinity of the church although its exact position is not known at present. He also added a manorial chapel to St.Andrews at a later date. In 1114, Hugh Gernon agreed to pay the church a proportion of monies he received from tithes, glebe lands and burials, saving that of his own house. Therefore, it is highly likely that the huge platform, which was cut out of the natural greensand slope where Chale Manor is presently situated, is, in fact, the original site of the manor house pertaining to Hugh Gernon in the early C12th. This is one of the main aims of the project, to determine where the original manor house stood and whether any archaeology survives to the present day.

The current building (figs.4, 5 and 6) was probably built as a 'hall house' in the1330's by John De Langford (Chief Lord of Chale), with an attached eastern annexe added at a later date. However, it is possible that the house was re-built (rather than a complete new build) by De Langford potentially on the site of Hugh Gernon's house and this may have incorporated building materials from an earlier phase (Champion, 2001 p.12). The main basis of this study is to ascertain whether there was, in fact, an earlier building on the site of the surviving 14th Century house or whether it is likely that the house was re-built with surviving C12th stonework incorporated into the C14th house.

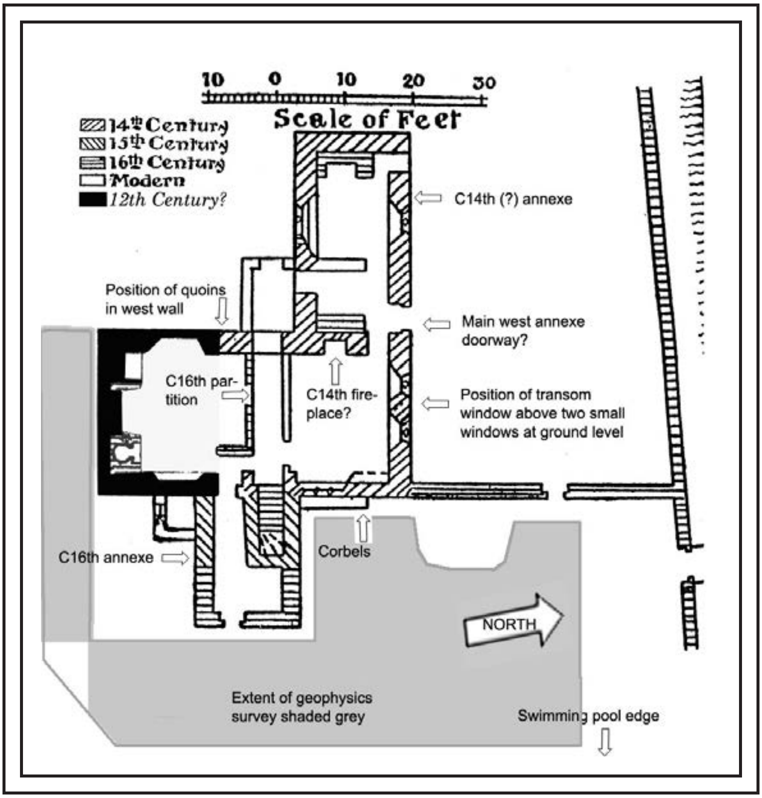

Fig. 3. Ground floor plan after Percy Stone, 1891.

There are possibly two periods of house building attributable to De Langford, which have some similarities in style to buildings at Carisbrooke Castle, as De Langford oversaw the building there too, as Chief constable of Carisbrooke. It is likely that he used the same stonemason, as there are architectural similarities between the two buildings using the same stone, mainly local Upper Greensand stone quarried on the estate and Limestone from the quarries at Binstead on the north side of the Isle of Wight (Champion, p.31). John De Langford died in 1342. The De Langfords held the manor for a few hundred years, until Anne Langford sold the estate to William Pounde, in 1521, by which time it consisted of ten messuages, 300 acres of land, 40 acres of meadow, 100 acres of pasture and 2 acres of woodland (Champion, 2001 p17).

Fig.4.The manor house looking at the south end

Fig.5. Looking towards the north gable.

In 1841, Colonel James Willoughby Gordon made extensive repairs to the farmhouse, including replacement of the entire roof, which was rotten (Champion, 2001, p.41) but which was described as being a 'splendid oak roof' but unfortunately none of it survives to the present day. This is very unfortunate as most buildings can be dated and analysed by looking at the roof structure and therein we lose our most dateable asset. By 1924 or thereabouts, the farm had been divided up into 6 smallholdings by the farmer, Fred Cheek, which was let to tenants through the Isle of Wight County Council (Champion, 2001, p.52).

Aims of the project

- Firstly, to trace any remains of a possible earlier building which is mentioned in historical documents and which precedes the present stone building, believed to have been built in 1330.
- Secondly, to investigate any other possible remains of outbuildings through geophysical survey and other landscape surveys.
- Thirdly to record and date any architectural additions to the current building over the years
- Finally the instigation of and completion of written reports for the IWNHAS Proceedings for public consumption, leading to a furthering of knowledge centred on the Manor of Chale.

House form and ground plans

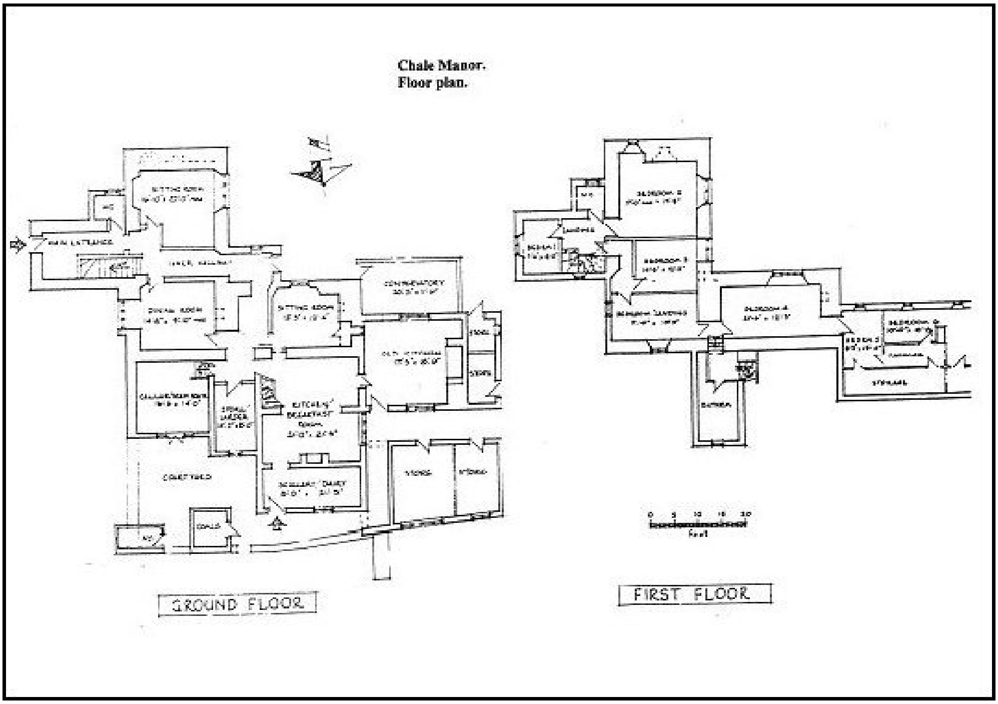

Fig.6 Architect plans prepared for the current owners, reproduced by kind permission of Simon Rodley

The walls

The walls are made of solid greensand of a ‘random rubble’ formation (Morriss,(2004) , p37), with the main medieval hall forming a central north/south alignment and having an eastern annexe and a western annexe. The eastern annexe is known to have been built in later years (post medieval) but it is not clear when the foundations were laid for the western annexe. It is likely that this extension was built at a later date than the main medieval wing although this is conjectural at this point and is subject to further investigations, although both Lloyd and Pevsner (2006) indicate that the western wing is medieval in date and Stone’s plan (1891) suggests that it is C14th in date. There are later additions to the house that have been added throughout the centuries, so we have a very convoluted ground plan (see fig.6). Until further investigations are carried out, it is difficult to ascertain the exact ground floor plan of the original house in medieval times, but there are three possibilities, which are outlined in this report. The first phase may have been built by Hugh Gernon in the C12th, as a single bay house. The second phase may have involved the re-building of the C12th remains by John De Langford in the early C14th to provide a two bay plan. The third phase may be the addition of the west annexe to create a three bay, L- shaped plan.

The hall has a very impressive and substantial mullioned and transom window in the north-facing wall (fig.7). The doorway into the western extension (see fig.17) is not substantial enough to have been an original doorway and in all probability was created to provide an opening between the main hall and the extension. However, Lloyd and Pevsner (2006) suggest that this doorway has been restored which may well have compromised its original proportions. In addition, the roofline of this extension is lower than the main roofline of the original hall. This in itself is not necessarily indicative of a later build but it adds weight to the theory, although sadly lacking in dateable evidence. There are further extensions which have been added to the building throughout the Elizabethan and later periods, but this report is dealing specifically with the early medieval construction only.

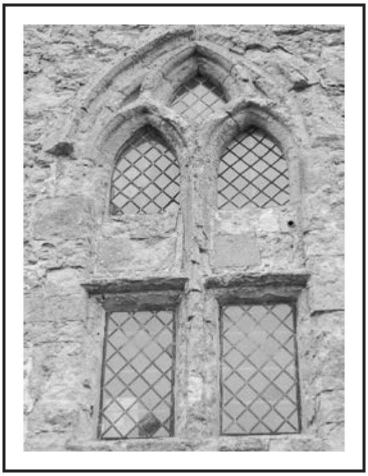

Fig.7. The transom window.

Three corbels on the east wall (figs. 8 and 9) may have supported a timber-framed extension. However, after visiting the site and talking to the present owners, they informed me that the wall had been re-built in the Victorian era to incorporate a bay window. It is likely, therefore, that the corbels are not in their original position. The only evidence for their previous position comes from an article in the journal the *Proceedings of the Association of British Architects*, Vol.2 (1846), which states that the corbels were placed at the summit of the wall, thus indicating a possible timber frame extension at the same height as the existing building.

An early engraving by Sir H. Englefield (1816), which predates the Victorian re-building of this wall, shows that there was an arched doorway in the east wall, although it is not certain that this was a real doorway or merely artistic licence. The present entrance is a modern addition, currently in the west wall which leads down a cross passage to the east stairwell.

Fig.8. One of the corbels in the east wall.

Fig.9. The east wall with corbels.

It is possible that the great hall was not, in fact, a great hall but a smaller house; there is evidence that the original building may have only been one bay in size (see fig.10), possibly with a first floor above. It is true that floor plans of single-bay houses do exist (Barley, 1961, p.18) but it is unlikely that a manorial house would have initially been so small. Whilst laying a flagstone floor in the south end, workers taking rubble out of the floor area uncovered a substantially compacted, clay floor, which appeared to be the original floor level. Beyond this, they found what looked like a wooden beam slot, which ran between three stone post pads (this I have concluded from the description). This could have been evidence for an internal wall. The beam was approximately 6" wide and maybe not substantial enough for a supporting wall, but may possibly provide evidence of supporting stone columns or timber framing for a floor level above (Cave, 1981, p.36). The beam slot ran parallel to the south wall, in line with the current west wall window.

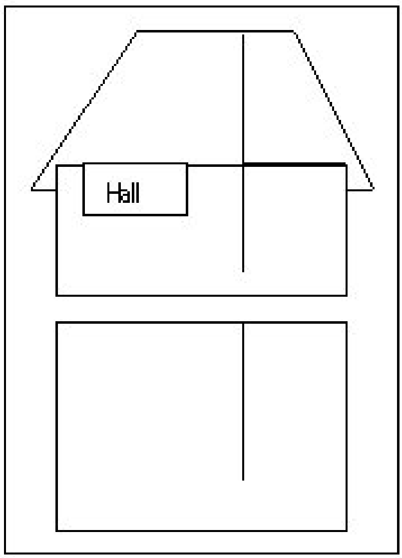

Fig.10. Single bay hall with combined solar/service with timber partition.

Certainly, during my first visit, I noticed some rather substantial quoin stones, which appeared to be situated in the middle of the main west wall, rather than defining the corner of the house, which does not make sense (see fig.11 and 12). It is the positioning of these two lines of quoin stones that give away the most tantalising evidence of the original floor plan. Certainly, both M.W.Barley and Lyndon Cave discuss the plan of first floor, stone halls in their respective books, which make for interesting reading, as there are strong parallels with Chale.

Fig.11. The quoin stones in the west wall.

Fig.12. Quoin stones are clearly not in the corner.

It would appear that the quoin stones in the west wall define the corner of a one-bay house, the length of this being approximately 20ft, which does conform roughly to a one-bay measurement (see Addy, 1961). There is no other reason for such substantial stones being placed there. Sadly, it is not possible to see if the quoin stones also appear in the east wall, as plaster on the interior obstructs the detail and the outside wall has the eastern extension built around this area. If the one-bay theory is correct, this then points to a massive re-building of the whole house, with the north gable end being effectively torn down with the east and west walls extended to twice the length. This would then expand the house to provide two-bays (fig.13), with the transom window being inserted in the north wall at this point in time**.** To add weight to the theory, there is a curious line of masonry in the west wall, which looks like the wall was levelled off at this point with additional re-building added above this point. There is no reason for this flat line of masonry, other than re-building or a flat stone lintel being originally inserted at this point to accommodate an exterior staircase. If it is true that the original north wall was torn down, it was replaced internally with a timber frame partition on both levels; upstairs and downstairs. A stone wall has been inserted downstairs, but not in line with the original north wall, set back from the original line of the gable end. This would have provided space for a cross-passage and if this is the case, the house at this point in time may have provided two distinct areas; the enlarged hall end with the transom window and a service end accommodating a pantry and buttery.

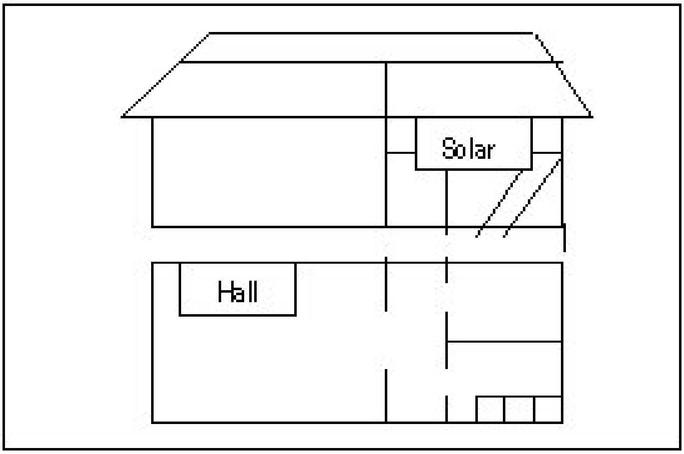

Fig.13. Two bay hall with combined solar/service bay and cross passage.

The other possibility is that the west annexe was built at the same time that the original north gable wall was torn down. This means that the main house was extended to provide an L-shaped hall house (see fig.14), with both service ends and solar flanking the open hall in the middle. L-shaped floor plans were not as common as rectangular plans but it is a strong probability.

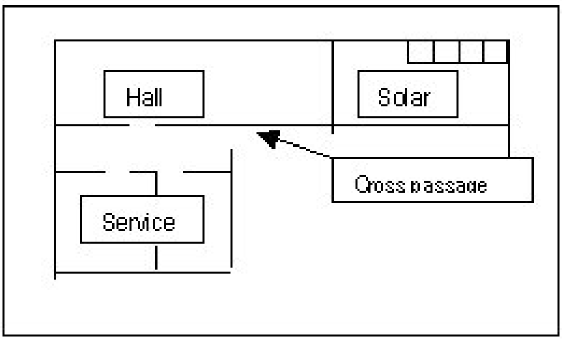

Fig.14. Three bay L-shaped hall with hall flanked by a service end and a solar.

It should also be noted for the record that at one point in recent history, there was a stone mason working on the site. There are numerous lumps of worked stone lying randomly around the garden which I initially got rather excited about. These should be disregarded as they probably have no connection with the re-building of the house and are probably the remnants of worked stone discarded when the mason left the site, although it is difficult to prove.

The staircases

In the southwest corner, an internal staircase was discovered, although with the present interior walls plastered it is hard to determine if there was originally a first floor inserted when the building was built or whether this too, was a later addition. It is a possibility that the internal staircase, discovered during renovation, was added to the room to provide sleeping accommodation above. However, the layout of most hall houses during the high medieval period provided service rooms (buttery and pantry store rooms) at one end, with a solar (or sleeping accommodation) at the other end (see fig.15). Access to sleeping rooms were not usually through the service end; there was a strict hierarchy of 'high end' and 'low end' in open hall houses but this was usually dependent upon having at least three bays to provide the solar end, a main hall in the central bay and a service bay at the other end. It is not yet clear which end of the house at Chale is the high end and which is the low end, if at all.

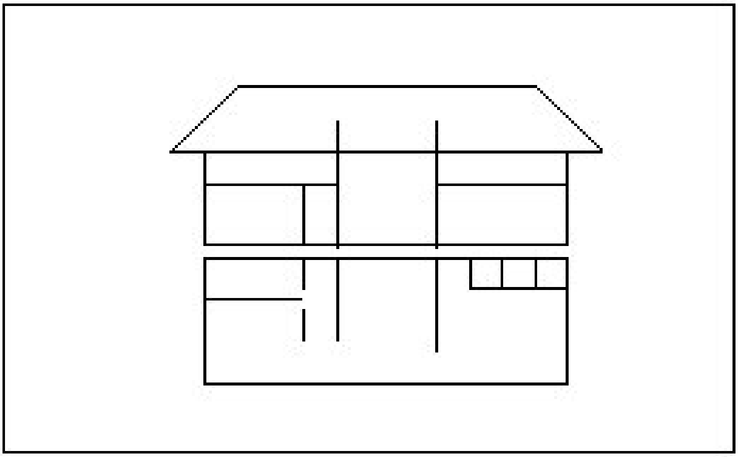

Fig.15. Three bay hall with separate solar and a service end flanking the hall.

Although, as previously mentioned, I could see some evidence for an external staircase on the west wall there is no documentary proof to back this up, but it is an interesting theory that should not necessarily be dismissed and needs further investigation. If there were to be such a staircase, there would need to be a doorway into the first floor and there is no evidence for this, although there is an original window on the first floor in the right position for a doorway, which has since been blocked up and a later, Tudor window, inserted in place (fig.16). However, it appears to be too narrow for a doorway but further investigations in this area may prove that the original aperture was wider (at first glance a wider aperture can be seen around the periphery). It does look like the Tudor window was inserted and the masonry below gives tantalising glimpses of the possible removal of a flat lintel, which may have been at the top of the steps. This is purely conjectural at this point in time and so we should record this as being a window, as Lloyd (2006) suggests, describing it as an original small single light in the west wall of the upper floor of the main range, recently reopened. Only the exterior glass surface has been re-opened and it is still blocked up on the inside, with no view through it. However there is also a flat plinth at the corner of the south-west wall which looks like it may have been a post-pad to support something weighty. Could this be an original plinth for an external staircase?

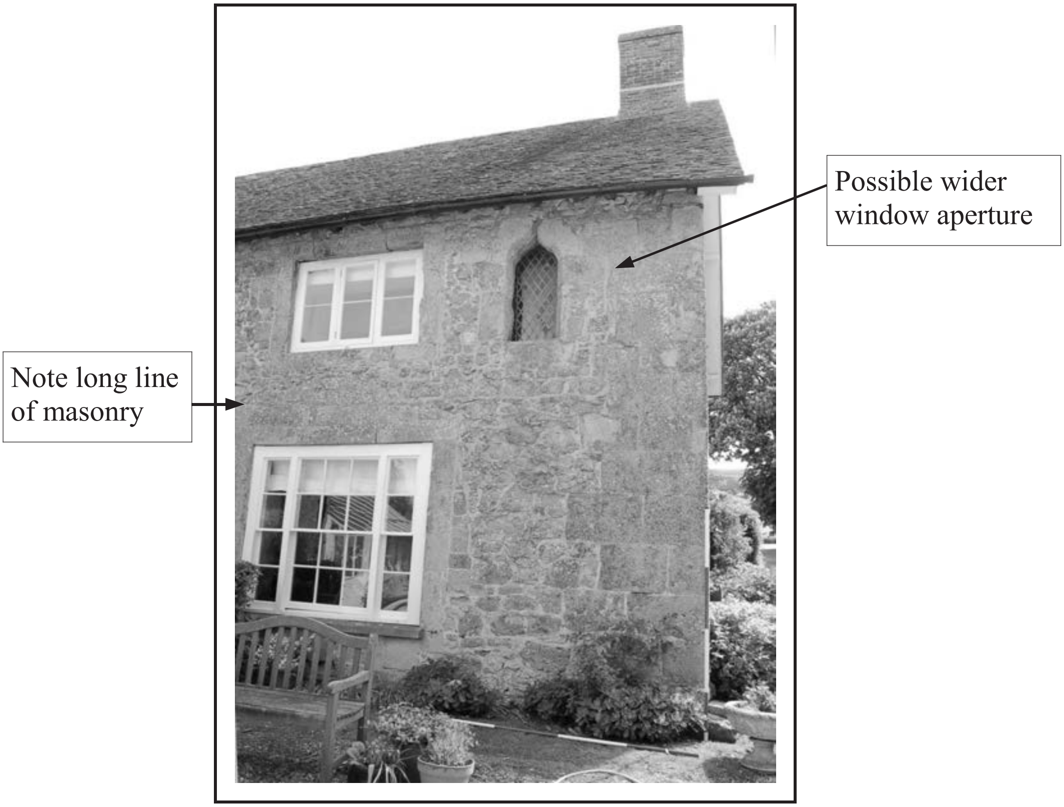

Fig.16. The 'blind' Tudor window.

The doorways

It is unclear as to where the original doorway to the postulated C12th building was positioned. As the house has been subjected to numerous renovations and re-buildings, in all likelihood the original doorway has been removed, built over or filled in. If the house is originally a one bay house, the doorway is likely to have been positioned to one side of any wall. Doors were generally positioned at the end of cross passages in hall houses, which minimised any through draughts using the protection of internal partitions. If the house was extended to a two bay house with an added cross passage, it is likely that the original doorway would be hidden underneath modern extensions. This would be on either the east wall or the west wall, both of which are currently not visible and covered by plaster.

It may well be that if the house was re-built in the 14th Century as an extended L-shaped, three bay house, then a 'new' main doorway may have been placed in the west annexe north wall during the C14th extensions. This doorway (fig.18) is a more likely candidate for an external doorway; certainly, it has more weathering around the stone archway and must have been an outside entrance at some point in time. The position of it would also allow for a cross passage with an internal partition and associated service doorways. However, the implications of this would mean that the chimney breast was added at a later date, into the cross passage area. It is interesting to note that the doorway has very little decorations; mouldings and chamfers are very simple and form a basic two-pointed arch, typical of the 14th Century (Brunskill, 2000, p138).

A final contender for the C14th doorway may be the blocked up arched door in the east wall that was recorded by Sir. H.Englefield's line drawing from 1816. However, there is also another possibility that the doorway stood in the middle of the east wall before the extension was built, as recorded in another line drawing by Percy Stone in 1891. This drawing is more likely to be conjectural, based on Stone`s assumption that if you removed the extension, you would find the original entrance, which was later re-used as the doorway to the stairwell. On the other hand, Englefield's engraving was drawn from existing masonry and form. This evidence is also strengthened by a mention in the journal *Proceedings of the Association of British Architects*, Vol.2 (1846), which states "Externally, on the east are traces of an arched door, built up…" I would suggest that it is possible that this doorway in the east wall was used purely as an entrance into a timber-frame extension, perhaps used as a kitchen. Sadly, the doorway no longer exists as the Victorian re-building of the wall obliterated any traces remaining, and with the corbels being re-positioned we cannot be sure whether they did support an extra roof or whether they were re-used stone from an earlier phase.

Fig.17. The west wall doorway.

Fig.18. The western annexe north doorway.

Equally confusing is the west wall doorway on the ground floor (fig.17), already mentioned above. This has been restored, which can clearly be seen by the new blocks of masonry surrounding the aperture. Because of this, there is a lack of datable evidence and it is not known whether this is a later doorway or a restored medieval doorway. On the eastern extension wall are two interesting doorways (fig.19). In most medieval halls there were usually two such doorways into the service end of the hall. One led to a buttery and the other to a pantry. However interesting these doorways may appear, they are in the wrong position to be service doors. They are placed at the side of the house, rather than at one end and ground floor plans matching this in the medieval period are not common. In addition to this, it is known that the right hand doorway was added when a modern extension was built to house a toilet on the side of the post medieval extension. However, we should not rule out the fact that the left hand doorway (fig.20) is the original C14th entrance, before the stairwell was built.

Fig.19. The later double doorways.

Fig.20. The post medieval staircase.

The fireplaces

At a later date, a fireplace was built with a chimney breast added on to the outside west wall. (Fig.21 and 22). There is evidence for the chimney breast being built at a later date, with Tudor bricks inserted into the back of the chimney, providing space for two fireplaces; one downstairs and one upstairs and this is likely to be a later addition. I think it likely that the large stones placed in an arch define the first phase of that fireplace and may well date from the C14th when the house was extended. Other fireplaces in the house post date the C14th re-building.

Fig. 21.The back of the chimney breast.

Fig.22. The early stone fireplace.

The geophysics survey

A Resistivity survey was conducted (figs.23-26) around the house and in the top field to the East of the house to ascertain whether there were any other areas of archaeological interest around the perimeter. It is possible that Hugh Gernon's original 12th Century house may have been of timber frame construction, built in a different orientation or location to the present manor house. The survey was conducted between the 8th and 9th July 2006, with the help of David Staveley from the Brighton and Hove Archaeological Society. In addition, three members of the Isle of Wight Natural History and Archaeology Society (IWNHAS) helped with the survey. One member, Richard Pratt, conducted a magnetometer survey of the top field (fig.26), using a meter that he had designed and built himself. The results for this are pending.

Fig.23. Laying out the grid by the house.

Fig.24. David Staveley conducting the resistivity survey.

Fig.25. The top field survey.

Fig.26. Richard Pratt with his magnetometer .

The Resistivity results around the house (fig.27) proved fairly inconclusive, although there is a curious area of high resistance (shaded white, with low resistance black) to the bottom right of the results that may prove interesting. A small trial trench may add to our knowledge about this area. The rectangular area of high resistance in the middle is a waste water tank and is not archaeological. However, it is the results in the top field (fig.28) that appear to show more features and it would be useful to put a few test trenches in this area to try and interpret the data retrieved from the survey. Lots of burnt material was found in this area when the ground was being excavated for a swimming pool so further investigation would be useful there. Trenches need to be identified and permission sought from the owners to put this plan into action. Furthermore, additional artefacts recovered from excavation would give more dateable material, hopefully indicating earlier activity on the site, or not, as the case may be.

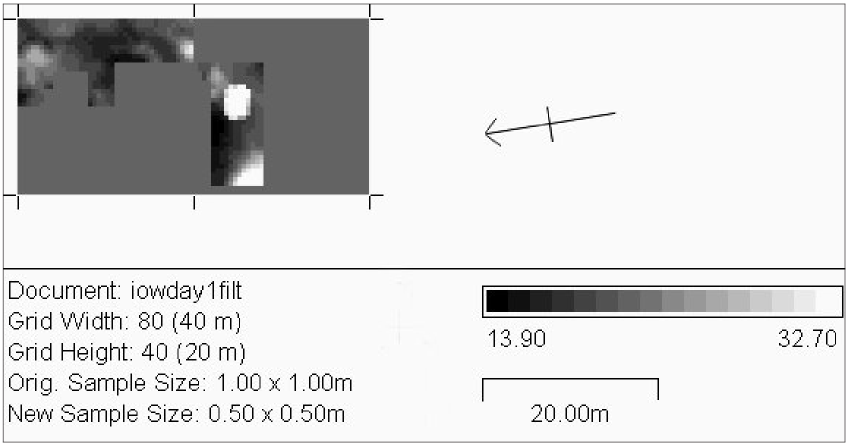

Fig.27.Filtered Resistivity survey results from the house area .
(by kind permission of David Staveley).

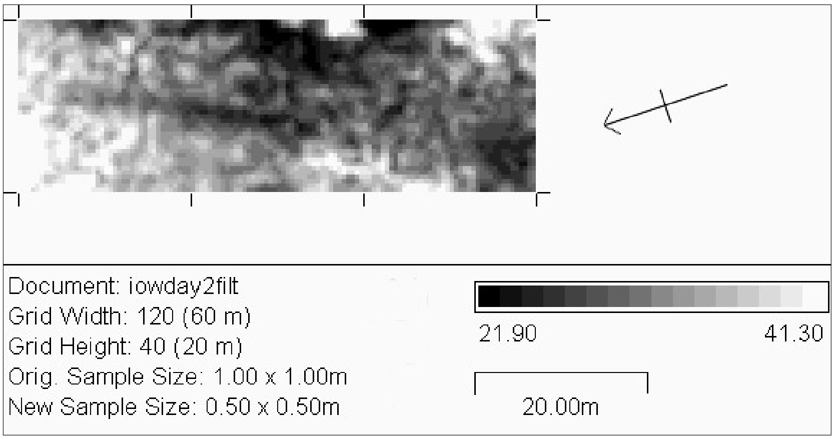

Fig.28.Filtered Resistivity survey results from the top field.
(by kind permission ofDavid Staveley).

Artefacts

These photographs show only a small percentage of the finds that the owners have recovered over the years. These are included for the purpose of dating and represent a small sample of artefacts which define various activities on the site in the medieval period. Other finds were inspected by the author and include various pieces of cooking pot dating from between 12th- 14th Century, as well as post-medieval pottery and clay pipes. The nicest sherd seen was a French Import from the Saintonge pottery in France. Most typically known as a ‘parrot beak’ jug (fig.33), this would have been a high status piece of imported ware from the 13th Century onwards. This could give us evidence of an earlier house on the site although these jugs were certainly being imported for a couple of centuries. Without further evidence, it is difficult to use this pottery assemblage for direct dating of the site.

Fig.29. 14th Century rod handle from jug.

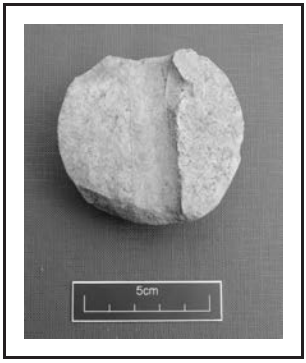

Fig.30. Loom weight, date unknown at present

Fig.31.Rim sherd from cooking pot, .

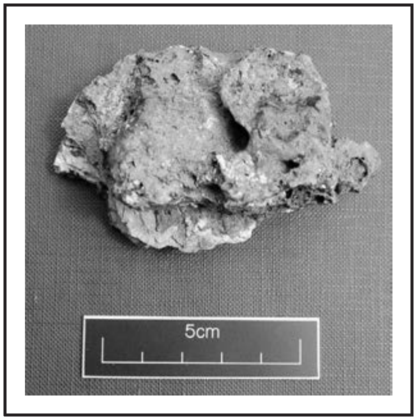

Fig.32.Burnt material from the top field.
13/14th Century

Fig.33. Saintonge jug from the London Museum,
late 13th Century

Conclusion

As this project is ongoing, it would be foolish to attempt to resolve issues of original ground plans and dating on the site. However, there are some areas that are clear and other areas that demand further inspection and some speculation. It may be that future historical searches should be conducted to investigate any possible ecclesiastical connections that the house may have; St.Catherine's oratory is but a stone's throw from the house on St.Catherine's down above. It is true that the strange, single bay layout of the original house is similar to some ecclesiastical buildings in the south east of England (see fig.34), although no documentary evidence for any ecclesiastical connections has been discovered by the author to date. The house does have a direct connection with the tithe barn; whether this barn was used to collect tithes for the lord of the manor or for the church is also not clear and additional research would prove beneficial here. There is a similar manor of the same date built at nearby Swainston, between Newport and Freshwater and it may be worth comparing the two buildings for similarities, as well as investigating any similarities that may occur with the great hall at Carisbrooke Castle.

Fig.34 – Michelham priory, East Sussex.

The transom window in the north wall is curiously elaborate for such a small house and appears to be somewhat out of character for what is, ultimately a simple building devoid of carved stone window mullions or doorways. It is possible, of course, that the original windows to the other walls used similar, elaborate mullions but as these have been replaced it is difficult to use the windows for any kind of evidence for dating. There is no elaborate façade; in fact it is not even clear which is the 'front' of the building or if there is necessarily a 'high end'. Most medieval buildings fronted the road in a lengthwise fashion, in accordance with the burgage plots of the day. This does not follow that orientation, with the north wall fronting the small lane next to the house, however it is likely that the house was positioned to be seen lengthwise from the main Chale Green to Chale road. The placing of the window in the North wall is also strange; it is not low enough to see out of at ground floor level, necessitating the additional windows placed at this level. This would suggest that the window was originally placed at first floor level, purposely, as there is also a window seat here. The middle portion was obviously blocked off later, when the ceiling joists and the additional floor in the roof space was added, possibly in

Elizabethan times as the later windows at this level date from this period in time. If the house was an open hall house, the window is placed in a peculiar position, suggesting that it was a first floor hall house. If this is the case, it is not clear how the hall would have been heated as the chimney breast inserted into the building on the ground floor is probably a later addition. However, first floor fireplaces are known from the C13th (Barley, 1961, p.18).

At present, it is my belief that the original ground plan of the early 12th Century medieval stone-built house was that of a single bay. It may have had an exterior stone staircase leading to a first floor, as defined by Brunskill (1982, p.35) although it is not clear why a manorial seat would have initially been built to such a small scale (see fig.35), unless it had an attached timber-frame hall.

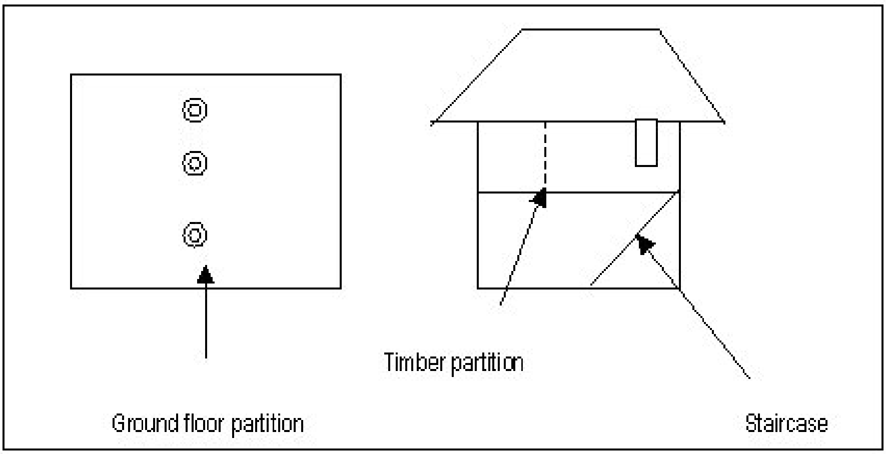

Fig.35. Plan and form of one-bay house

The ground floor area of first floor halls was often divided into two rooms, which may explain the beam slot found during renovations. Early examples from the C12th still exist in Lincolnshire, Wales, the Marcher counties and Canterbury, notably researched in Lincoln through Barley's work (1961, p.18) and Cave (1981, p.34-37). Heating a first floor hall would prove difficult but known examples in Lincoln (sometimes called 'King John's Houses') have evidence for fireplaces in side walls. This may have been the case at Chale, but with renovations potentially destroying any surviving evidence. This may well have been the simple house first built by Hugh Gernon (though unlikely), which was extended and re-built by De Langford two hundred years later. However, the other theory put forward by Lloyd and Pevsner (2006, pp117) suggests that the main C12th building was a solar bay, with an attached timber-frame hall running off the east wall with access given by the two stone service doors. This of course is another possibility but this would suggest that the width of the stone-bay house was only 15 ft wide, which is very narrow for a hall house. Also the lack of corbels on the south east wall would not really support this theory, unless the this wall was torn down in the raids and re-built, incorporating the corbels in the wall further north. Furthermore one of the stone doorways is modern and the other does not line up to be within the boundaries of the stone bay, as delineated by the walls and quoin positions. It has to be part of the later 14th Century re-building. The geophysical survey would also seem not to support this theory; no evidence of foundation trenches or supporting stone foundations could be found and neither were uncovered when the swimming pool was built to the east side of the house. In addition, a large platform to the east of the house was excavated when the pool was built; if a timber-frame extension had once stood in this area it would not have been possible as the slope of St.Catherine's down extended towards the house in this area. A large timber-frame hall would have needed a flat platform to build upon and this was not evident before the pool was excavated.

I would postulate that a more likely scenario is that a timber-frame building was attached to the stone-built bay heading in a northerly direction (see fig.36). This wall may have originally contained the corbels which were ripped down in the raids, potentially. The enigmatic quoins in the west wall would support this theory and the lack of a stone wall abutting these quoins in the north wall would be explained by the re-building theory. When the building was re-built, the stone and corbels were incorporated into the extension of the east wall. If this is the case then sadly there would be no visible archaeology as it would be directly under the present building, as well as under the undercroft and north yard (currently laid with bricks).

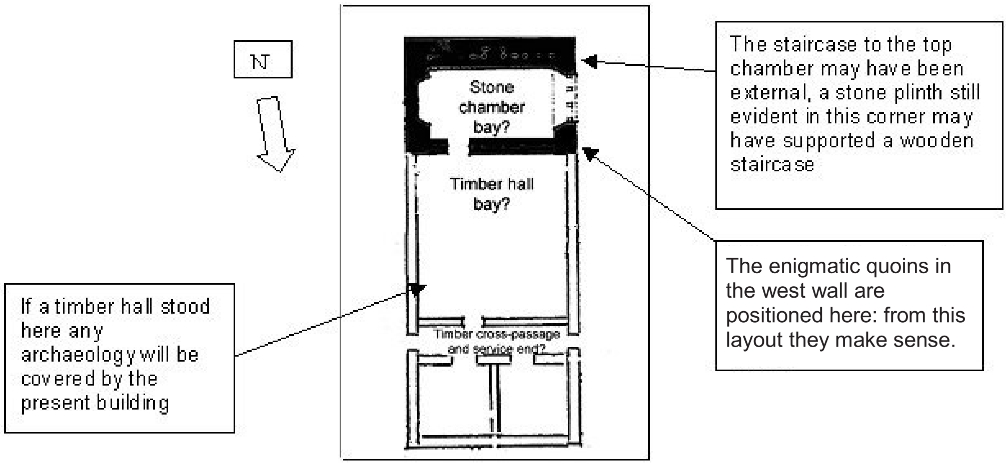

Fig.36. Conjectural ground plan of Hugh Gernon's 12th Century hall house

If De Langford re-styled the house in the 14th Century so that it became either a two-bay or three-bay (L-shape) hall, we do have the clear evidence for this. I would suggest that we do have the remains of Gernon's 12th Century stone bay from the larger timber hall incorporated into De Langford's re-building. Whether De Langford's extensions stretched to an L-shape plan in one phase is not certain, but I would postulate that ultimately the L-shape plan was built by De Langford. Future work needs to resolve the issue of the ground plan and whether the L-shape was built in one phase or two. It may be that this information cannot be picked apart due to the amount of re-building that has occurred on site.

If the original roof had survived, then the story would probably have been explained by now as this is the most valuable evidence for the history of an individual house. It may be that the full story is never revealed but we can at least preserve the record so far for future Historians and archaeologists to add to. What remains is that Chale manor has proven to be an archaeological delight; it is one of the oldest buildings on the island and its origins date from the C12th, which is extremely rare. Without doubt, Chale is one of the most precious and important buildings to have been studied and it is hoped that further research and archaeological investigations will reveal more of the story.

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THE STAG BEETLE. *Lucanus cervus* (L.)

Bill Shepard

A Practical Handbook of British Beetles, by Norman H. Joy, published in 1932, is still the standard work on the Coleoptera, although various sections have been updated."The distribution of this species is given in this work as "North to Lincs; Local. In roots of tree stumps.

A more comprehensive account of this species is given in "Beetles of the British Isles," by E.F. Linssen, published in 1959. Agreeing with the distribution as described by Joy, but adding that the species is local in France and Germany and protected in the latter. "It is a species which the natural history societies should record in the greatest detail so that the ever-recurring discussions about its distribution could result in something conclusive."

As far as the Isle of Wight is concerned so conspicuous a species has been recorded for more than a century, and reports have increased during the past quarter of a century. Morey (1909) describes it as "not common" , giving just three locations: just outside Newport, near Yarmouth and a specimen picked up on the sea front, Cowes. R.M. West (1926-36), records a single specimen from Spencer Road, Ryde. J.W. Saunt, writes in the Proceedings of the I.W.N.H.& A.S. 1948, "As the distribution of the Stag Beetle has been the subject of papers in the Entomological journals from time to time, I would point out that I have had three male specimens brought to me from West Cowes. I have also seen a female that was taken at Woodside".

Lucanus cervus disappears from our records until July 6, 1987, when a male specimen was picked up in Cowes. From that date specimens have been reported almost annually, but always from the north of the Island and none further south than Newport. A century had passed with sporadic recordings of this species, but no confirmation of breeding on the Island. With all the records relating to the north of the Island, by general consensus it was believed that the specimens had crossed the Solent from the New Forest.

July 27, 1989. came a call from Westwood Close, Cowes, to identify some large larvae and pupae discovered in a long dead Elm stump that was being sawn up for disposal. There was no doubt these were *Lucanus*, but a request to leave the log until adults appeared was agreed and eventually both male and female were reported. The first authentic record of breeding on the Island. This record was repeated in 1993, when an old tree root was removed in the grounds of the Royal Corinthian Yacht Club at Cowes.

There is another species, the Lesser Stag Beetle, *Dorcus parallelipipedus,* L. which can be confused with *Lucanus*, but only with the females, the sizes overlapping. The Lesser Stag Beetle has been recorded from all districts of the Island, but why not *Lucanus* ?.

There is a parallel to the mystery of its distribution, for Linssen, 1959, writes, "The Stag Beetle could well serve as the insect emblem of London. However, it would be most interesting to learn in what parts of the London area it is most plentiful for it seems to be found only south of the Thames."

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LEAF MINING ORGANISMS NOT PREVIOUSLY RECORDED ON THE ISLE OF WIGHT

Dr D.T.Biggs

Since the publication of the last list of newly found leaf miners (Biggs, 2007) two new leaf mining moths have been found and four new leaf mining Agromyzid flies.

DIPTERA

AGROMYZIDAE

Agromyza myosotidis, Kaltenbach, 1864 on Narrow-leaved Lungwort, *Pulmonaria longifolia*

At the first Society fungal meeting of the year at Fattingpark Copse SZ5291 3.10.2007 Margaret Nelmes had disappeared for what seemed a long time but at last reappeared bearing a Lungwort leaf which had along its edge a short narrow corridor leading to an elongated large blotch, the whole mine being a fox-red. Luckily the mine contained a larva in a reddish-brown puparium, the posterior spiracles of which were found on microscopy to have three respiratory bulbs, enabling identification to species. This fly is known to also mine the leaves of *Myosotis, Pentaglottis, Symphytum* and possibly other genera in the Boraginaceae. It is described as local in England and is also found in Scandinavia, Germany, Poland and (oddly) Ethiopia. The larvae mine from May to November in two generations.

Agromyza sulfuriceps Strobl, 1898 on Raspberry, *Rubus idaeus*

Dave Dana found some leaf mines on Raspberry plants in his garden at Wroxall SZ551802 15.5.2007. Each mine was a narrow upper surface corridor which gradually expanded into a relatively wide elongate blotch. The mine was a slightly paler green than the rest of the leaves and contained frass in two distinctly rows. This fitted with the description of the mine caused by the larva of this fly but a puparium had to be examined to be certain. These first mines had been vacated. At my request Dave sent me others throughout the season until eventually I was able to examine a puparium and confirm that its posterior spiracles had six bulbs. This fly is described as probably widespread but local in England and widespread in Europe. Its hosts are members of the Rosaceae, particularly, *Filipendula, Fragaria, Potentilla, Rubus* and *Sanguisorba.* In the Midlands it favours Raspberry. This is another fly which is bivoltine, mining in early summer and again in early autumn.

Phytomyza sedicola Hering, 1924 on Navelwort, *Umbilicus rupestris*

I visited the Navelwort site at Beacon Alley, Godshill 5.6.2007 to confirm the continuing presence there of the Navelwort Rust and was surprised to find several leaves of Navelwort with long, winding and branched upper surface corridors containing sparse frass in pearl-strings and separated grains. The first English record of this fly was from Keswick in 1931. It is now described as local in England and found mainly on Orpine, *Sedum telephium.* It is widespread throughout much of Europe on flat-leaved species of the Crassulaceae. The larva mines from May to July.

Phytomyza symphyti Hendel, 1935 on Common Comfrey, *Symphytum officinale*

This is another Dave Dana find, this time from Marvel Farm, Newport SZ502872 18.6.2007. Yet another marginal upper surface corridor, brick-red, with rather odd cul-de-sacs and later broadening into a blotch. A yellowish-orange pupa was present on the under surface of the leaf. The frass was in separate grains. This is another bivoltine fly with the larvae feeding June to August and again September to October. The fly is described as local but widespread in England. In mainland Europe it also mines *Echium* and *Lithospermum*.

LEPIDOPTERA

NEPTICULIDAE

Ectodemia heringella (Mariani, 1939) on Holm Oak, *Quercus ilex*

Osborne SZ517949 3.2.2007

On this date I was on the Osborne estate and decided to inspect an old plantation of Holm Oak which I had never entered before. I was very surprised to find that every visible leaf of every tree had the multiple small upper surface corridor mines of this moth. Two weeks later I did a full survey of all the Holm Oaks on the estate and found the great majority of the trees affected and I knew for certain that most of these had not been affected in 2006. I have now found the mines in six of our ten 10-kilometre squares but not yet at Fort Victoria where there is much *Quercus ilex.* Until 2001 this moth was only known from Mediterranean islands, Corsica, Sardinia, Sicily and from Italy, the old Yugoslavia and Greece. A moth of this species had been taken in South Kensington in 1996 but not identified until 2001. It was then found mining in the gardens of Buckingham Palace. By 2005 it was still only known from Greater London but by mid-2007 it had been recorded along the south coast from Hampshire to Suffolk and from Middlesex, Surrey, Hertfordshire and Cambridgeshire. Dr John Langmaid kindly confirmed the identification of this miner for me. There are often many mines on one leaf, the corridor initially very winding and close together and often confined to the angle between the midrib and a secondary vein. The corridor later straightens out and the terminal larval chamber is wider and distinctly transparent. I have since found this mine also on Lucombe Oak, *Quercus crenata.*

COSMOPTERIGIDAE

Cosmopterix pulchrimella Chambers 1875 on Pellitory-of-the-wall *Parietaria judaica*

Shanklin Chine SZ58438107 22.12.2006

This moth first appeared in England in Dorset in 2001 and then in Cornwall in 2004. Its original range was from France and Switzerland through southern Europe to Yugoslavia and Greece. The larva mines the leaves of Pellitory-of-the-wall producing relatively large bright shiny white inflated blotches on the leaves. The first English reports suggested that it only mined north-facing plants growing in shade, often in rock crevices or caves.

So finding myself in Shanklin just before Christmas in 2006 I decided to look for the mines at the foot of (the closed) Shanklin Chine where I knew the plant was likely to grow and where there would be shaded sites. I soon found three large mines, one still tenanted with a larva, and several smaller ones. After Christmas I found more mines alongside the path above Steephill Cove and also at two sites in Bonchurch. Despite regularly searching the plants at Fort Victoria and on the Royal Yacht Squadron building at Cowes no mines have been found there yet. By mid-2007 the moth had been found in Cornwall, Devon, Somerset, Dorset, Kent, Sussex and Berkshire.

Again Dr John Langmaid confirmed my identification.

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GLANVILLE FRITILLARY LARVAL WEB SURVEY

Andy Butler

In 1979 and 1980, D. Simcox & Dr. J. Thomas, who worked for the Institute of Terrestrial Ecology, carried out a detailed study of the Glanville Fritillary, *Melitaea cinxia L*. at all its known breeding sites in the Isle of Wight. To arrive at an estimate of population numbers, they decided that the most reliable method would be to count the larval webs in spring and autumn; for a more detailed description of this and the life cycle of the butterfly, see:- IWNHAS Proceedings Vol VIII Part 2, " The status of the Glanville Fritillary in the Isle of Wight" by C. R. Pope.

In April 1982, Dr Thomas held a two day symposium on the Glanville for the IWNHAS and from this initial discussion it was decided that members of the Society would carry out a survey, using the method initiated by Simcox and Thomas and starting in 1983. This duly happened, but with the decision that only the Spring webs would be counted. This Survey has continued to the present day with only one year being missed, which was 2001 due to the Foot & Mouth restrictions.

The purpose of this paper is to put the results of each year`s counts into the Proceedings up to 2007 and henceforth each year results will go in to the appropriate issue. The only table missing, other than 2001, is that for 1985 due to the only copy being indecipherable.

Over the years, some of the routes mapped out originally have changed due to coastal erosion and in fact some Sites have disappeared completely. It is intended to review the ites and adjust the tables accordingly. An interpretation of the figures gathered so far will be discussed in a future paper.

Grid References

Site 1 Compton Chine to Shippards Chine SZ368853-377842

Site 2 Shippards Chine to Brook Chine & East to Sudmoor SZ377842-395826

Site 3 Sudmoor east to Chilton Chine SZ409821-395826

Site 4 Chilton Chine east to Grange Chine SZ409821-420817

Site 5 Shepherds Chine (Atherfield) SZ442801-449795

Site 7 Rocken End to Castlehaven SZ490758-505755

Site 9 Binnel Bay (St Lawrence) SZ511755-520757

Site 12 Bonchurch Landslip SZ582782

Site 13 Redcliff SZ618853-625855

GLANVILLE FRITILLARY LARVAL WEB SURVEY

Survey Date 1983	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
03/04/83	**A**	57	N/r	F&MH
03/04/83	**B**	90	"	"
	C	N/r	"	
12/04/83	**D/E**	18	N/r	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
11/04/83	**A**	0	N/r	O&DF
11/04/83	**B**	4	"	"
11/04/83	**C1** combined	31	"	"
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
11/04/83	**A**	21	N/r	O&DF
11/04/83	**B**	0		"
4. CHILTON CHINE EAST TO GRANGE CHINE				
09/04/83	**A**	28	N/r	J&MC
09/04/83	**B**	1	"	"
09/04/83	**C**	12	"	"
09/04/83	**D**	0	"	"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
14/04/83	**A**	0	N/r	RH
14/04/83	**B**	70	"	F&ML
7.ROCKEN END TO CASTLEHAVEN				
15/03/83		29	N/r	AW
9.BINNEL BAY [ST.LAWRENCE]				
08/04/83		52	N/r	CNP
12. BONCHURCH LANDSLIP				
?/04/83		0	N/r	JC
13. REDCLIFF				
07/04/83		29	N/r	C&JP

Survey Date 1984	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
07/04/84	**A**	180	N/r	F&MH
10/04/84	**B**	155	"	"
	C	N/r		
10/04/84	**D/E**	88	"	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
08/04/84	**A**	63	"	RH
	B			
15/04/84	**C1**	49	"	"
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
16/04/84	**A**	130	"	O&DF
	B			
4. CHILTON CHINE EAST TO GRANGE CHINE				
06/04/84	**A**	95	"	J&MC
06/04/84	**B**	13	"	"
06/04/84	**C**	24	"	"
06/04/84	**D**	0	"	"
	E	0	"	"
5. SHEPHERDS CHINE [ATHERFIELD]				
?/04/84	**A**	0	"	RH
14/04/84	**B**	147	"	F&ML
7.ROCKEN END TO CASTLEHAVEN				
?/03/84		17	"	AW
9.BINNEL BAY [ST.LAWRENCE]				
30/03/84		47	"	CNP
12. BONCHURCH LANDSLIP				
?/04/84		0	"	JC
13. REDCLIFF				
07/04/84		60	"	C&JP

GLANVILLE FRITILLARY LARVAL WEB SURVEY

Survey Date 1986	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
	A	N/r		
	B	"		
	C	"		
14/04/86	**D/E**	23	N/r	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
16/04/86	**A**	27	"	RH
	B			
16/04/86	**C1**	1	"	RH
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
25/04/86	**A**	52	"	DF
	B	N/r		
4. CHILTON CHINE EAST TO GRANGE CHINE				
20/04/86	**A**	0	"	J&MC
20/04/86	**B**	12	"	"
20/04/86	**C**	5	"	"
20/04/86	**D**	0	"	"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
19/04/86	**A**	11	"	DG-S
31/03/86	**B**	50	"	ML
7.ROCKEN END TO CASTLEHAVEN				
22/04/86		25	"	CNP
9.BINNEL BAY [ST.LAWRENCE]				
13/04/86		12	"	N/r
12. BONCHURCH LANDSLIP				
N/r		0	"	JC
13. REDCLIFF				
12/04/86		9	"	C&JP

Survey Date 1987	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
N/r	**A**	65	N/r	FH
"	**B**			
"	**C**			
20/04/87	**D/E**	57	"	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
11/04/87	**A**	19	"	RH
11/04/87	**B**		"	"
11/04/87	**C1**	33	"	"
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
22/04/87	**A**	62	"	O&DF
	B			
4. CHILTON CHINE EAST TO GRANGE CHINE				
17/04/87	**A**	8	"	J&MC
17/04/87	**B**	9	"	"
17/04/87	**C**	19	"	"
17/04/87	**D**	17	"	"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
11/04/87	**A**	3	"	DG-S
11/04/87	**B**	115	"	ML
7.ROCKEN END TO CASTLEHAVEN				
?/04/87		21	"	CMP
9.BINNEL BAY [ST.LAWRENCE]				
21/04/87		11	"	RE
12. BONCHURCH LANDSLIP				
?/04/87		0	"	JC
13. REDCLIFF				
11/04/87		29	"	C&JP

GLANVILLE FRITILLARY LARVAL WEB SURVEY

Survey Date 1988	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
N/r	**A**			
"	**B**			
"	**C**			
10/04/88	**D/E**	21	N/r	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
06/04/88	**A**	0	"	RH
06/04/88	**B**	40	"	RH
06/04/88	**C1**	19	"	RH
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
08/04/88	**A**	34	"	O&DF
08/04/88	**B**	67	"	"
4. CHILTON CHINE EAST TO GRANGE CHINE				
26/03/88	**A**	0	"	J&MC
26/03/88	**B**	43	"	"
26/03/88	**C**	13	"	"
26/03/88	**D**	0	"	"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
11/04/88	**A**	15	"	DG-S
31/03/88	**B**	113	"	ML
7.ROCKEN END TO CASTLEHAVEN				
31/03/88		14	"	CMP
9.BINNEL BAY [ST.LAWRENCE]				
06/04/88		32	"	RE
12. BONCHURCH LANDSLIP				
N/r				
13. REDCLIFF				
27/03/88		34	"	C&JP

Survey Date 1989	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
08/03/89	**A**	44	30-50	DTB
08/03/89	**B**	10	"	"
08/03/89	**C**	16	"	"
29/03/89	**D/E**	22	"	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
11/03/89	**A**	0	"	RH
11/03/89	**B**	3	"	"
11/03/89	**C1**	0	"	"
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
15/03/89	**A**	39	"	TT
13/04/89	**B**	122	"	O&DF
4. CHILTON CHINE EAST TO GRANGE CHINE				
12/03/89	**A**	13	"	J&MC
12/03/89	**B**	17	"	"
12/03/89	**C**	4	"	"
12/03/89	**D**	0	"	"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
25/03/89	**A**	18	"	DG-S
09/03/89	**B**	49	"	ML
7.ROCKEN END TO CASTLEHAVEN				
30/03/89		6	"	CNP
9.BINNEL BAY [ST.LAWRENCE]				
25/03/89		27	"	RE
12. BONCHURCH LANDSLIP				
N/r				
13. REDCLIFF				
11/03/89		33	"	C&JP

GLANVILLE FRITILLARY LARVAL WEB SURVEY

Survey Date **1990**	**Subsite**	**Number of webs**	**Ave.Number of larvae per web**	**Recorder**
1. COMPTON CHINE TO SHIPPARDS CHINE				
05/04/90	**A**	153	76	DTB
05/04/90	**B**	19	19	"
05/04/90	**C**	101	48	"
09/04/90	**D/E**	83	N/r	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
18/03/90	**A**	1	77	RH
18/03/90	**B**	29	"	"
18/03/90	**C1**	49	"	"
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
24/03/90	**A**	74	71	TT
29/03/90	**B**	68	66	O&DF
4. CHILTON CHINE EAST TO GRANGE CHINE				
25/03/90	**A**	78	150	J&MC
25/03/90	**B**	74	"	"
25/03/90	**C**	13	"	"
25/03/90	**D**	0	"	"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
31/03/90	**A**	49	53	DG-S
04/04/90	**B**	319	35	ML
7.ROCKEN END TO CASTLEHAVEN				
01/04/90		25	30	CNP
9.BINNEL BAY [ST.LAWRENCE]				
01/04/90		15	N/r	RE
12. BONCHURCH LANDSLIP				
N/r				
13. REDCLIFF				
24/03/90		22	40	C&JP

Survey Date **1991**	**Subsite**	**Number of webs**	**Ave.Number of larvae per web**	**Recorder**
1. COMPTON CHINE TO SHIPPARDS CHINE				
29/03/91	**A**	93	20	DTB
29/03/91	**B**	9	25	"
29/03/91	**C**	32	20	"
29/03/91	**D/E**	17	N/r	F&DB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
N/r	**A**			RH
14/04/91	**B**	0		"
14/04/91	**C1**	3	28	"
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
03/04/91	**A**	5	30	TT
03/04/91	**B**	2	"	"
4. CHILTON CHINE EAST TO GRANGE CHINE				
07/04/91	**A**	16	50	J&MC
07/04/91	**B**	3	"	"
07/04/91	**C**	5	"	"
07/04/91	**D**	0	"	"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
13/04/91	**A**	0	N/r	C&JP
01/04/91	**B**	9	"	ML&ED
7.ROCKEN END TO CASTLEHAVEN				
28/03/91		6	50	CNP
9.BINNEL BAY [ST.LAWRENCE]				
10/04/91		8	23	CNP
12. BONCHURCH LANDSLIP				
?/o4/91		4	32	JC
13. REDCLIFF				
24/03/91		10	30	C&JP

GLANVILLE FRITILLARY LARVAL WEB SURVEY

Survey Date 1992	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
08/04/92	**A**	5	30	DTB
08/04/92	**B**	0	"	"
08/04/92	**C**	2	40	"
11/04/92	**D/E**	7	N/r	F&DB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
N/r	**A**		N/r	RH
05/04/92	**B**	0	"	"
05/04/92	**C1**	5	"	"
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
02/04/92	**A**	3	30	TT
02/04/92	**B**	0	"	"
4. CHILTON CHINE EAST TO GRANGE CHINE				
12/04/92	**A**	10	35	J&MC
12/04/92	**B**	5	"	"
12/04/92	**C**	2	"	"
12/04/92	**D**	0	"	"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
11/04/92	**A**	0	N/r	DG-S
29/03/92	**B**	2	"	ML&ED
7.ROCKEN END TO CASTLEHAVEN				
04/04/92		2	30	AW
9.BINNEL BAY [ST.LAWRENCE]				
10/04/92		6	24	CNP
12. BONCHURCH LANDSLIP				
N/r				
13. REDCLIFF				
05/04/92		5	68	CP

Survey Date 1993	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
22/03/93	**A**	25	60	DTB
22/03/93	**B**	3	80	"
22/03/93	**C**	14	60	"
28/03/93	**D/E**	32	22	F&DB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
21/03/93	**A**	0	34	RH
21/03/93	**B**	18	"	"
21/03/93	**C1**	30	"	"
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
25/03/93	**A**	58	54	TT
25/03/93	**B**	8	54	"
4. CHILTON CHINE EAST TO GRANGE CHINE				
28/03/93	**A**	87	50	J&MC
	B			
28/03/93	**C**	0		"
28/03/93	**D**	0		"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
20/03/93	**A**	0		DG-S
23/03/93	**B**	14	30	ML&ED
7.ROCKEN END TO CASTLEHAVEN				
28/03/93		15	55	AW
9.BINNEL BAY [ST.LAWRENCE]				
27/03/93		14	N/r	CNP
12. BONCHURCH LANDSLIP				
N/r				
13. REDCLIFF				
28/03/93		13	32	C&JP

GLANVILLE FRITILLARY LARVAL WEB SURVEY

Survey Date 1994	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
26/03/94	**A**	77	80	DTB
26/03/94	**B**	10	100	"
26/03/94	**C**	39	120	"
23/03/94	**D/E**	60	N/r	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
19/03/94	**A**	0	47	RH
19/03/94	**B**	8	"	"
19/03/94	**C1**	2	"	"
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
23/03/94	**A**	95	N/r	TT
23/03/94	**B**	52	"	"
4. CHILTON CHINE EAST TO GRANGE CHINE				
03/04/94	**A**	18	60	J&MC
03/04/94	**B**	24	"	"
03/04/94	**C**	0		"
03/04/94	**D**	0		"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
20/03/94	**A**	0	N/r	DG-S
26/03/94	**B**	66	"	ML&ED
7.ROCKEN END TO CASTLEHAVEN				
29/03/94		32	N/r	AW
9.BINNEL BAY [ST.LAWRENCE]				
29/03/94		13	55	CNP
12. BONCHURCH LANDSLIP				
N/r				
13. REDCLIFF				
20/03/94		26	50	C&JP

Survey Date 1995	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
20/03/95	**A**	175	240	DTB
20/03/95	**B**	13	120	"
20/03/95	**C**	53	200	"
28/03/95	**D/E**	100	49	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
19/03/95	**A**	0		RH
19/03/95	**B**	18	49	"
19/03/95	**C1**	6	"	"
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
22/03/95	**A**	33	N/r	TT
22/03/95	**B**	33	"	"
4. CHILTON CHINE EAST TO GRANGE CHINE				
26/03/95	**A**	41	100	J&MC
26/03/95	**B**	25	"	"
26/03/95	**C**	13	"	"
	D			
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
N/r	**A**			
15/03/95	**B**	74	N/r	ML&ED
7.ROCKEN END TO CASTLEHAVEN				
01/04/95		74	38	CNP
9.BINNEL BAY [ST.LAWRENCE]				
25/03/95		22	32	CNP
12. BONCHURCH LANDSLIP				
26/03/95		2	N/r	A&EB
13. REDCLIFF				
25/03/95		4	42	C&JP

GLANVILLE FRITILLARY LARVAL WEB SURVEY

Survey Date **1996**	**Subsite**	**Number of webs**	**Ave.Number of larvae per web**	**Recorder**
1. COMPTON CHINE TO SHIPPARDS CHINE				
01/04/96	**A**	13	30	DTB
01/04/96	**B**	4	25	"
01/04/96	**C**	2	20	"
08/04/96	**D/E**	116	N/r	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
04/04/96	**A**	0	54	RH
04/04/96	**B**	18	"	"
04/04/96	**C1**	0		
	C2			
3. SUDMOOR EAST TO CHILTON CHINE				
17/04/96	**A**	91	70	TT
	B			
4. CHILTON CHINE EAST TO GRANGE CHINE				
07/04/96	**A**	2	40	J&MC
07/04/96	**B**	67	"	"
07/04/96	**C**	27	"	"
07/04/96	**D**	8	"	"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
N/r	**A**			
31/03/96	**B**	72	N/r	ML&ED
7.ROCKEN END TO CASTLEHAVEN				
18/04/96		74	38	A&EB
9.BINNEL BAY [ST.LAWRENCE]				
17/04/96		13	23	CNP
12. BONCHURCH LANDSLIP				
N/r				
13. REDCLIFF				
08/04/96		4	40	C&JP

Survey Date **1997**	**Subsite**	**Number of webs**	**Ave.Number of larvae per web**	**Recorder**
1. COMPTON CHINE TO SHIPPARDS CHINE				
28/03/97	**A**	181	123	DTB
28/03/97	**B**	31	102	"
28/03/97	**C**	3	35	"
N/r	**D/E**			
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
16/03/97	**A**	0	95	RH
16/03/97	**B**	17	"	"
16/03/97	**C1**	0	"	"
16/03/97	**C2**	13	"	"
3. SUDMOOR EAST TO CHILTON CHINE				
N/r	**A**	128	50	TT
	B			
4. CHILTON CHINE EAST TO GRANGE CHINE				
16/03/97	**A**	2	30	J&MC
16/03/97	**B**	13	"	"
16/03/97	**C**	24	"	"
16/03/97	**D**	25	"	"
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
N/r	**A**			
19/03/97	**B**	133	N/r	ML&ED
7.ROCKEN END TO CASTLEHAVEN				
28/03/97		129	32	AW
9.BINNEL BAY [ST.LAWRENCE]				
N/r		14	45	SC
12. BONCHURCH LANDSLIP				
N/r		0		A&EB
13. REDCLIFF				
28/03/97		33	50	C&JP

GLANVILLE FRITILLARY LARVAL WEB SURVEY

Survey Date **1998**	**Subsite**	**Number of webs**	**Ave.Number of larvae per web**	**Recorder**
1. COMPTON CHINE TO SHIPPARDS CHINE				
24/03/98	**A**	52	37	DTB
24/03/98	**B**	14	10	"
24/03/98	**C**	20	63	"
22/03/98	**D/E**	68	N/r	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
29/03/98	**A**	0	35	RH
29/03/98	**B**	25	"	"
29/03/98	**C1**	0	"	"
29/03/98	**C2**	7	"	"
3. SUDMOOR EAST TO CHILTON CHINE				
N/r	**A**	62	70	TT
	B			
4. CHILTON CHINE EAST TO GRANGE CHINE				
20/04/98	**A**	2	N/r	J&MC
20/04/98	**B**	1		"
20/04/98	**C**	4		"
	D			
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
N/r	**A**			
19/03/98	**B**	10	N/r	ML&ED
7.ROCKEN END TO CASTLEHAVEN				
18/03/98		14	25	AW
9.BINNEL BAY [ST.LAWRENCE]				
N/r		8	N/r	RJC
12. BONCHURCH LANDSLIP				
N/r		0	0	A&EB
13. REDCLIFF				
15/03/98		2	25	C&JP

Survey Date **1999**	**Subsite**	**Number of webs**	**Ave.Number of larvae per web**	**Recorder**
1. COMPTON CHINE TO SHIPPARDS CHINE				
20/03/99	**A**	2	18	DTB
20/03/99	**B**	15	25	"
20/03/99	**C**	35	30	"
20/03/99	**D/E**	28	N/r	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
20/03/99	**A**	0	0	RH
20/03/99	**B**	7	35	"
20/03/99	**C1**	1	24	"
20/03/99	**C2**	4	31	"
3. SUDMOOR EAST TO CHILTON CHINE				
N/r	**A**	35	36	TT
	B			
4. CHILTON CHINE EAST TO GRANGE CHINE				
18/03/99	**A**	2	N/r	J&MC
18/03/99	**B**	10	"	"
18/03/99	**C**	0		
18/03/99	**D**	0		
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
N/r	**A**			
25/03/99	**B**	7	50	ED.TG&LT
7.ROCKEN END TO CASTLEHAVEN				
24/03/99		6	44	AW
9.BINNEL BAY [ST.LAWRENCE]				
19/03/99		57	42	SC
12. BONCHURCH LANDSLIP				
19/03/99		0		A&EB
13. REDCLIFF				
20/03/99		5	60	C&JP

GLANVILLE FRITILLARY LARVAL WEB SURVEY

Survey Date 2000	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
27/03/00	**A**	8	30	DTB
27/03/00	**B**	3	45	"
27/03/00	**C**	10	50	"
12/03/00	**D/E**	18	N/r	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
25/03/00	**A**	0		RH
25/03/00	**B**	5	68	"
25/03/00	**C1**	0		"
25/03/00	**C2**	0		"
3. SUDMOOR EAST TO CHILTON CHINE				
26/03/00	**A**	99	N/r	RL
	B			
4. CHILTON CHINE EAST TO GRANGE CHINE				
24/03/00	**A**	0	N/r	J&MC
24/03/00	**B**	7	"	"
24/03/00	**C**	12	"	"
24/03/00	**D**			
24/03/00	**E**	3	"	"
5. SHEPHERDS CHINE [ATHERFIELD]				
	A			
26/03/00	**B**	6	N/r	TG&LT
7.ROCKEN END TO CASTLEHAVEN				
N/r		2	N/r	AW
9.BINNEL BAY [ST.LAWRENCE]				
25/03/00		64	N/r	KM&AR
12. BONCHURCH LANDSLIP				
25/03/00		0	0	A&EB
13. REDCLIFF				
25/03/00		0		C&JP

Survey Date 2002	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
23/03/02	**A**	5	88	DTB
23/03/02	**B**	2	"	"
23/03/02	**C**	10	"	"
25/03/02	**D/E**	48	N/r	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
23/03/02	**A**	0		RH
23/03/02	**B**	15	70	"
23/03/02	**C1**	0		"
23/03/02	**C2**	0		"
3. SUDMOOR EAST TO CHILTON CHINE				
23/03/02	**A**	33	74	TT
23/03/02	**B**	74	"	"
4. CHILTON CHINE EAST TO GRANGE CHINE				
24/03/02	**A**	1	70	JCl
24/03/02	**B**	7	"	"
24/03/02	**C**	10	"	"
24/03/02	**D**	0		
	E			
5. SHEPHERDS CHINE [ATHERFIELD]				
04/04/02	**A**	N/r		
04/04/02	**B**	413	60	LT.TG&BD
7.ROCKEN END TO CASTLEHAVEN				
N/r		2	44	RJC
9.BINNEL BAY [ST.LAWRENCE]				
24/03/02		41	68	K&AM
12. BONCHURCH LANDSLIP				
23/03/02		0		A&EB
13. REDCLIFF				
N/r		0		C&JP

Survey Date 2003	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
02/04/03	**A**	37	N/r	DTB
02/04/03	**B**	N/r	"	"
02/04/03	**C**	N/r	"	"
02/04/03	**D/E**	7	"	FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
10/04/03	**A**	0		RH
10/04/03	**B**	8	"	"
10/04/03	**C1**	0		"
10/04/03	**C2**	0		"
3. SUDMOOR EAST TO CHILTON CHINE				
31/03/03	**A**	20	"	TT
31/03/03	**B**	0	"	"
4. CHILTON CHINE EAST TO GRANGE CHINE				
03/04/03	**A**	0		RL
03/04/03	**B**	0		"
03/04/03	**C**	3	"	"
03/04/03	**D**	0		"
03/04/03	**E**	0		"
5. SHEPHERDS CHINE [ATHERFIELD]				
04/04/03	**A**	4	"	LT&TG.BD
04/04/03	**B**	10	"	"
7.ROCKEN END TO CASTLEHAVEN				
03/04/03		3	"	RJC
9.BINNEL BAY [ST.LAWRENCE]				
05/04/03		17	"	K&AM
12. BONCHURCH LANDSLIP				
03/04/03		0		A&EB
13. REDCLIFF				
05/04/03		0		C&JP

Survey Date 2004	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
08/03/04	**A**	8	69	DTB
08/03/04	**B**	0	"	"
08/03/04	**C**	3	"	"
21/03/04	**D/E**	12	"	DTB&FB
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
N/r	**A**	0		RH
"	**B**	4	85	"
"	**C1**	0		"
"	**C2**	0		"
3. SUDMOOR EAST TO CHILTON CHINE				
22/03/04	**A**	17	46	TT
22/03/04	**B**	0		"
4. CHILTON CHINE EAST TO GRANGE CHINE				
15/03/04	**A**	0		RL
15/03/04	**B**	0		"
15/03/04	**C**	13	85	"
15/03/04	**D**	0		"
15/03/04	**E**	0		"
5. SHEPHERDS CHINE [ATHERFIELD]				
21/03/04	**A**	1	N/r	LT&TG.BD
21/03/04	**B**	2		"
7.ROCKEN END TO CASTLEHAVEN				
13/03/04		0		A&EB&RJC
9.BINNEL BAY [ST.LAWRENCE]				
13/03/04		73	66	K&AM
12. BONCHURCH LANDSLIP				
21/03/04		0		A&EB
13. REDCLIFF				
21/03/04		0		C&JP

GLANVILLE FRITILLARY LARVAL WEB SURVEY

Survey Date **2005**	**Subsite**	**Number of webs**	**Ave.Number of larvae per web**	**Recorder**
1. COMPTON CHINE TO SHIPPARDS CHINE				
24/03/05	**A**	12	100	DTB
24/03/05	**B**	31	"	"
24/03/05	**C**	102	"	"
27/03/05	**D/E**	79/40	"	C&JP
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
N/r	**A**	0		RH
"	**B**	52	90	"
"	**C1**	0		"
"	**C2**	0		"
3. SUDMOOR EAST TO CHILTON CHINE				
04/04/05	**A**	95	88	TT
04/04/05	**B**	0		"
4. CHILTON CHINE EAST TO GRANGE CHINE				
04/04/05	**A**	0		RL
04/04/05	**B**	0		"
04/04/05	**C**	241	89	"
04/04/05	**D**	0		"
04/04/05	**E**	0		"
5. SHEPHERDS CHINE [ATHERFIELD]				
01/04/05	**A**	0		LT&TG.BD
01/04/05	**B**	291	55	"
7.ROCKEN END TO CASTLEHAVEN				
20/03/05		1	N/r	A&EB&RJC
9.BINNEL BAY [ST.LAWRENCE]				
20/03/05		80	80	K&AM
12. BONCHURCH LANDSLIP				
25/03/05		0		A&EB
13. REDCLIFF				
N/r		-		

Survey Date **2006**	**Subsite**	**Number of webs**	**Ave.Number of larvae per web**	**Recorder**
1. COMPTON CHINE TO SHIPPARDS CHINE				
23/03/06	**A**	9	126	DTB
23/03/06	**B**	4	145	"
23/03/06	**C**	8	60	"
23/03/06	**D/E**	5/3	84/50	"
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
02/04/06	**A**	1	25	RH
02/04/06	**B**	10	"	"
02/04/06	**C1**	3	"	"
02/04/06	**C2**	1	"	"
3. SUDMOOR EAST TO CHILTON CHINE				
25/03/06	**A**	149	47	TT
25/03/06	**B**			"
4. CHILTON CHINE EAST TO GRANGE CHINE				
28/03/06	**A**	30	90	RL
28/03/06	**B**	0		"
28/03/06	**C**	0		"
28/03/06	**D**	0		"
28/03/06	**E**	0		"
5. SHEPHERDS CHINE [ATHERFIELD]				
	A			
25/03/06	**B**	50	70	LT&TG
7.ROCKEN END TO CASTLEHAVEN				
28/03/06		5	40	A&EB
9.BINNEL BAY [ST.LAWRENCE]				
25/03/06		77	30	K&AM
12. BONCHURCH LANDSLIP				
28/03/06		0		A&EB
13. REDCLIFF				
N/r		-		

Survey Date 2007	Subsite	Number of webs	Ave.Number of larvae per web	Recorder
1. COMPTON CHINE TO SHIPPARDS CHINE				
13/03/07	**A**	146	56	DTB
13/03/07	**B**	305	76	"
13/03/07	**C**	146	70	"
13/03/07	**D/E**	68/38	55/75	"
2. SHIPPARDS CHINE TO BROOK CHINE+EAST TO SUDMOOR				
18/03/07	**A**	9	84	RH
18/03/07	**B**	23	"	"
18/03/07	**C1**	73	"	"
18/03/07	**C2**	30	"	"
3. SUDMOOR EAST TO CHILTON CHINE				
N/r	**A**	172	33	TT
	B			
4. CHILTON CHINE EAST TO GRANGE CHINE				
16/03/07	**A**	1	50	RL
16/03/07	**B**	19	50	"
16/03/07	**C**	36	75	"
16/03/07	**D**	59	80	"
16/03/07	**E**	93	70	"
5. SHEPHERDS CHINE [ATHERFIELD]				
	A			
21/03/07	**B**	509	20	A&EB
7.ROCKEN END TO CASTLEHAVEN				
14/03/07		19	60	A&EB
9.BINNEL BAY [ST.LAWRENCE]				
11/03/07		67	70	K&AM
12. BONCHURCH LANDSLIP				
18/03/07		0		A&EB
13. REDCLIFF				
15/03/07		1	40	A&EB

Recorders past and present

F. & M. Heap
F. Basford
R. Herbert
O. & D. Frazer
J. & M. Cull
R. Hodgson
D. Grove-Smith
F. & M. Lee
B. Dollery
R. J. Curtis
K. & A. Marston
A. & E. Butler
C. N. Pelham
R. Edmonds
J. Cheverton
C. & J. Pope
T. Tutton
R. Lang
L. Tiller
T. Goodley
A. Wilkinson
D. T. Biggs
S. Colnutt

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Addendum to

THE ANGLO-SAXON CHARTER BOUNDS OF THE ISLE OF WIGHT PART 2: THE EAST MEDINE

John Margham

See: Proceedings Vol 22 - 2006 & 2007, Page136
Landscape Regions and Charter Bounds
(Reference to Table 1)

Table 1: Boundary Markers in Isle of Wight Charters and Landscape Regions

Coastal features

NL	the sea S 274,S 766,S 842iv,S 1581	
	the north sea S 274,S 1581	the shore S 842iv
	the shoe fleet S 543	the shallow fleet S 543
	the firm fleet S 766	the bird fleet S 842iv
SV	the south sea S 274,S 1581	
	Eadgils's river mouth S 274,S 1581	
	Bic(c)a's valley S 274,S 1581	

Valleys and water courses

NL	the Caul Bourne S 274,S 1581	
	the slade S 543	the slade S 543
	the head of the valley of the stack S 766	
	the spring/stream S 766	the wide ditch S 842iv
	the brook S 842iv	Chillingwood Brook S 842iv
SV	the Bathing Bourne S 842i,S 842ii,S 1662	
	the Bathing Bourne S 1663	the stream S 842i
	the confluence S 1662	the hollow brook S 1663
	the ditch S 1662	the ditch S 1662
	the ditch S 1663	the dirty ditch S 842i
	the wide ditch S 842i	the wide ditch S 842ii
	the eastern long ditch S 1663	
	the stony ford S 842i,S 842ii,S 1662	

Marshes and moors

NL	the end of the moor S 543	*the wheat marshy meadow S 842iv*
SV	the moor S 842ii	Tidheard's moor S 1662

ADDENDUM TO: ANGLO-SAXON CHARTER BOUNDS: PT2

Hedgerows, pasture and meadows

NL the hedgerow S 766
the old hart hedgerow S 766
the ash hedge S 842iii
the hart (?wood-)pasture S 766
the wheat marshy meadow S 842iv
the stone that stands at Benna's (river) meadow S 842iv

LR the stack (?wood-)pasture S 766

SV *the meadow/pasture gate* S 842i

Roads, lanes and gates

NL the lane S 543
the lane S 543
the dirty gate S 842iii
the gate S 842iv
the stone at the gate S 842iv

LR the swing gate S 842iii

SV the highway S 842i
the highway S 842ii
the sandy highway S 1663
the green way S 1663
the meadow/pasture gate S 842i

Other linear boundary features

NL the boundary S 842iii
the boundary S 842iii
the boundary S 842iv
the boundary S 842iv
the boundary S 842iv
as it is marked out S 842iv
the monks' boundary S 842iii
the monks' boundary of Titchfield S 842iv

LR Ætheric's boundary S 842iii
Byrhtlaf's boundary S 842iii

SV the boundary S 842i
the boundary S 842i
The old (or main) hide formerly belonging to Winchester New Minster S 842i
the monks' boundary S 842ii
as it is marked out S 842i

Hills

NL *the wooded hill* S 543
the moot mound/hill S 766

LR the hill S 842iii

SV Athulf's hill S 842ii

SM the stone hill S 1663

Stones, trees, pits and ponds

NL Beorhtnoth's stone S 543
the holy stone S 766
the stone that stands at Benna's (river) meadow S 842iv
the stone at the gate S 842iv
the named (or embraced) tree S 766

LR the lime pit S 766

SV the stone S 1662
the stone S 1663
the other stone S 1663
the stony shelter S 842i
the other stony shelter S 842i

SM the rush pond S 1663

ADDENDUM TO: ANGLO-SAXON CHARTER BOUNDS: PT2

Woodland

NL	*the wooded hill* S 543	Chillingwood S 842iii
LR	the place of the ash trees S 274,S 766,S 1581	

Other topographical features

NL	Wullaf's leap S 543	*the moot mound/hill* S 766
	the nook S 842iv	
LR	the moot mound S 274,S 1581	swines head S 274,S 1581

Boundary markers *in italics* appear in two categories

The above does not include *Linlande* S 1662

Landscape regions:
NL Northern Lowlands
LR Lateral Ridge
SV Southern Vale
SM Southern Massif

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PLACE-NAMES IN THE LANDSCAPE: THE BOWCOMBE VALLEY

John Margham

Abstract

The research presented here is a pilot project for an Island-wide study of topographical place-names. This type of place-name is defined and the study area of the Bowcombe Valley delineated. Information is provided about the area's physical and administrative geography. Names for hills, valleys, wet environments and woodland are identified and related to topographical features. Studies of topographical place-names in the rest of England are cited and compared with findings from the study area. The evidence is summarised for land use in various localities when place-names were formulated. Comments are made about how the perception of land-forms in the Anglo-Saxon period was reflected in the naming of these features and their associated settlements. Some conclusions are drawn regarding methodology for the study of the Island's topographical place-names.

Introduction

This present study forms part of the author's continued research into the landscape of the Isle of Wight during the early medieval period and in the relationship between place-names and the landscape. This examination of the topographical place-names of the Bowcombe Valley is presented here as a pilot project for a wider study examining the topographical place-names of the Isle of Wight.

Place-names usually consist of more than one place-name element. Thus Afton, which was first recorded as *Affetun* in 1086, comprises two elements, Æffa, a man's name, and *tūn*, an Old English (OE) term meaning settlement or estate (Mills 1996, 21). Personal names, such as Æffa at Afton or Eadhere at Arreton are one type of place-name element, telling us something of the former occupancy of land. Habitative place-name elements inform us about the former status of settlement sites. A very common example of a habitative element on the Isle of Wight is *tūn*, as in the two examples above, Afton and Arreton. Other place-name elements may describe the appearance of a place, such as the Old English term *hwæte* in the place-name Watchingwell, referring to the growing of wheat there (Mills 1996, 105). Place-name elements may be directional, referring to where a settlement lay in relation to an estate centre. The place-names of the 'Freshwater Isle' provide fine examples in Easton, Weston, Norton, Middleton and the now lost name, Sutton.

Topographical place-names provide us with information about the physical environment of a location. Brook is a simplex topographical place-name (consisting of one element only), first recorded as *Broc* in 1086, the Old English term *brōc* 'brook' referring to the small stream there. An example of a topographical place-name consisting of two elements is Wydcombe, *Widecumbe* in 1255 (Mills 1996, 112), from Old English *wīd* 'wide', and *cumb*, a term describing a certain type of valley.

The Bowcombe Valley provides a wide variety of topographical place-names to examine, ranging from place-name elements describing landforms (hills and valleys), through water-courses and wet-land names, to those referring to land use. A corpus of place-names containing topographical terms has been produced (Appendix). The criteria used to select these names are references to names in the published Isle of Wight place-name literature (Kökeritz 1940 and Mills 1996), with additional references from various maps from 1759 through to the modern 1:25,000 Ordnance Survey map. Field-names are not discussed, unless their record pre-dates references to place-names in the literature or on published maps.

The examples cited above of different types of place-name elements all refer to names of settlement. Whilst several of the place-names in the appendix are names of settlement sites, a large proportion relate to uninhabited sites. The very nature of topographical place-names means that such a dichotomy is arbitrary and artificial. It has been stated that topographical settlement names

> consisted originally of a description of some topographical or physical feature, either natural or man-made, which was transferred to the settlement near the feature named…. Thus names for rivers and streams, springs and lakes, fords and roads, marshes and moors, hills and valleys, woods and clearings, and various other landscape features became the names of inhabited places (Mills 1991, xvi).

Margaret Gelling prefers a different emphasis:

> I feel that in the case of topographically-named settlements, the Anglo-Saxons looked first at the settlement, and then defined it by what seemed to them the most significant factor in its geographical location (personal communication, August 1995).

Thus topographical place-names emphasise the link between the physical environment of the settlement and its actual site. In the study of the place-names of the Bowcombe Valley these relationships will be examined, as will the topography associated with non-settlement names, and the naming of upland areas in relation to nearby settlement, largely recorded in the centuries after c.1500[1].

The Bowcombe Valley

The area chosen for study is approximately defined by the watershed of the Lukely Brook upstream from Carisbrooke. Following the convention describing boundaries in Anglo-Saxon land charters, these bounds can be defined in a clockwise direction starting at the northern-most point: From the lower part of Carisbrooke village, where the Lukely Brook flows under the road, the bounds run southwards along Spring Lane and up Clerken Lane and then along the road to Whitcombe Cross; from Whitcombe Cross southwards following Dark Lane and then following the footpath to Garstons Farm; from Garstons Farm up on to Garstons Down, following the ridge of downland to the vicinity of Chillerton Down TV mast; from the mast westwards down to the summit of Cheverton Shute/Shorwell Shute, then continuing westwards along the line of the Worsley Trail to its junction with the Tennyson Trail; from this junction north-eastwards to Gallibury Hump and along the Tennyson Trail to the junction of Down Lane and Nodgham Lane in Carisbrooke; then down the hill, around Carisbrooke church and back to the starting point (fig. 1).

This area rises from 55 ft above sea level at the lower end of Carisbrooke to over 600 ft in the vicinity of Gallibury Hump. The solid geology consists largely of chalk, with an area of upper greensand in the area between Froglands Farm and Garstons Farm. The drift geology is confined to angular flint gravel on the tops of chalk ridges and alluvium downstream from Bowcombe Farm alongside Lukely Brook (IGS 1976). The soils of the area range from the brown earths overlying the flint gravels which are well suited to cultivation, with shallow, well drained silty soils overlying the chalk, and brown earths which are fertile and easily worked overlying the upper greensand, through to the alluvial soils in the lower reaches of the valley (Jarvis *et. al.* 1984). The surface drainage in the modern landscape is largely restricted to Lukely Brook and two small tributary streams. Lukely Brook rises at a point about 400 yards south-west of Bowcombe Farm[2]. It is very likely that the brook formerly flowed from further up the valley as suggested by the location of the former place-name of Watergate some 500 yards up the valley from its present day source. Cheverton Farm, a further mile up the valley from the site of Watergate, is a long-established settlement site with a place-name originating within the Anglo-Saxon period, which may very well have been served by a watercourse over a millennium ago. This drying up of the watercourse would appear to be due to the development of colluvial deposits through the later prehistoric period and after, perhaps accentuated in more recent times through the effects of the ground-water pumping station down valley from Bowcombe Farm. A stream with seasonal flow in the upper reaches of the valley is a distinct possibility within the historic period, which in Dorset or Hampshire would have been referred to as a 'winterbourne'. Surface water drainage in the upper reaches of the Bowcombe Valley area, in the dry chalk valleys known locally as bottoms, can only be envisaged at the end of periglacial conditions during the later Palaeolithic.

The north-eastern two-thirds of the study area lay within the historic ecclesiastical parish of Carisbrooke, with the Garstons area being within Gatcombe parish. The south-western third of the area was mainly part of Shorwell parish, with the south-western corner within Brighstone. Carisbrooke Castle and a small area near Rowborough formed parts of the scattered parish of the castle chapel of St Nicholas.

Hills and Shutes (fig. 1)

beorg: Various terms within the study area refer to hills. The first of these is OE *beorg*, which can refer to a naturally-occurring rounded hill or a tumulus (Gelling and Cole 2000, 145-151). The two instances of *beorg* in the area represent both meanings of the term. The settlement site of Rowborough Farm was first recorded as *Rowebere* in 1277. The first element of the name is OE *rūh* 'rough' (Mills 1996, 88), describing the appearance of the *beorg* when it was named. The *beorg* here must refer to the rounded shape of the spur of chalk downland to the north of the farm (plate 1). The second meaning of the term, naming an earthwork with a rounded profile, is to be found in Gallibury Hump. This Bronze Age round barrow was first named in the bounds of an Anglo-Saxon land charter delineating the estate of Calbourne, supposedly recording its grant to the bishopric of Winchester. This document, purported to date from 826 but perhaps originating in the tenth century (Edwards 1988, 155-6), refers to *gemot beorh*. This round barrow site was an important location on an estate and ecclesiastical boundary as a meeting place of a moot (*gemot*) within the Anglo-Saxon period. Its role in local justice is indicated by its later name of Gallibury, the first element being OE *galga* 'gallows' (Mills 1996, 52). This part of the name was not recorded until 1769, as *Gallaberry Down*, but may reflect the use of Gallibury Hump as a gallows site within the mid to late Anglo-Saxon period. In Hampshire, all known Anglo-Saxon execution sites have been shown to have been located on hundred boundaries (Reynolds 1999, 109). The boundary which *gemot beorh* helped delineate formed the eastern boundary of Calbourne Hundred in 1086.

dūn*:* The second term referring to hills, OE *dūn*, is much more widespread within the study area. Margaret Gelling says of this term

> *dūn* was probably in use for the formation of settlement names from the beginning of the Anglo-Saxon period. It may not have been much employed in that capacity after AD 800, though it remained in use for field-name and minor name formation and for purely landscape features. The modern reflex is *down* (Gelling and Cole 2000, 164).

The *dūn* names of the Bowcombe Valley area can be put into three distinct categories, which reflect this change in use from settlement name, then minor names and the modern usage of *down* to name upland areas.

Firstly, the only settlement name, that of Cheverton. This enters the written record as *Cevredone* in 1086. The spelling of second element changed from *-don* to *-ton* in the 16th century. The first element of the name is OE *ceafor* 'chafers or beetles' (Mills 1996, 38). Cheverton, despite the modern spelling, is a *dūn* settlement name originating within the Anglo-Saxon period and its name may very well have been of considerable antiquity when first recorded in Domesday Book (plate 2).

Secondly, there are seven instances of *dūn* names relating to upland areas which are not directly associated with the names of settlement sites. Bowcombe Down was referred to simply as *la Dune* in the late 13th century (Mills 1996, 32). Other medieval records of *dūn* names provide information about the 'down' in question. The probable significance of the name of Gallibury Down, part of which is now known as Gallibury Fields, has been referred to above. Occupancy is specified in *Lavendone*, recorded in 1324, the first element being the OE personal name *Lāfa*. *Lavendone* can probably be identified with Garstons Down (Mills 1996, 52). Monkham Down was *Monkendowne* in1608, the first element being Middle English *monken(e)* 'monks' (Kökeritz 1940, 103), recording its ownership by Quarr Abbey prior to its dissolution. Three medieval records tell us something of the land-use and natural history of the area's downland. Renham Down, *Ranedone* in the13th century, has OE *rāna* 'roe-deer' as its first element (Kökeritz 1940, 222). Fore Down was first recorded as *la Fordone* in 1273. 'Fore' may refer to pigs, *i.e.* OE *fōr* 'pig' (Kökeritz 1940, 220), but this is a rare place-name element. OE *fore* 'in front of, before' (Smith 1956, vol. 1, 183-4) is quite plausible[3], perhaps referring to Fore Down in relation to Limerstone Down to the west or Cheverton Down to the north. Lorden Copse was recorded in 1324 as *L…kedone*. Kökeritz has established that the first element of the name seems to be *Leurke*, *i.e.* OE *læwerce* 'lark' (Kökeritz 1940, 220). Whilst being an open habitat where larks could be heard, the chalk downland would have had sufficient woodland cover to provide a habitat for deer and for the pasturing of swine.

The third type of *dūn* name is that of the word 'down' appended to a manorial or farm name, recorded after c. 1500. There are numerous instances of this within the study area so only a few examples will be referred to here. Cheverton Down illustrates the consequence of the name change from *–don* to *–tun* in the farm name, as it was deemed necessary to add 'Down' in the 16th century to what otherwise would have been a tautological place-name (Mills 1996, 38). Bowcombe Down was first named as such in 1608 (Mills 1996, 32). The name of some downland areas changed during the post-medieval period. *Lavendone* of 1324 would appear to have referred to Garstons Down, *Gaston Down* in 1799, named after the family name associated with the nearby settlement site. In 1586 and 1781 however it was referred to as Gatcombe Down (Mills 1999, 52; Kökeritz 1940, 136-7).

***hrycg**:* Two instances of OE *hrycg* 'ridge' have been identified within the Bowcombe Valley area. Like some of the names referred to above, Westridge Down is a modern name, formed with the addition of 'down' to a pre-existing name. The ridge in question first entered the written record in 1293 as *Westrigge* (Mills 1996, 107) and forms a ridge of chalk downland on the eastern bounds of the study area. It was either named as the western ridge of this irregular shaped upland[4], or in relation to a location further to the east, perhaps Chillerton or Shate. The second instance named in the area was known as Rowborough Down from 1810 onwards. This was first recorded as *Rurigge* c.1241 (Hockey 1991, no. 322 and map 10). The modern spelling would have been 'Rowridge', not to be confused with the location of this name further to the north. The first element of *Rurigge* is coincidentally the same as that in Rowborough, *i.e.* OE *rūh* 'rough'. Both the spur of downland immediately to the north of Rowborough Farm and Rowborough Down itself to the west would appear to have been perceived as rough pasture in, or quite probably before the 13th century, when both *Rowbere* and *Rurigge* were first recorded as place-names.

***scyte**:* The last name referring to hills and slopes is 'shute', although derived from OE *scyte* 'steep hill', this would appear to be a modern term, describing a road negotiating a steep hill. There are two occurrences within the study area, Cheverton Shute, first recorded as such on the Ordnance Survey 25 inch map of 1866, and Clatterford Shute, which would appear not to have been named on any map but has a modern street sign. Of the thirteen 'shutes' on the Isle of Wight, none were recorded before the 19th century.

Coombs and Bottoms (fig. 2)

***botm**:* A study of 'bottom' place-names throughout England has identified thirty-five examples recorded before 1500, deriving from the OE place-name element *botm* and variants, and Old Norse *botn*. This study concluded that these names "… are terms which perhaps originally referred to damp valley floors, but which came to mean a flat, restricted stretch of valley floor with abruptly rising sides, damp and easily flooded" (Cole 1988, 46). This conclusion is at variance with the four 'bottom' names within the study area and the wider distribution within the Isle of Wight. There are various reasons why this should be so. Firstly, Cole's study was one of settlement sites. Within the Bowcombe Valley area, 'bottoms' are steep-sided dry valleys within the chalk uplands, in the upper reaches of the valley system, more than 250 ft above sea level. No settlement sites can be envisaged in such locations within the historic period, due to lack of surface water. Secondly, the names of these deep chalk dry valleys appear to be relatively modern. The relatively late formation of *bottom* names within the Bowcombe Valley area is indicated by the name Rowboroughdown Bottom, not recorded until the advent of modern 1:25,000 maps, named in relation to Rowborough Down, a name first appearing on the Ordnance Survey 1 inch map of 1810. The first record of such a name in the area is Rowborough Bottom in 1781, a location below the 'confluence' of Fern Bottom and Bunkers Bottom, both first mentioned in the mid 19th century (plate 3). Thirdly, there is some evidence that the *bottoms* of the study area were formerly referred to as 'coombes'. It is probably significant that Slocum Copse is situated on the southern slope of Rowborough Bottom. This name first enters the written record as *Sloucumbe* and *Slocum* in the 13th century (Kökeritz 1940, 222-3; Hockey 1991, no. 322), the second element of the name being OE *cumb* (a type of valley, discussed below). It would appear that Slocum was the former name of Rowborough Bottom[5]. This observation raises the question of any other changes of name from *cumb* to *bottom.* One possibility is *Reynecumbe,* recorded c. 1241 (Hockey 1991, no. 322), which would appear to have been located in the Rowborough area[6]. Was *Reynecumbe* the former name of Rowboroughdown Bottom?

In a later study of place-names of an area of chalk landscapes, Cole notes that:

> A very common modern valley term in the Chilterns is *bottom.* ….
> These features do not have the specialised shape of the early-recorded bottoms ….. The age of the names is unknown, but it seems likely that they are comparatively modern (Gelling and Cole 2000, 295).

This observation would certainly apply to the Isle of Wight, where the majority of such names refer to chalkland dry valleys and appear to be relatively modern. Thus in the post-medieval place-names of the Isle of Wight, the term was not restricted to damp valley floors which are subject to flooding. The opposite would appear to be the case, *i.e.* that 'bottoms' refer to the upper part of valleys, which within chalk landscapes had no surface drainage. It is perhaps significant that Old Norse (ON) *botn* has a meaning of 'the head of a valley', "which is generally preferred for the ON term outside England" (Parsons *et al.* 1997, 134; Smith 1956, vol 1, 43).

cumb*:* A study of *cumb* place-names in the chalklands of southern England has concluded that

> *cumbs* occur basically in one of two situations; firstly in short valleys and secondly at the heads of long valleys. In most cases they have quite steeply rising ground on three sides (Cole 1982, 80).

This study contrasted *cumb* and *denu* topographies, and found that

> *Cumb* is mostly used of shorter, broader valleys than *denu*, and these valleys are usually bowl- or trough- shaped with three fairly steeply rising sides, whilst *denu* is mostly used of long, narrow valleys with two moderately steep sides and a gentle gradient along most of their length (Cole 1982, 86).

The only instance of *denu* on the Isle of Wight is Dean Farm in Whitwell, the long valley there having such characteristics.

Within the Bowcombe Valley area the place-name element *cumb* is to be found in dry valleys high up in the chalk and in settlement sites. All of these sites are compatible with the observations presented by Cole (1982). Firstly, the sites further up the valley not associated with settlement: As we have seen, Slocum Copse indicates the location of *Slocum*, first recorded in the 13th century.

The first element of the name is OE *slā(h)* 'sloe' (Kökeritz 1940, 222-3). Similarly, Dukem Copse and Dukem Down locate *Diewcumbe*, a name dating to 1198, its first element being OE *dēaw* 'dew' (Kökeritz 1940, 99). Dukem is a short, bowl-shaped feature, in contrast to the longer Slocum, but both have steep sides and no surface drainage. *Reynecumbe* may have been the former name of Rowboroughdown Bottom, another dry valley with steep sides. The first element of *Reynecumbe* is OE *ræge* 'female roe deer or she-goats' (Mills 1996, 85). Secondly, there are two instances of *cumb* settlement sites, Idlecombe and Bowcombe. Idlecombe was first recorded in 1635 as *Idlescome*, the first element of the name possibly being a family name *del Idle* or *de Lisle*, or OE *īdel* 'uncultivated' (Mills 1996, 62)[7]. There are no 'coombes' in the immediate vicinity of Idlecombe Farm. There is however a shallow coombe some 500 yards to the south of the farm site, above Rains Grove. The downland above this feature is now known as Idlecombe Down. The site of the farm would thus appear to have been named through reference to this coombe.

Bowcombe was recorded as *Bovecome* and *Bouecome* in Domesday Book, when it formed the centre of a substantial estate, which included a church and a settlement with some urban characteristics (Munby 1982, 52c). The first element of the place-name is possibly the masculine personal name Bofa, or alternatively OE *bufan* 'above'. If Bowcombe means 'above the coombe' then the name would have referred to Bowcombe Down at some time, before the site now known as Bowcombe Farm was so named (Mills 1996, 32). More specifically it would refer to the Bowcombe Down pagan Anglo-Saxon cemetery, which was in use from the later fifth or early sixth century through to the later sixth century, and is situated on the chalk ridge above this coombe (Arnold 1982, 89-96). This second interpretation of the place-name is lent some weight by the place-name *Etdreðecumb*. This was recorded in a document dating to 963x975, recording the restoration of 30 *mansae* of land (*i.e.* 30 hides) to the church of Winchester by King Edgar (Sawyer 1968, no. 821). This restoration of land actually refers to the estate of 30 *mansae* which had previously been granted to the church of Winchester, centred on Calbourne (Margham 2006, 91-96). In Domesday Book the bishop of Winchester's Calbourne estate is described as being "In Calbourne Hundred which lies in Bowcombe Hundred" (Munby 1982, 52c). It would therefore appear that *Etdreðecumb* refers to a large area, probably the western half of the Isle of Wight, but that the name also related to a particular site. Kökeritz has pointed out that if the name is an OE compound **þryþacumb*, it could signify 'assembly valley', and "it may have referred to the valley above which the ancient hundred moots of Bowcombe … took place" (Kökeritz 1940, lix-lx). There is no independent evidence that assemblies took place at the pagan cemetery site, but as Bowcombe is known to have been the name of a hundred, the suggestion is quite plausible.

In the modern landscape, Bowcombe refers to Bowcombe Farm, the nearby hamlet of Bowcombe and Bowcombe Down (plate 4). At the time of Domesday Book however, Bowcombe meant more than this. It was the name of the hundred which encompassed much of the western half of the Island (Margham 2006, note 1), and the name of an estate assessed at four hides in 1066 (Munby 1982, 52c). These observations raise the question of the location of the nucleated settlement recorded in Domesday Book, with its urban characteristics and a church. There are two possibilities for the location of this settlement site. One solution to this problem is that it may have been at or near Bowcombe Farm, which has been suggested in a recent study (Edwards 1999, 3-4). This is consistent with the place-name evidence reviewed above. This would indicate the presence of a now deserted, formerly substantial settlement site with a lost minster church in the vicinity of Bowcombe Farm[8]. There is however no evidence in the landscape for the former presence of such a settlement site here in the post Roman period[9]. Alternatively, it has been argued that the settlement referred to as Bowcombe in 1086 was Carisbrooke, which can be seen as having consisted of a small planned town with a minster church in the later 11th century (Margham 1993, 2-5). Carisbrooke was not recorded as a place-name until 1114 (Hockey 1981, no. 15), so the name of the nucleated settlement of Bowcombe may have been changed to Carisbrooke between 1086 and the early 12th century. This solution does not fit easily with the place-name evidence of *cumb* names being closely associated with coombes in the landscape, although *Etdreðecumb* could refer to the whole of the Bowcombe Valley rather than the coombe adjoining Bowcombe Farm. There is one parallel for Bowcombe/ Carisbrooke being an administrative centre of some importance in later Anglo-Saxon England and a *cumb* name not directly associated with a small coombe in the landscape: "The only *cumb* settlement which achieved outstanding administrative status before modern times is Winchcombe [Gloucestershire], which occupies an atypically large valley" (Gelling and Cole 2000, 103-5). Winchcombe was the centre of a later Anglo-Saxon shire, and it is likely to have been the location of a Mercian royal mausoleum at an earlier date (Whybra 1990; Basset 1985). Whilst Winchcombe is located in an atypically large valley for a *cumb* place-name, demonstrating that it is possible for the name Bowcombe to refer to the whole of the valley upstream from Carisbrooke as well as its major settlement focus, the following is offered as a hypothesis of why Carisbrooke was formerly known as Bowcombe:

1. The settlement name Bowcombe is associated with the coombe immediately to the north-west of Bowcombe Farm and below the pagan Anglo-Saxon cemetery site. This was the manorial centre for Bowcombe in the later medieval and post-medieval periods. It is quite likely that Bowcombe Farm had a similar function in relation to the Anglo-Saxon estate of Bowcombe, which also gave its name to the hundred which later became known as the West Medine.
2. The small town referred to in the Domesday Book entry for Bowcombe, with its minster church, was situated almost 1½ miles from the administrative centre of the estate, where the valley of the Lukely Brook opens out as it leaves the chalklands. This soon after became known as Carisbrooke, or possibly was already known locally as Carisbrooke, not being recorded as such in Domesday.

Cumb, with its association with the primitive Welsh word which became the Modern Welsh *cwm*, is a potentially early place-name element, probably entering the naming vocabulary for topographical features of the earliest Anglo-Saxon settlers (Gelling 1984, 88-90). The significance of this for the naming of topographical features within the Bowcombe Valley area will be discussed below.

Wet Places (fig. 3)

broc: Unlike *cumb*, *broc* 'brook' is not a potentially early place-name element. A study of place-names recorded before AD 730 found no instances of it; and "there seems little doubt that it is not one of the earliest elements to be used in the coinage of English names" (Gelling 1984, 15; Cox 1976). There are two instances of *broc* place-names within the Bowcombe Valley area, both referring to the stream draining the lower part of the valley.

Lukely Brook was first recorded as 'stream of *Lokeleie*' *c.* 1191 and had a similar name in the 14th century (Mills 1996, 69). The term 'brook' in this name would appear to have a late medieval or post medieval origin. The first element of Lukely would appear to be a postulated OE term **luc-* or **lūce-*, this "may well have been used for an enclosure of some sort, perhaps a contrivance in connection with a mill-weir" (Kökeritz 1940, 102). Mills points out that "… one Alurich le Lokere is mentioned *c.* 1200-30 as having lands in this vicinity: his surname would seem to mean 'the one in charge of the river-barrier or dam'" (Mills 1996, 69). The first element of the name thus refers to mill dams or the like, there having been an abundance of mill sites between Carisbrooke Mill and Newport. The second element of Lukely is OE *lēah*, discussed below. Lukely Brook was known by a different name before the later 12th century. This name is preserved in the place-name Carisbrooke.

Carisbrooke first enters the written record in a reference to the church in 1114 as *ecclesiam sancta Marie de Caresbroc* (Hockey 1981, no. 15). The place-name *Caresbroc* was first recorded for the castle in 1179 (Rigold 1969, 128). The first element of the name is uncertain. It may be related to the British river-name Cary in Somerset and Carey in Devon. Cary perhaps means 'pleasant stream'. "If this interpretation is correct, *Cary* will have been the ancient original name of what is now Lukely Brook" (Mills 1996, 36). Other possibilities are OE **cear*- or **car*-, probably meaning 'hollow gorge', referring to the deep valley below the castle site, or OE *carr* 'rock', or the British word which became Welsh *carreg* 'rock', *i.e.* the hill on which the castle stands (Kökeritz 1940, 95).

ford: This is one of the most frequently used topographical terms in English place-names. It can be shown to have been used at a relatively early date, as there are nine examples recorded before AD 730, five of which definitely refer to settlement sites (Cox 1976; Gelling 1984, 67). Copley found that *–ford* is the place-name element most frequently associated with fifth century archaeological sites, and accounts for the names of at least one in ten of such sites (Copley 1986, 70). It is uncertain how long *–ford* remained in the place-naming vocabulary. There are several fords in the modern landscape within the Bowcombe Valley area and there are former ford sites at Plaish Farm and the lower end of Carisbrooke High Street where the Lukely Brook now flows under the main road to Newport. Only one of them appears to have been named, *i.e.* Clatterford. The ford itself entered the written record as *Claterford c.*1150 and a settlement site at Clatterford was recorded in 1255-6. The first element of the name is OE **clater* 'loose stones or pebbles' (Mills 1996, 40; Page 1912, 231), this being an apt description of the location where the Lukely Brook crosses the road below Clatterford Shute (plate 5).

mere*:* *Reynemere,* recorded *c.* 1241 (Hockey 1991, no. 322), would appear to have been a location in the Rowborough area. It has already been suggested that *Reynecumbe* may have been the former name of Rowboroughdown Bottom. The third name in the document of *c.* 1241 with the same first element was *Reyneris*, possibly the former name of Rains Grove (Mills 1996, 85). The first element is OE *ræge* 'female roe deer or she-goats'. *Reynemere* cannot be located with any certainty, but because of the first element *ræge* being common to all three names and their almost consecutive mentions in the confirmation document of *c.* 1241, they would appear to have been in relatively close proximity. The second element is OE *mere* 'pond, lake, pool', also 'wetland' (Gelling and Cole 2000, 21-22). This suggests that *Reynemere* may have been a pond or wetland in the valley bottom in the Rowborough and Rains Grove area. Alternatively, it may refer to a former pond high up on the clay with flints overlying chalk[10], perhaps in the Idlecombe Down area

plæsc*:* We can be more certain of the next place-name of a wet location, as Plaish is the name of a hamlet and a farm in the modern landscape, in a valley bottom location either side of the Lukely Brook. Despite being a simplex name derived from a postulated OE word **plæsc* 'shallow pool' and sharing its name with a location in Shropshire which was named in a tenth century Anglo-Saxon charter (Sawyer 1968, no. 723; Robinson 1988), Plaish was not recorded as such until 1660. Before this it was known as *Hillen* or *Hillden* (Mills 1996, 82)[11].

wæter*:* The one instance of *wæter* 'water' in the study area is the former small, now deserted, settlement site of *Water Gate* which was just to the south of Idlecombe Farm. It was first recorded in 1775, but can perhaps be identified with *Watergate* in 1248. It would appear to mean 'a pass through which water flows' (Kökeritz 1940, 110). This location is some 500 yards up valley from the present day source of Lukely Brook. The name implies that some time in the past there was a sufficient flow of water here to make the construction of a barrier feasible, although the flow of the stream may have been seasonal[12].

welle*:* The house site near Froglands Farm now known as Frosthills was recoded as *Forsteswelle* in 1409. The first element was probably a personal name, the surname *Forst* or *Frost* (Kökeritz

1940, 100). The second element of the medieval name is the Wessex dialect OE *welle* which often means 'spring' but has a secondary meaning of 'stream' (Gelling and Cole 2000, 31). *Forsteswelle* refers to the spring on the opposite side of the lane from Frosthills, the source of a tributary stream of Lukely Brook. It has been observed that *welle* and its variants, although commonly occurring in place-names, are "poorly represented in names recorded before c. 730 (Cox 1976), and may not have become the usual word for a spring until after that date" (Gelling and Cole 2000, 31).

frogga*:* This is not exactly a topographical place-name element, being the OE for 'frog'. It does however reflect the damp nature of the landscape around Lukely Brook at Froglands Farm! This name was recorded as *Frogland* in 1608, the second element then being OE *land*. The place-name was however first recorded as *Froglane* in 1395 (Mills 1996, 51). This change in name can be compared with the previous names of Whitelane Farm on the other side of the valley. Here, in the time of Henry VIII, the place-name was *Wythelond* alias *Whytelane* (Kökeritz 1940, 111). The words *–lane* and *–land* may have been interchangeable in the name of Froglands as well, although the evidence would suggest a change from *–lane* to *–land*. Whilst the route-way from Whitcombe Cross to Frosthills is known as Froglands Lane, *Froglane* would have been the lane from Frosthills passing Froglands Farm towards Plaish. It is a little over 100 yards from the farm site to the *welle* mentioned above opposite Frosthills, and there is a pond within the farmyard at Froglands, so frogs would appear to have been in abundance here.

Meadows, Groves and Brushwood (fig. 4)

lēah*:* OE *lēah* is potentially an early place-name element being associated with fifth century archaeological sites (Copley 1986, 52), although it does not feature prominently in names recorded before *c*. 730 (Cox 1976). A date range of *c*. 750 to *c*. 950 has been suggested for *lēah* being very productive as a place-name forming element (Gelling 1992, 6). The second element of Lukely is *lēah*. This would appear to be a relatively late use of the term, as the first record of the name as *Lokeleie* c. 1191 was apparently a recent name change from 'the cary brook' or the like (above). It is also uncertain where the *lēah* in the place-name was located. The **luc-* or **lūce-* probably referred to a mill dam, there having been seven mills on the Lukely Brook in 1627 (Mills 1996, 69). To further confuse the issue, *lēah* is a name element that has changed its meaning through time. The earliest sense of the word was continuous woodland, with a development of meaning to 'glade, clearing'. The meaning continued to develop through the Anglo-Saxon period to name some areas of pasture and meadow (Gelling 1984, 198-9). The final development of its meaning has been suggested for the 10th century (Gelling 1992, 16). The name Lukely, being of recent origin in the later 12th century, would therefore refer to an area of meadow, rather than woodland, alongside the brook in the vicinity of a mill dam.

grāf*:* Rains Grove is the only instance of a *grāf* place-name within the Bowcombe Valley area. It was first recorded as a 'grove' name in 1781. It was referred to as *Rawens* in 1583. *Rayners* may be a family name, but the name is possibly associated with *Reyneris* of *c.* 1241 (Mills 1996, 85 and below). Rackham comments that

> 'Grove', Anglo-Saxon *grāf*, has the opposite meaning [to *lēah*], a small, defined, probably managed wood, normally surrounded by non-woodland; it therefore carries a presumption that there was not much woodland where the name was first formed (Rackham 1990, 46).

The small band of woodland on the hillside immediately above Rains Grove Cottage in the modern landscape is succinctly described in this statement.

***hrīs**:* The name *Reyneris* is mentioned in a document of *c.* 1241, along with *Reynecumbe* and *Reynemere* (Mills 1996, 85; Hockey 1991, no. 322). These place-names would appear to relate to the Rowborough area and it is possible that *Reyneris* is to be identified with Rains Grove. The second element of the name is *hrīs* 'area of brushwood' and may have described the small area of woodland adjoining Rains Grove when the name was first formed. The first element is OE *ræge* 'female roe deer or she-goats' which is common to all three of these names, so it can be suggested that here there was an area of brushwood of grove proportions which was frequented by such animals[13].

Place-Names in the Landscape

All of the dates associated with place-names cited above record when a particular name first entered the extant written record, whether it be a medieval document or a post-medieval map. What the dates do not do is to record the date of the formulation of the place-name. In some instances, such as Lukely being recorded for the first time in the later 12th century, it is quite likely that the name was of a recent origin. The greater number of the names discussed above would have been in use for a long time before being recorded in documents. For instance, only two of the place-names were recorded in Anglo-Saxon charters and two in Domesday Book. Many of the place-names must have existed by the later Anglo-Saxon period if not earlier, but were not committed to paper until manorial and ecclesiastical records became more common after *c.* 1200.

Conversely, some apparently OE names were used to form place-names long after the time of Domesday Book. Almost all of the place-name elements discussed above are Old English terms, the language of the Anglo-Saxons. Whilst Old English is generally seen as changing to become Middle English in *c.* 1100, it is quite possible that Old English terms remained in the place-name forming vocabulary of an area for a long time after this. This can be illustrated by the OE term *scyte* 'steep hill', which would seem not to have been used on the Isle of Wight until the post-medieval period. Whilst there is a place-name Shute in Devon, first recorded *c.* 1200, this is not derived from OE *scyte* but from OE **sciete* 'corner or angle of land' (Mills 1996, 296). Chute Causeway in Wiltshire refers to a length of Roman road between Winchester and Mildenhall where it negotiates a steep escarpment (Taylor 1979, 52-3, 186). This and the nearby village name of Chute would appear to provide a medieval example for the use of 'shute' as a road negotiating a steep hill, but the name is that of a medieval forest derived from Primitive Welsh *cēd* 'wood, forest' (Gelling and Cole 2000, 223). The use of *scyte* in such situations is seemingly a modern usage of the term which is largely confined to the Isle of Wight, although Smith (1956, vol 2, 116) lists one example of the term relating to a hill, Shute Shelve in Somerset.

Whilst the date of a place-name formation is often uncertain, topographical names can be used to provide information about the appearance of the landscape in the past. On the downland there was rough pasture above Rowborough, larks could be heard at Lorden and Fore Down may have been an area of wood-pasture inhabited by pigs. In the uppermost reaches of the Bowcombe Valley system, one of the 'bottoms' was vegetated with ferns, and slightly further down this dry valley sloes grew (plate 6). The coombe at Dukem was renowned for its dew, whereas the coombe adjoining Idlecombe was apparently uncultivated. Female roe deer or goats frequented the area near Rains Grove, which was a small area of brushwood. Lukely Brook used to flow in the now dry valley at Watergate and the name of the brook records an area of pasture or meadow further down the valley. Carisbrooke may recall the pleasant nature of this stream, which was noisy at Clatterford. Froglands had its eponymous frogs and Plaish used to have a shallow pool.

There is one use to which place-names can be put which is not restricted by uncertainties over when the name was formed. This is the study of the Old English terms used in naming land forms, as the shapes of hills and valleys have hardly changed since being named. It has been shown through the study of topographical place-names that the place-naming vocabulary of the Anglo-

Saxons was very specific when it came to naming different types of hills and valleys and that there is a remarkable consistency in the use of terms to describe land forms throughout England. Our modern vocabulary is impoverished and is largely restricted to the two terms, *hyll* and valley. In the Anglo-Saxon period:

> Study of topographical names in relation to the actual landscape has made it clear that groups of words which can be translated by a single modern English word such as 'hill' or 'valley' do not contain synonyms. Each of the terms is used for a different type of hill, valley or whatever ….. (Gelling and Cole 2000, xiii).

This study has already made reference to these specific meanings. A further study will investigate the consistency of the use of terms such as *beorg*, *dūn*, *hrycg*, *hyll*, *cumb*, *healh* and *slæd* throughout the Island. One of these terms has a sufficient number of instances recorded within the study area to make some further comments here. The *cumb* names of the Bowcombe Valley are all consistent with the observation that the term means a 'short, broad valley, usually bowl- or trough-shaped with three fairly steeply rising sides' (Gelling and Cole 2000, 103). What is of significance in the Bowcombe Valley area is the proximity of *cumbs* to pagan Anglo-Saxon cemetery sites, of which there were two, Bowcombe Down and Carisbrooke Castle (Arnold 1982, 89-96; Young 2000, 86-97). It is highly likely that there were significant contemporary early Anglo-Saxon settlement sites in the Bowcombe area, implying that these *cumb* names were amongst the earliest Old English place-names of the Island. Continuity of Romano-British settlement in the immediate vicinity of Bowcombe Farm is also a distinct possibility[14]. These observations are supported by the possible relationship between *cumb* and Primitive Welsh *combo*-, which has become the Modern Welsh *cwm*. Margaret Gelling has suggested that the situation was more complex than this:

> There is an Old English word *cumb* 'cup, vessel' which could have been used in a transferred sense….. This may be at least partly the origin, with the resemblance to the Welsh word helping *cumb* to take precedence over other 'vessel' terms used to denote valleys (Gelling and Cole 2000, 106-7)

Thus it would appear that *cumb* was in the place-name forming vocabulary of the earliest Anglo-Saxon inhabitants of the Bowcombe Valley.

The term 'Bowcombe Valley' has been used throughout the present study, although it will not be found on a map! It is a tautological term made up by the author to describe the study area in relation to its major topographic feature. What is perhaps surprising is that the whole valley appears never to be referred to as a *denu*, '… mostly used of long, narrow valleys with two moderately steep sides and a gentle gradient along most of their length' (Gelling and Cole 2000, 114). This would fit the topography of the area, but in modern usage on the Isle of Wight is restricted to Dean Farm in Whitwell, near the head of a similar valley.

One other anomaly is the *beorg* element in Rowborough, 'rounded hill'. In a survey of this name element throughout England it was stated that:

> It cannot be claimed that every *beorg* name in the country has been matched to its visual setting, but this has been done in a sufficiently large number of instances for it to be asserted confidently that the defining characteristic of a *beorg* is a continuously rounded profile (Gelling and Cole 2000, 145).

This is not the case with the hill to the north of Rowborough Farm as it is a spur of chalk downland. The hill does however have a rounded profile when viewed from the east. It is suggested here that what was important at this site was where the hill was viewed from when first named, *i.e.* from the valley. Similar observations have been made in the place-name literature when discussing the *ōra* names of the Solent, including Bouldnor, suggesting that their distinctive profiles were viewed and named from the sea[15] (Cole 1989, 1990).

This study started with a discussion of *beorg*, so it is appropriate that it end in a return to the site of the second instance and meaning of the term, at Gallibury Hump. The site of the *gemōt beorh* 'moot barrow' of the Calbourne charter later became known as *Gallaberry Down*, commemorating the former existence of a gallows here, OE *galga* (Mills 1996, 52). This area was also shown as *Gallowharrow Down* on Isaac Taylor's map of 1759. Whilst the second element of *Gallowharrow* may be OE *hara* 'hare', it is just possible that it is OE *hearg* 'heathen shrine or temple', as in Harrow in Middlesex (Mills 1991, 160; Gelling 1978, 158-161). Was there a pagan Anglo-Saxon place of worship here associated with this Bronze Age barrow, hundred meeting place and gallows site?[16]

Conclusions

The study presented above is a pilot project for the study of topographical place-names throughout the Isle of Wight. It has demonstrated the usefulness (and limitations) of place-name study in reconstructing past landscapes, and at the importance of looking at the shape of landforms through the eyes of our Anglo-Saxon forebears. It has also drawn attention to the possibility of names of physical features changing through time, as in the observations made about at least one coombe becoming known as a bottom. Part of the reason for undertaking a local study was to assess the methodology used. Field-names in tithe apportionment schedules and minor place-names in documents, such as the charters of Quarr Abbey and the 1608 survey of royal lands, contain invaluable information about the past. However, to use such sources in an exhaustive way for an Island-wide study would be an immense undertaking. Use of published place-name research supplemented by names on maps provides a manageable database. It also avoids amateur speculation, leaving the study of the development of place-names (mainly) to linguists.

Notes

1. This study will not discuss the identification of *Wihtgarasbyrig* with Carisbrooke Castle. Readers are referred to Young (2000) and Tomalin (2002).

2. The modern 'source' of Lukely Brook is a nettle-filled ditch at this location, which contained no water when examined in the wet summer of 2007. No flowing water was observed in the stream bed at Plaish either. In addition to the relatively modern pumping station extracting ground water near Bowcombe Farm, bore holes were sunk in 1876 and in 1891 at Newport Waterworks at the eastern end of Carisbrooke village (Whitaker 1910, 150). It is uncertain how much these water supply bore holes have affected the surface flow of Lukely Brook, as unlike mainland Hampshire, the hydrology of the intermittent streams of the Isle of Wight was not documented prior to 1910 (*ibid,* 37).

3. Anne Cole has suggested the possibility of OE *fore* (personal communication).

4. Suggestion by Ann Cole (personal communication).

5. Ann Cole comments that "The bottoms are in *cumb*-like valleys. It's hard to tell if 'bottom' refers just to the valley floor, or to the whole deep hollow- sides and all; probably the former, leaving the term *cumb* to describe the whole hollow" (personal communication).

6. *Reynecumbe* should not be confused with the deserted settlement site of Rancombe, which is located in a dry valley to the south of the study area.

7. The possibility that this place-name element is OE *rān* 'a boundary strip, a balk' (Smith 1956,

vol 2, 80), here referring to lynchets, has been pointed out to the author by Maurice Turner (personal communication). Lynchets are visible on the south-facing slope of Fern Bottom and other lynchets on the north-facing slope of Fern Bottom have been plotted from aerial photographs (County Archaeological Centre 1:10,000 overlay SZ48SW AP). There are however no lynchets recorded on the same overlay for the area around Rancombe, just to the south of the study area.

8. There are two pieces of evidence which may support the location of the pre-Conquest minster church being at Bowcombe, that Carisbrooke church would appear to lie on land belonging to the manor of Alvington (Page 1912, 232) and that Page (*ibid.* 234) cites a reference to the 'new church of Carisbrooke' in the mid-twelfth century. The latter may refer to a rebuilding of the church on the same site, probably associated with the foundation of a priory here *c.* 1147.

9. An abundance of evidence exists for Romano-British settlement in the vicinity of Bowcombe Farm (County Archaeological Centre Historic Environment Record). Any continuity of settlement into the early medieval period is an unknown factor at present.

10. 'I would expect to find *Reynemere* on the patch of "Angular Flint Gravel of the Chalk Downs" (Geological map of the Isle of Wight)' (Ann Cole, personal communication).

11. The 'shallow pool' may be the small, roughly triangular, low-lying area immediately to the south of the dry (August 2007) bed of Lukely Brook just 'upstream' from the bridge giving access to Plaish Farm.

12. No earthworks associated with any damming of a former watercourse were recorded in this location during fieldwork in August 2007. A slight earthwork at the site of Watergate was noted, probably a house platform.

13. The 'grove' adjoining Rains Grove Cottage now consists of an ash canopy with a mixed deciduous under-story.

14. The only Romano-British settlement site in the Bowcombe Valley that has been excavated to modern standards is Clatterford Roman Villa: 'It would appear from the excavations that during the 4th century AD, or shortly thereafter, the site was abandoned' (Busby *et al.,* 2001, 103). Early Anglo-Saxon finds, including brooches, have been found through metal detection further down the valley from Bowcombe Farm. This area has also produced a large number of mid Anglo-Saxon coinage, mainly of the eighth century and broadly contemporary non-ferrous metalwork (Ulmschneider 2003, 75-77).

15. A recent study has suggested that several of the place-names of the Bigbury Bay area of south Devon also originated through topographical features being named from the sea (Griffith and Wilkes 2007).

16. Henson (2006, 127) lists sixteen probable and possible instances of *hearg* and *hearh* place-names, many of which are located in south-east England, saying that 'This term seems to have indicated a tribal shrine, often located on a hill top (probably as a convenient communal meeting place)'. See Meaney (1995) for pagan places of worship and hundred meeting places. In the absence of any further records of the place-name, Margaret Gelling is sceptical about *Gallowharrow* being a *hearg* name, seeing it as a mistake for *Gallowbarrow* (personal communication).

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I am grateful to the staff of the Isle of Wight Archaeological Centre for access to six-inch and twenty-five inch maps and to the Historic Environment Record. Vicky Basford provided the field-names that I was interested in for Carisbrooke and Shorwell parishes. Alan Phillips and Mary Barton identified the locations of various field-names within Shorwell parish. The staff of Hampshire County Records office introduced me to Isaac Taylor's map and provided me with a copy. Margaret Gelling has read through and commented on an as yet unpublished typescript on Isle of Wight place-names, some of which was used in this paper. Vicky Basford, Ann Cole, Johanna Jones, Alan Phillips and Maurice Turner have commented on the presentation and content of earlier drafts of this paper, providing information, references and encouragement.

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Appendix

Bowcombe Valley: Topographical Place-Names Index

Hills, Slopes and Ridges

beorg 'hill, mound, barrow'
Gallibury Hump *Gallaberry Down* 1769, OE *galga* 'gallows' (M52); *gemōt beorh* 'moot barrow' S 274 ?826 (Margham 2006, 92)
Rowborough Down & Farm (Carisbrooke) *Rowebere* 1277, OE *rūh* 'rough' (M 88)

dūn 'hill, upland expanse'
Bowcombe Down *la Dune* late 13th c, *Boucombe Downe* 1608 (M 32)
Cheverton Farm *Cevredone* 1086, first element OE *ceafor* 'chafers or beetles', *down* added in 16th c. when spelling of second element changed from *–don* to *-ton* (M 38)
Cheverton Down, *down* added in 16th c. when spelling of second element changed from *–don* to *–ton* (M 38)
Dukem Down *Diewcumbe* 1198, OE *dēaw* 'dew', Dukem is either the southern continuation of the Bowcombe valley between Idlecombe and Rains Grove, or the valley to the east of Dukem Down where Dukem Copse is (K 99)
Fore Down *la Fordone* 1273, seems to be OE *fōr* 'pig' (K 220)
Gallibury Down [*Gallowharrow Down* 1759] *Galloharrow (Down), Gallyberry Down* 1769 K 220 [OE *galga* 'gallows', OE beorg *'barrow*]
Garstons Down *Gaston Down* 1799, seems to have been called *Lavendone* in 1324, sometimes *Gatcombe Down*, as in 1586 and 1781 (M 52)
Gatcombe Down 1759 (Newbarn Down 1:25,000 map)
Idlecombe Down 1:25,000 map
Lavendone 1324, OE personal name *Lāfa* (probably Garstons Down) (M 52)
Limerstone Down 1781
Lorden Copse *L…kedone* 1324, OE *læwerce* 'lark' (K 220)
Monkham *Monkendowne* 1608, ME *monken(e)* 'monks'' (K 103) (part of Rowborough Down)
Newbarn Down 1:25,000 map
North Court Down 1781
Renham Down *Ranedone* 13th c, OE *rāna* 'roe-deer' (K 222)
Rowborough Down 1810
Westridge Down 1:25,000 map

hrycg 'ridge'
Rurigge c.1241 (Hockey 1991, no. 322 and map 10), former name of Rowborough Down, OE *rūh* 'rough'
Westrigge 1293 (M 107)

scyte 'steep hill'
Cheverton Shute 25 inch map 1866
Clatterford Shute modern street sign

Valleys

botm 'bottom'
Bunkers Bottom, Bunkers Bottom Ground, Shorwell tithe apportionment 1844
Fern Bottom 25 inch map 1866
Rowborough Bottom 1781
Rowboroughdown Bottom 25 inch map 1866

cumb 'short, broad valley, usually bowl or trough shaped, with three fairly steeply rising sides'
Bowcombe *Bovecome, Bouecome* 1086, possibly masculine personal name *Bofa*, or OE *bufan* 'above', in which case the name would originally have applied to Bowcombe Down and was then transferred to the valley and settlement below (M 32)
Dukem Down *Diewcumbe* 1198, OE *dēaw* 'dew', Dukem is either the southern continuation of the Bowcombe valley between Idlecombe and Rains Grove, or the valley to the east of Dukem Down where Dukem Copse is (K 99)
Etdreðecumb 963x975 S821, restoration of 30 *mansae* to the church of Winchester by Edgar; if an OE compound **þryþacumb* could signify 'assembly valley', "it may have referred to the valley above which the ancient hundred moots of Bowcombe … took place" (K lix-lx)
Idlecombe *Idlescome* 1635, possibly *del Idle* or *de Lisle* family name or OE *īdel* 'uncultivated' (M 62)
Reynecumbe c.1241, OE *rǣge* 'female roe deer or she-goats', in vicinity of Rains Grove (M 85)
Slocum Copse *Sloucumbe* 13th c, OE *slā(h)* 'sloe' (K 222-3), *Slocum* c.1241. (Hockey 1991, no. 322)

Watercourses and Wetlands

broc 'brook'
Carisbrooke *Caresbroc* 1114 (Hockey 1981, no 15); possibly 'the brook called Cary', lost Celtic river-name identical with the River Cary in Somerset, perhaps meaning 'pleasant stream' (M 36-7)
Lukely Brook 'stream of *Lokeleie*' c.1191, second element is OE *lēah,* the first OE **luca* or **lūce* meaning something like 'barrier in a stream to form a pool, a mill-dam' (M 69)

ford 'ford'
Clatterford *Claterford* c.1150, OE **clater* 'loose stones or pebbles' (M 40); there was a settlement site at Clatterford recorded in 1255-6 (Page 1912, 231)

mere 'pond, lake, pool', also 'wetland'
Reynemere c.1241, OE *rǣge* 'female roe deer or she-goats', in vicinity of Rains Grove (M 85)

***plæsc** 'shallow pool'
Plaish 1660, called *Hill(d)en* 1583,1608 (M 82)

wæter 'water, stream, lake'
Water Gate 1775, perhaps identical with *Watergate* 1248, would appear to mean 'a pass through which water flows' (K 110)

welle 'spring'
Frosthills *Forsteswelle* 1409, first element probably a personal name, surname of *Forst* or *Frost* (K 100) [*Vorsteswelle c.*1150, (Hockey 1981, no. 82)]

Woodland, groves and –land

land ‘land, estate’, also ‘new arable area’
Froglands Farm *Froglane* 1395, *Frogland* 1608, OE *frogga* ‘frog’ (M 51)
Whitelane Farm *Wythelond* als. *Whytelane* t.Henry 8, *Whytlond* 1520, OE *hwīt* ‘white’ (K 111)

lēah ‘forest, wood, glade, clearing’, later ‘pasture, meadow’
Lukeley Brook ‘stream of *Lokeleie* c.1191, the first element OE **luca* or **lūce* meaning something like ‘barrier in a stream to form a pool, a mill-dam’ (M 69)

grāf ‘grove’
Rains Grove *Rawmes* 1583, *Rayners Grove* 1781, perhaps a family name, but possibly to be associated with *Reyneris* c.1241, OE *ræge* ‘female roe deer or she-goats’, and *hrīs* (M 85)

hrīs ‘area of brushwood’
Reyneris c.1241, OE *ræge* ‘female roe deer or she-goats’, possibly Rains Grove (M 85)

The sources used for this corpus of place-names are as follows:

Published texts-
K: Kökeritz (1940)
M: Mills (1996)
Hockey (1981)
Hockey (1991)
Margham (2006)
Page (1912)

Maps-
1759: Isaac Taylor’s Map of Hampshire, Including the Isle of Wight
1781: Haywood’s map of the Isle of Wight, published in Worsley (1781)
1810: First Edition Ordnance Survey map 1:63,360
Shorwell Tithe Apportionment map 1844
Ordnance Survey 25 inch map 1866
1:25,000 map- Ordnance Survey Outdoor Leisure map 29 1996

Plate 1: Rowborough Farm from the south, showing the rounded profile of the spur of downland to the north of the farm

Plate 2: Cheverton Farm, a Domesday settlement site in the upper part of the Bowcombe Valley. The pond is modern.

Plate 3: Fern Bottom from the east. The patch of nettles is probably the site of a dew pond for the watering of stock. There is no evidence that dew ponds are older than the nineteenth century (Rackham 1986, 368).

Plate 4: The Bowcombe Valley from Bowcombe Down. Bowcombe Farm is in the centre of the picture with Dukem Down and Westridge Down beyond. The road up the valley can be seen, culminating in Cheverton Shute.

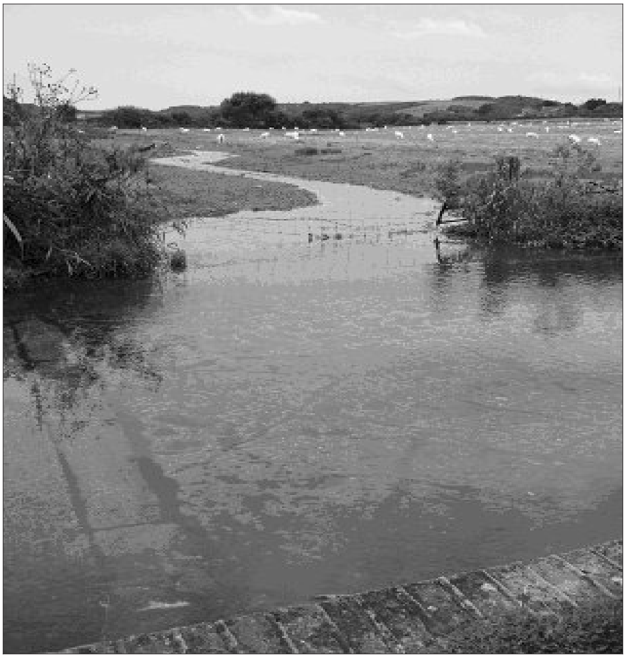

Plate 5: The ford at Clatterford, looking up stream towards the modern source of Lukely Brook. Unlike other fords in the Carisbrooke area, this ford no longer clatters!

Plate 6: Slocum was first recorded as a place-name in the thirteenth century. Sloes can still be found growing on the margins of Slocum Copse in the twenty-first century.

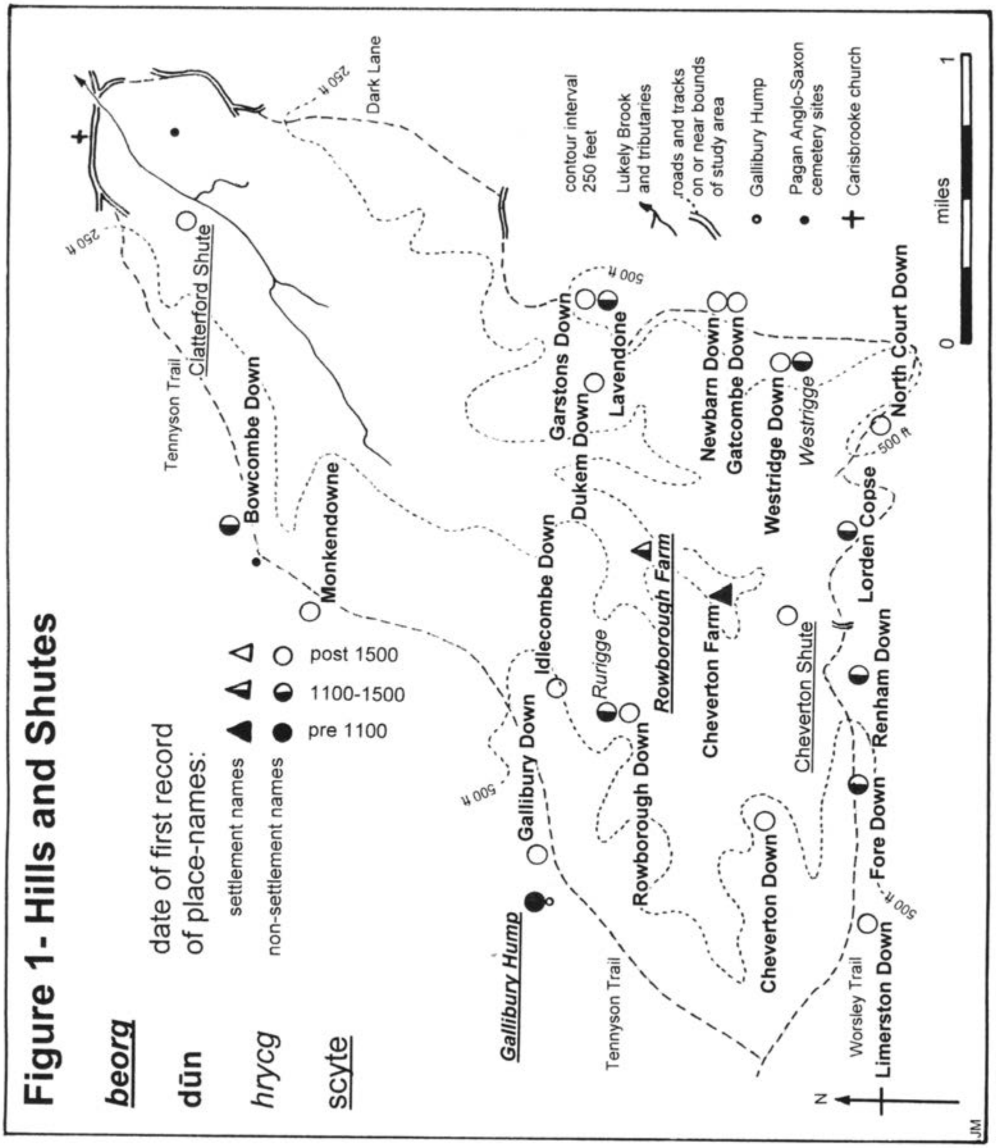
Figure 1 - Hills and Shutes
beorg
dūn
hrycg
scyte
date of first record
of place-names:
settlement names
non-settlement names
pre 1100
1100-1500
post 1500
contour interval
250 feet
Lukely Brook
and tributaries
roads and tracks
on or near bounds
of study area
Gallibury Hump
Pagan Anglo-Saxon
cemetery sites
Carisbrooke church
miles
0
1
N
250 ft
500 ft
Dark Lane
Tennyson Trail
Worsley Trail
Clatterford Shute
Bowcombe Down
Monkendowne
Gallibury Hump
Gallibury Down
Idlecombe Down
Dukem Down
Garstons Down
Lavendone
Rurigge
Rowborough Farm
Rowborough Down
Cheverton Farm
Cheverton Shute
Cheverton Down
Newbarn Down
Gatcombe Down
Westridge Down
Westrigge
North Court Down
Lorden Copse
Renham Down
Fore Down
Limerston Down
JM

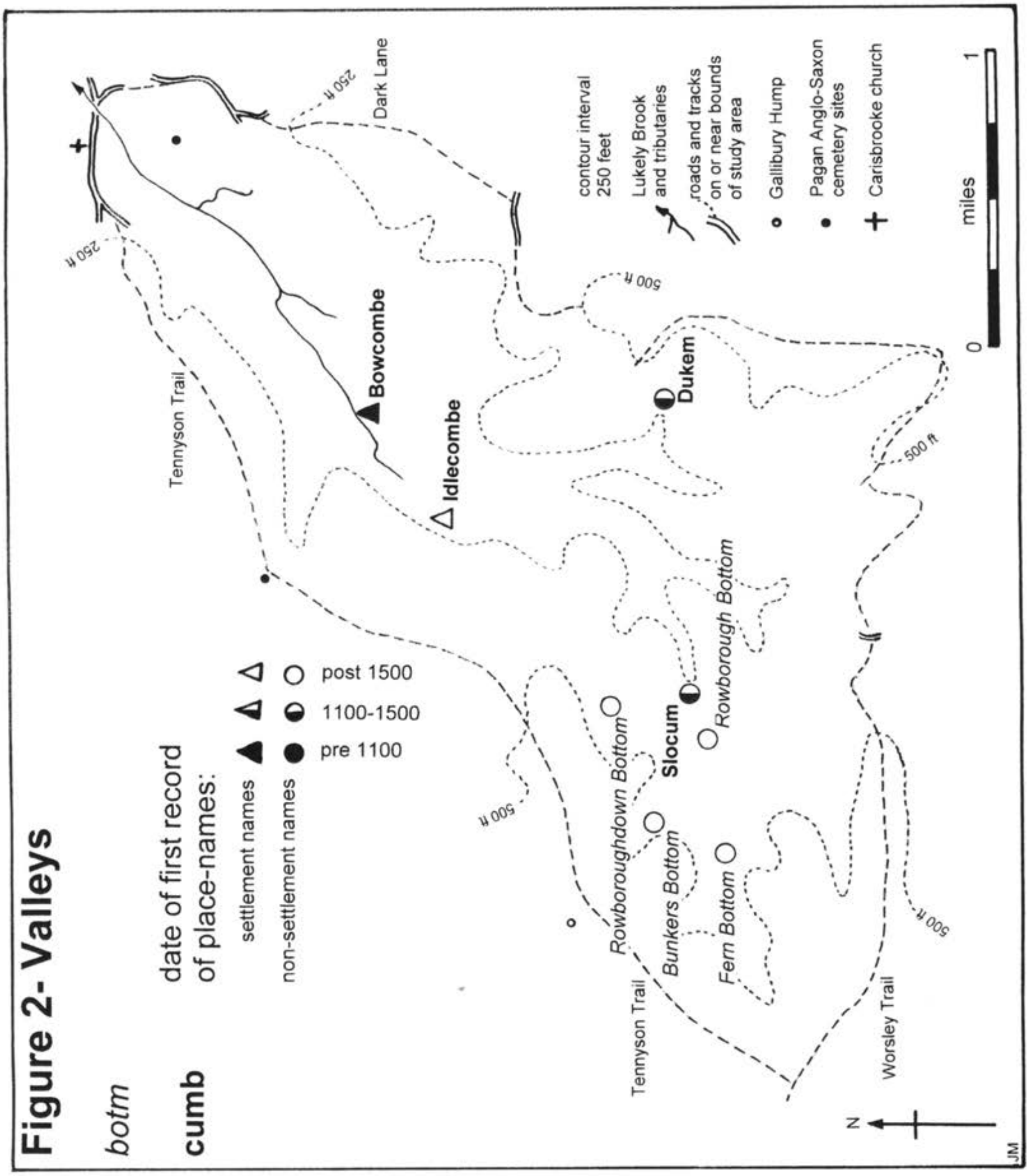
Figure 2- Valleys
botm
cumb
date of first record
of place-names:
settlement names
non-settlement names
pre 1100
1100-1500
post 1500
Bowcombe
Idlecombe
Dukem
Slocum
Rowborough Bottom
Rowboroughdown Bottom
Bunkers Bottom
Fern Bottom
Tennyson Trail
Worsley Trail
Dark Lane
250 ft
500 ft
contour interval
250 feet
Lukely Brook
and tributaries
roads and tracks
on or near bounds
of study area
Gallibury Hump
Pagan Anglo-Saxon
cemetery sites
Carisbrooke church
miles
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1
N
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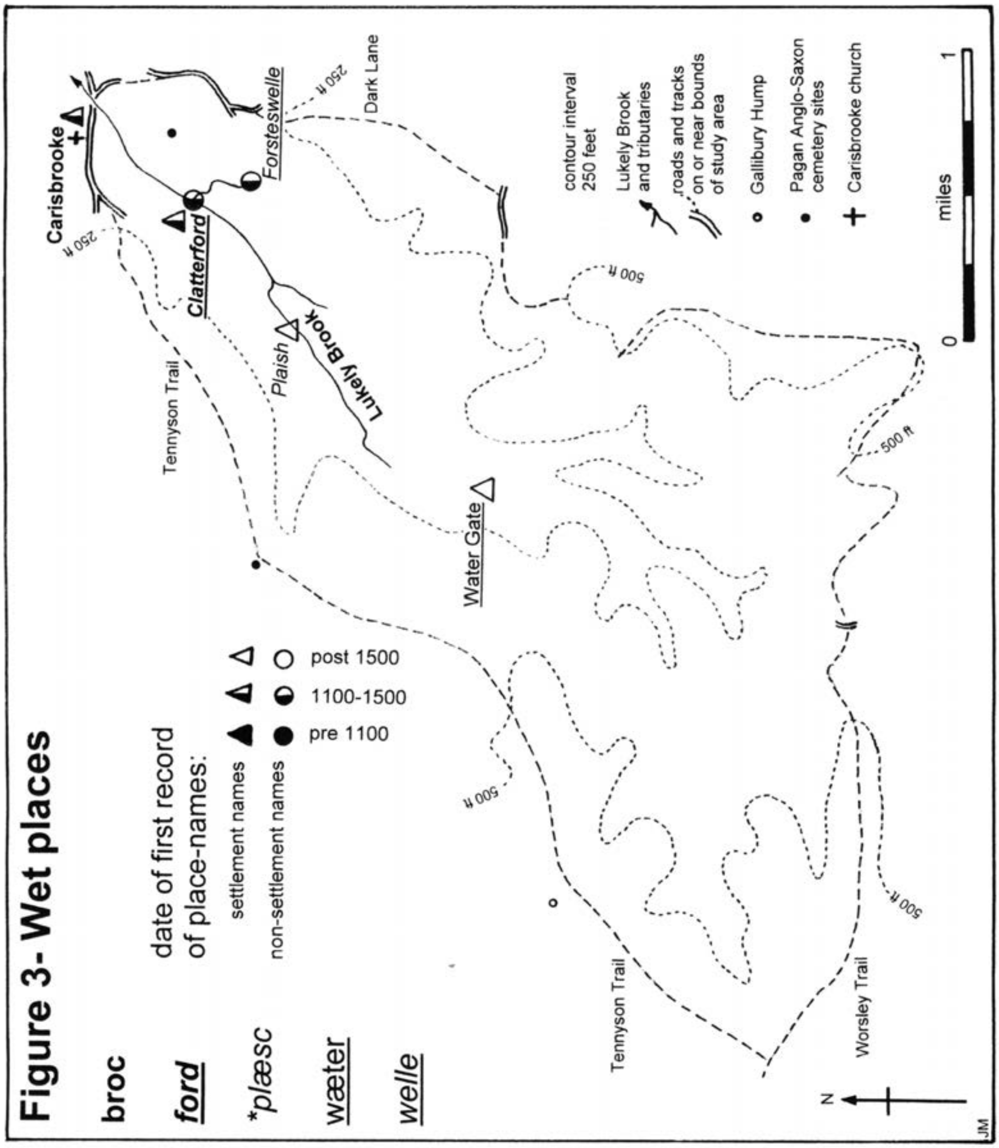
Figure 3- Wet places
broc
ford
*plæsc
wæter
welle
date of first record
of place-names:
settlement names
non-settlement names
pre 1100
1100-1500
post 1500
Carisbrooke
Clatterford
Forsteswelle
Plaish
Lukely Brook
Water Gate
Dark Lane
Tennyson Trail
Worsley Trail
250 ft
500 ft
contour interval
250 feet
Lukely Brook
and tributaries
roads and tracks
on or near bounds
of study area
Gallibury Hump
Pagan Anglo-Saxon
cemetery sites
Carisbrooke church
miles
0
1
N
JM

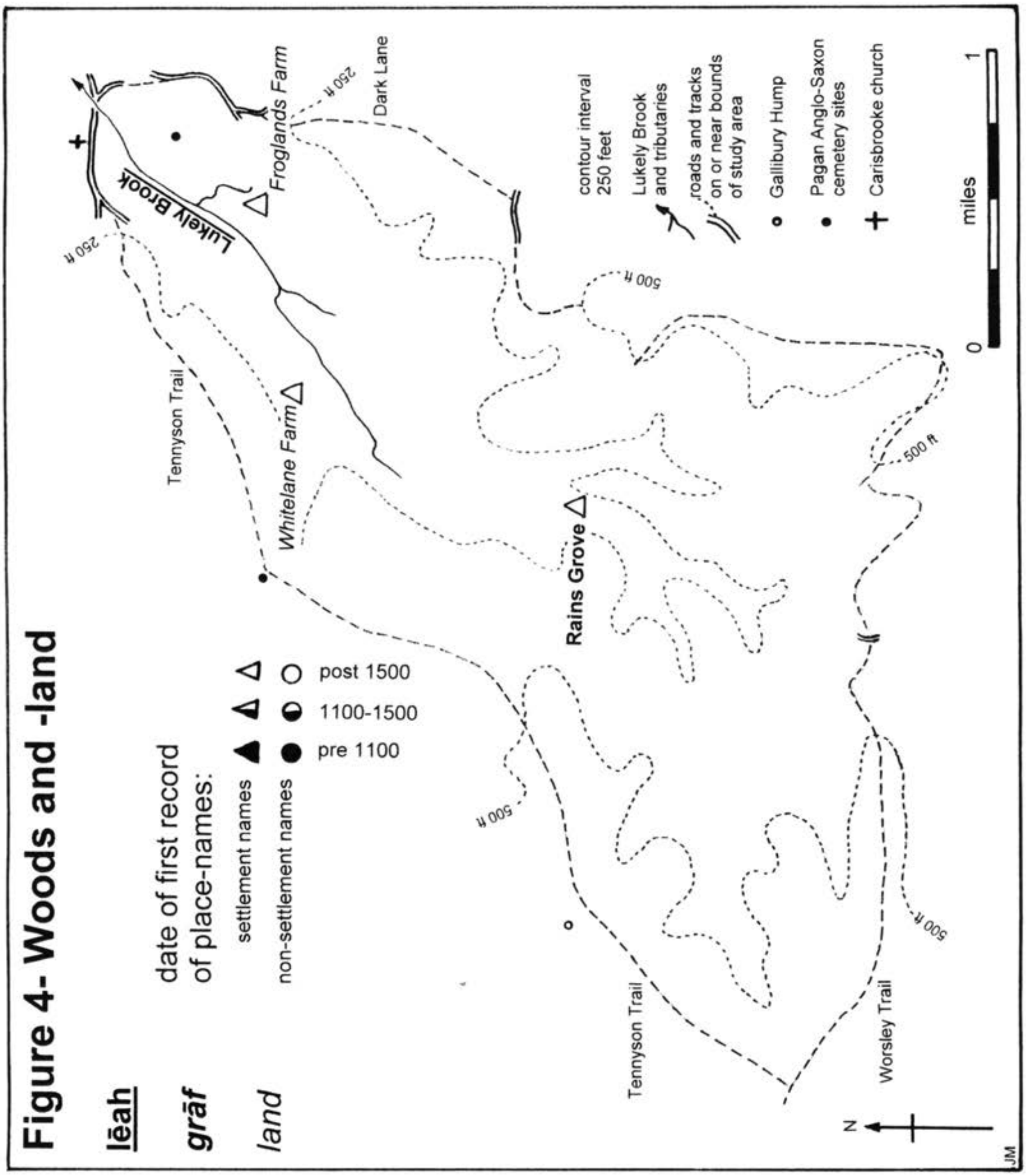
Figure 4- Woods and -land
lēah
grāf
land
date of first record of place-names:
settlement names
non-settlement names
pre 1100
1100-1500
post 1500
Froglands Farm
Dark Lane
Lukely Brook
250 ft
500 ft
Tennyson Trail
Whitelane Farm
Rains Grove
Worsley Trail
contour interval 250 feet
Lukely Brook and tributaries
roads and tracks on or near bounds of study area
Gallibury Hump
Pagan Anglo-Saxon cemetery sites
Carisbrooke church
0
1
miles
N
JM

Proc. Isle Wight nat. Hist. archaeol. Soc. **23** *(pub 2008)*

NEW VICE-COUNTY RECORDS FOR HEMIPTERA

Dr D. T. Biggs

Two papers with similar titles have been published previously (Biggs, 2001 and Biggs, 1998) up-dating the list of Island Hemiptera published in 1997 (Biggs, 1997). This paper describes six new species of Heteroptera and three of Homoptera.

HETEROPTERA

ANEURIDAE

Aneurus avenius (Dufour, 1833)

This is a bark bug, 5mm. in length, very flat, blackish-brown with paler brown antennae and legs. It is found throughout southern England, usually beneath the bark of dead branches of various deciduous trees and shrubs. Paul Davies found an adult female on washing hanging on a line at Mottistone 11.5.2001.

PENTATOMIDAE

Eurydema ornatum (Linnaeus, 1758)

A visiting entomologist John Paul from West Sussex whilst walking from Bonchurch to Ventnor along the revetment 20.10.2006 found four of these beautiful shield-bugs on a Wall-flower, *Erysimum cheiri* growing at the foot of the chalk cliffs. One of the insects was immature, indicating breeding at the site. Although found in Europe from Sweden to Spain it was not found in England until 2004 (Boscombe) and 2005 (Portland Bill). It is 8mm. in length and red and black in colour. A further specimen found by Enid Butler in her garden at Wheelers Bay 29.5.2007 and photographed by Andy Butler (see colour photo).

COREIDAE

Gonocerus acuteangulatus (Goeze, 1778)   The Box Bug

Until 1990 the only English site for this squash bug was Box Hill in Surrey where it had been known since 1850. It then began to spread through Surrey, reaching west Kent and Sussex in 2002, Middlesex in 2003, and Hampshire and Buckinghamshire in 2006. I found an adult male at Ningwood Common 12.6.2007. There is of course no Box at Ningwood Common. In western Europe this insect also feeds on Alder, Blackthorn and Oak and apparently in southeast England it is also known to feed on Hawthorn, *Crataegus spp.* and Rose, *Rosa spp.* It is an elongate bug 11-12 mm. in length, a dull pale reddish-brown above with black puncturation, and lime-green beneath. This is a Red Data Book species classified as Rare and Endangered.

RHOPALIDAE

Liorhyssus hyalinus (Fabricus, 1794)

At 4.8 mm in length, red and black with black puncturation and with six very obvious black spots on the body and completely transparent wings this is a handsome bug which was known as a migrant species from Europe, with invasions into England in 1903 and 1958. However since 1996 with appearances in Hampshire and Bedfordshire and 1998 in east Sussex it appears now to be a recent colonist. The first Island record was from Newport town centre where one landed on me 14.5.2007. The main food-plant abroad is Sow-thistle, *Sonchus spp*.

MIRIDAE

Atractotomus magnicornis (Fallén, 1807)

This bug inhabits Spruces, *Picea spp.* and is only rarely found on other conifers. It is apparently widely distributed throughout the British Isles. I decided to search for this insect and went to Firestone Copse 12.7.2006 and beat lower branches of Norway Spruce *Picea abies.* I collected one male and one female. Although only 3.2-3.5mm. in length this bus is elongate in form, black and covered with a complicated collection of hairs, short black simple ones and fine golden-yellow and white scale hairs. The legs are yellowish-white and the second antennal segment is black, stout and cylindrical.

Tuponia brevirostris Reuter 1883

A closely-related species to this, *Tuponia carayoni* Wagner, now *T. mixticolor* (A. Costa) was found for the first time in Britain from Freshwater in 1980. It inhabits Tamarisk, *Tamarix gallica.* This bug is now widespread on the Island. In 2001 a second Tamarisk bug was found at Chelsea Harbour in London. This species, *Tuponia brevirostris,* 2.5 mm in length, light green in colour with white legs bearing conspicuous black spines had spread to Hampshire and Kent by late 2001 and to Suffolk in 2002. I was able to beat many individuals from Tamarisk in Osborne Bay 24.7.2007 and took a few at Dodnor 31.10.2007. It used to be found in southern France, Portugal and Spain, eastwards to Turkey and Cyprus, and in North Africa. More recently it has spread, presumably under the influence of climate change, to Brittany and Paris.

HOMOPTERA

CERCOPIDAE

Aphrophora costalis (Matsumura, 1903)

Bill Shepard and I visited the Newtown rifle range, Porchfield, 1.8.2007 to collect insects. We swept the Grey Willow, *Salix cinerea* growing around the large pond and amongst numerous specimens of *Aphrophora salicis* were several of *A. costalis.* This is a relatively large frog-hopper, at 9-11mm. in length with orange-yellow and brown forewings, and found locally in central and southern England on various Willows, *Salix spp.*

Appelia tragopogonis (Kaltenbach, 1843)

This aphid has two different host-plants, alternating between Blackthorn, *Prunus spinosa* and Goat's-beard, *Tragopogon pratensis*. I found a small colony of these shiny black aphids at Little London, Newport 11.5.2007 on the stems of Goat's-beard growing on waste ground.

Aspidiotus nerii Bouché 1833

A glasshouse pest throughout Europe this is the Oleander scale insect. I suspect that it is likely to be widespread on the Island. My wife found one of the conservatory Oleanders, *Nerium oleander* to be infected with this insect 7.8.2007. The female insects are flat, rounded (1-2mm. across) and white with a yellow centre looking uncannily like tiny fried eggs.

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RED-VEINED DARTER
FIRST CONFIRMED BREEDING ON THE ISLE OF WIGHT

Dave Dana

The Red-veined Darter *Sympetrum fonscolombii,* (Selys) is now considered a regular migrant dragonfly to Great Britain and breeding has been recorded from 18 counties as far north as Lancashire and East Yorkshire (Parr 2006). Breeding records however are erratic with few regular localities. Locally-bred (ie in Britain) individuals appear to disperse / migrate rather than remain to establish colonies. In Europe northward migrations occur from late May; subsequent reproduction takes only three months. The second generation emerges from mid-August and may extend into November (Dijkstra 2006). This pattern seems to be occurring in southern England. In 2006 few mature individuals were observed during the autumn, despite the emergence of hundreds of individuals at some sites (Parr 2007). Emergents apparently disperse before reaching sexual maturity and do not return.

On the Isle of Wight the species has been recorded every year (except 2001) since 2000 (Cheverton 2001-7). In 2007 five adults were recorded at Leycroft Farm reservoir on 13th June. How long they had been there is not known. On 8th September a teneral (recently emerged) male was seen entangled in an apparently disused spider's web on the bank of the reservoir. The specimen was sent to Adrian Parr, Migrant Dragonfly Recorder for the British Dragonfly Society, who confirmed the identification. A teneral dragonfly present at or near the water's edge is normally accepted as sufficient evidence to confirm successful breeding.

Acknowledgements
I am grateful to Adrian Parr for not only confirming identification of the insect but also keeping us informed of the current trends of immigrant Odonata. I am also grateful to the landowner for access to the site.

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Eurydema ornatum
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Red-veined Darter *Sympetrum fonscolombii* (Sélys) Male.
Leycroft Farm reservoir 13th June 2007
Photo Dave Dana

Eurydema ornatum (Linneaus, 1785)
Photo Andy Butler

The Devil's Bolete *Boletus satanus* a large, rare and spectacular fungus found growing beneath holm oak at Fort Victoria

Physisporinus sanguinolentus, a small white bracket fungus which exudes drops of red liquid, was found on a muddy ride in Briddlesford Copse.

Attractive clusters of the little white fungus, *Hemimycena tortuosa*, were found growing on fallen twigs in Robin Wood, Porchfield.

Gomphidius roseus, with a red slimy cap found growing in Parkhurst Forest with the bovine bolete, *Suillus bovines*, on which it is parasitic.

Photos Colin Pope

SOME FUNGAL HIGHLIGHTS OF 2007

Colin Pope

The damp summer raised prospects for a bountiful autumn harvest of fungi but hopes were dashed by prolonged dry spells during the autumn. At the time of our annual autumn foray on the week-end of 5/6 October, our visiting expert, Alan Outen, reported very poor finds from his home area in Bedfordshire / Hertfordshire. Nevertheless, a full day foraying in Parkhurst Forest, always a rich site, produced a very respectable haul of 154 taxa which was on a par with Alan's subsequent productive forays in Bedfordshire and Hertfordshire.

Table 1 shows the counts for toadstools (Agarics and Boletes) and the total list of all fungi from the sites visited with Alan in 2007 and in 2006. We visited the same part of Briddlesford Copse in both years, but the species lists were very different.

Site	Parkhurst Forest 05/10/07	Briddlesford Copse 06/10/07	Other sites 06/10 &07/10	Borthwood Copse 28/10/06	Briddlesford Copse 29/10/06	Other sites 28/10 & 29/10
	2007			2006		
Agarics & Boleti	75	55	3	72	87	84
TOTAL FUNGAL TAXA	**154**	**102**	**14**	**127**	**154**	**121**

Table 1 Counts of fungi during forays in 2006 and 2007

Notes on a selection of the more noteworthy macro-fungi recorded in 2007 are provided below.

Agarics and Boleti

Boletus satanus (Photo)

The Devil's bolete is a large, brightly coloured poisonous fungus. It has a red pored, pale cap and a swollen, often globose stem. It is considered to be rare in Britain; it was listed as endangered in Bruce Ing's 1992 Provisional Red Data List of fungi and was earmarked as being a priority species for conservation under Britain's commitment to preserving biological diversity. This created a lot of interest and records started to come in from across southern England. In the light of this extra information, its status has now been reviewed. Although still scarce, it is no longer considered to be a threatened species.

Boletus satanus is found on warm base-rich soils in southern counties generally under mature beech but sometimes under oak. It usually fruits quite early in the season, before the main foraying season has got underway.

Up until 2006, there had only been one record from the Island; it appears in E.W. Swanton's checklist (1934) from Apes Down. However, in mid October 2006, Nick Blake produced a fine specimen at the end of a foray at Fort Victoria. It certainly looked like *Boletus satanus* but I was

unable to get it confirmed. In August 2007, Nick found another specimen and I was able to get this confirmed by Alan Hills, a national specialist on British boletes.
It is particularly interesting that the site is on a coastal slope close to the sea in open ground beneath holm oak (*Quercus ilex*). This is the first British record for this species growing with this host tree. The site seems to produce occasional specimens sporadically each late summer / autumn.

Cortinarius bolaris
This is one of the few colourful and easily identified *Cortinarius* species. It has a reddish-brown scaly cap and yellow-ochre gills and occurs gregariously beneath beech. It was found during our Parkhurst foray at the north end of the Forest, where there is much beech; we had previously seen it here during one of our forays in 2006.

Cortinarius uliginosus
This is another brightly coloured *Cortinarius*. This one has a copper-red cap and lemon yellow gills and grows beneath willows. We found it on our foray at Porchfield Ranges on 3rd November.

Gomphidius roseus (Photo)
This is a fascinating fungus which is not regularly recorded on forays but appeared at two sites this autumn. It is closely associated with the brownish bolete, *Suillus bovinus*. We found a large collection of this bolete beneath pines along one ride in Parkhurst Forest on 5th October and Alan suggested we should keep an eye open for *Gomphidius roseus*. Jacqui Darby, a visiting mycologist with a good eye for something unusual, found a specimen of this red-capped fungus, looking superficially like a *Russula*. Later in the season, Jillie and myself found two specimens in Combley Great Wood. This fungus has been shown to be parasitic on the mycorrhiza established between the bolete and the roots of pine. Consequently, it is parasitic on both fungal and plant partners.

Hemimycena tortuosa (Photo)
We found this attractive little white toadstool growing in small clusters on the bark of fallen damp wood (probably oak) in Robin Wood, Porchfield during our final foray of the season on 1st December. There were quite a few but generally they were growing in small clusters. The stipe ranged from 6-9mm in length and around 0.8mm width; the pileus was up to 38mm across. The fusoid spores were around 9.6u x 2u. The stipe had abundant flexuous capitate caulocystidia and there were also long cystidia on the cap. The tentative identification as this species was confirmed by Alan Outen as being spot on! He said that the microphotograph of the caulocystidia (specialised swollen cells on the stem) could almost be superimposed over Orton's drawings in the 1960 Checklist Supplement. There have been a few previous records of this species from the Island.

Tubaria furfuracea
Wood chip is increasingly widely used as a garden mulch and it has its own specialised mycoflora. Late this autumn, huge troops of the little brown fungus, *Tubaria furfuracea*, were spotted on mulched flower beds at Ventnor Botanic Gardens and at Freshwater Bay.

Coprinus micaceus
Elsewhere, Magpie Fungus, was prolific on woodchip at Seaclose Recreational Grounds, Fairlee, Newport.

Stropharia aurantiaca
This striking orange-capped fungus which appears to be uniquely associated with wood chip, was found growing on wood chip mulch at Ventnor Botanic Gardens. This is an interesting habitat for finding unusual fungi.

Aphyllophorales

Physisporinus sanguinolentus (Photo)
This little white bracket fungus oozes droplets of scarlet liquid. Once pointed out, as it was to us by Alan Outen in Briddlesford Copse, it is quite striking but is easily overlooked. It was found growing on dead woody branches embedded in a muddy ride. There have been few previous Island records.

Schizophyllum commune
This little split-gilled fungus is increasingly seen bursting out of silage bales sealed with plastic and has been recorded on a number of locations from the Island in this situation. It is a species which is far commoner in the tropics and it no doubt benefits from the heat generated in composted bales in this country. It is far less frequently found in its more natural habitat on dead wood, but specimens were seen on fallen beech timber at the north end of Parkhust Forest on our main foray.

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COCK AND BULL STORIES: ANIMALS IN ISLE OF WIGHT FOLKLORE, DIALECT, PLACE-NAMES AND CULTURAL HISTORY

Alan R. Phillips

Introduction

This paper is a much extended version of some notes originally submitted as the Isle of Wight's contribution to Professor Stefan Buczacki's *Fauna Britannica*, published in 2002. The aim has been to gather together a selection of references to animals, birds and insects which have featured in Island folklore, cultural tradition, dialect and place-names. The result is a very mixed bag culled from many different sources, ranging from dialect stories and individual words to the leisure pursuits of royalty, from oral reminiscences to folklore snippets and place-name origins. Some were first recorded a very long time ago, others have only recently made it into print, whilst a few have never been recorded at all in any formal sense.

The material readily available for various kinds of species varies widely. Medieval references centre round deer-hunting, owing to its royal connections, and rabbit-breeding, for which the Island became noted; hares, like their real-life equivalent, are a bit more elusive. Sheep, pig and cattle farming have been so integral to the Island's economy and cultural life that references abound right up to modern times, including a large variety of dialect words (something which does not apply to deer, and surprisingly little to rabbits). We should also not be surprised that an agricultural economy so dependent on horses should produce such a wonderfully nostalgic set of memories as have been recorded in recent years, by the last generation that is able to do so: a selection has been included with their authors' permission in addition to an extensive set of dialect survivals. Despite, perhaps because of, their familiarity, references to cats and dogs have been spasmodic and quirky, but a large range of the most popular birds are very well represented in folklore, dialect and place-names; so too, more unexpectedly, are a large variety of insects. The rat, that ever-present vermin threat, also fares surprisingly well. Badgers and squirrels, however, especially given the latter's prominence in the Island's contemporary cultural life, have produced very little but could not be passed over without mention of at least a few interesting snippets.

A primary aim has been to give some of the dialect and place-name material, already extant in the form of dictionaries and lists, a more cohesive narrative. The research has been reliant for dialect entries on W.H. Long's classic *Dictionary of the Isle of Wight Dialect* (1886), supplemented by Charles Roach Smith's *Isle of Wight Words* (1881) and Edward Turner's *Encyclopaedia of Isle of Wight Words* (1900), and now updated a century later by Jack Lavers' excellent *Dictionary of Isle of Wight Dialect* (1988). (Owing to the multiplicity of dialect references in the text and for the sake of readability references to these four dictionaries are listed simply as 'Long', 'Roach Smith', 'Turner', and 'Lavers', respectively, without repeating the date of publication each time.) Place-name etymologies are mostly taken from A.D. Mills' *The Place-Names of the Isle of Wight* (1996), which in turn updates the Swedish scholar Helge Kokeritz's pioneering work published in 1940 that carries the same title (these are likewise referred to simply as 'Mills' and 'Kokeritz' in the text).

Historically animals have been of central importance to the lives of Isle of Wight inhabitants, especially until the retreat of agriculture in the middle of the last century. Animal husbandry was long a major source of food production, and the wealth of surviving dialect material in particular serves to highlight the integration of Islanders' day-to-day lives with those of their livestock. Wildlife had always been a target for the sportsman and poacher alike, and whilst several practices which once passed for popular entertainment such as cock-fighting or bull-baiting would not be condoned today, it should be remembered that, whilst the upper classes had their hunting pursuits, before the advent of modern transport working people had few alternative avenues for amusement. There was furthermore a constant threat to folks' welfare and well-being posed by animals regarded as pests and disease carriers, whilst the Island was no exception in terms of the quirky English relationship with animals regarded as pets.

Sheep

i) The Island's Best

Sheep were farmed in Britain from the Neolithic period, and a Late Iron Age occupation site at Gill's Cliff, Ventnor, revealed well distributed animal remains at all levels, including the bones and teeth of a sheep as well as of fox and pig (Benson 1953). Sheep were certainly of prime importance to the Isle of Wight economy from the earliest times, the Island in fact becoming noted for their excellence (Long 1888). By the later medieval period they roamed on the downs and commons belonging to the manors, whilst their owners who had rights of pasturage were known as 'commoners'. The shepherd would have followed his flock as it slowly moved along the downs and spent the night in a sheepcote or 'bercarie' (Hockey 1970). The manor farm of Rew possessed 138 'hoggets' (one-year-old sheep) and 200 lambs in the late 13th century, contrasting markedly from the nearby Bonchurch manor farm, which appears to have possessed no sheep but ten oxen (Whitehead 1911). Wool was sold at 1s 11d. a clove of seven pounds at Bowcombe in 1317 (Page 1912). The Abbey of Lyre's accounts for 1351-52 include some income from wool from Freshwater, Brook, Compton, Chessell, Wellow, Ningwood, Appuldurcombe and Wroxall (Hockey 1982). In 1400 Rowborough Farm had two hundred and fifty sheep in its flock (Jones & Jones 1987); by 1560 Freshwater parish possessed common land for a total of 4,488 sheep (Margham 1992).

By this time sheep were producing dairy products as well as wool: "The milkyng of ewes is commodious and profitable to the owners, although troublesome and painfull to the servants. And ewes mylk renned yeldeth much more crud than cow mylke, and mingled with cow milke increaseth the dairie" (Hockey 1970). The common rights system did not of course stop disputes arising, including a particularly complex and acrimonious legal one between neighbouring sheep-owners over grazing rights on St Catherine's Down, which lasted from 1559 to 1577, and which seems not so much to have resolved itself as to have expired from exhaustion (Hockey 1982). The Swainston Survey of 1630 demonstrates that it was possible for Swainston, Brighstone and Waytes Court manors to graze 3,130 sheep on the downs, and tenants were allotted grazing rights according to the size of their tenancy (Jones 2003). John Albin could write in 1795 that "the pasture which is afforded for sheep on the hilly and elevated parts [of the Island] produces a fleece of so fine and pure a staple, as not to be inferior to any in the kingdom... the mutton is held in the highest estimation" (Albin 1795). About 30,000 sheep and 8,000 lambs were being shorn annually on the Island when Thomas Pennant was writing his tour guide in 1801 (Pennant 1801).

Common rights also enabled farmers to wash their sheep freely in local streams from medieval times, and the sheepwash in Winkle Street continued in use right through to 1976 (Jones & Jones 1987). Sheepwash Farm to the south of Godshill denoted 'a place for dipping sheep', and there are at least four other places called Sheepwash on the Island, at Carisbrooke, Freshwater, Northwood and Whippingham (Mills). Up to 1,200 sheep would be washed at Plaish Farm sheepwash, Bowcombe, in the 1920s (Humber 2006). Greening (2000) provides this account of the sheepwash in Chillerton by local resident Mrs Attrill: "Every year in May the sheep were washed on the green. The stream was stopped by putting a sack in the bung and sealing with mud overnight, and by the next morning the sheepwash was full. Hurdles were put around the wash, the sheep were penned there, and the overflow filled up the yard... Not only Chillerton Farm sheep were washed but sheep from the other farms around... After the sheep were finished the bung was taken out and all the dirty water ran down the main village road" (Greening 2000). It was also within living memory a common sight on Saturday mornings to see around one thousand sheep being driven through Newport High Street by the drivers and their dogs, heading for Cowes and Yarmouth where the animals would be transported across the water in barges en route to the London markets (Greening & Shepard 2002).

ii) Lambs & Rams

Whereas nowadays we expect the lambing to be done in the spring, in the 1920s and '30s it was always carried out in the autumn, to match the agricultural food supply: the young lambs would be fed initially on white turnips, then by the end of February this would be replaced by swedes (H Humber pers. comm.). However, at the end of the 18th century "the time of lambing, here as in West Sussex, [was] Christmas, or a little after" (Marshall 1798). Sheep manure was the chief way of adding fertility to the land, hence the reason for their being kept in folds which were moved every few days across the field. Sheep-bells were also very important and were attached not to the best-looking ones but to those that were most likely to stray (H Humber pers. comm.). A number of 'crotal bells', i.e. bells put on sheep as well as other stock animals, have been recorded from the Island on the Portable Antiquities Scheme (V Basford pers. comm.).

Sheep were always considered bringers of luck, perhaps because of their association with the Nativity (Newall 1971). In Isle of Wight dialect they often became 'sheepses', 'yo' was an old dialect word for a ewe more widespread than just the Island, while 'not' referred to sheep or cattle that were hornless. A 'pur lamb' was male, 'chid lamb' female, 'hog' a lamb after weaning up to the time it had shed its first or sucking teeth, and a 'tag' once it had reached one year old. A top delicacy of its day was 'larberts', or lambs' testicles - fried, or in a pie! (Lavers). About 'reyaps' we are told no more than that it was 'food for sheep', though whether a specific food or just a general term is not clear (Lavers). 'Coathe' denoted a disease of the livers of sheep from feeding on wetlands: hence the origin of Coathy Butts near Havenstreet (Lavers), and almost undoubtedly Cothey Bottom at Ryde (Kokeritz). A 'voold' signified an enclosure in a field for sheep, though it doubled up as the dialect word for a foal (Long). A stake driven into the ground to which the hurdles in a sheepfold were fastened was known as a 'zool'; however, 'riggish', or wantonly playful, sheep or cattle would always find a way to break through fences or get out of a field: "That's a terbul riggish heifer o' yourn, varmer, she's for ever gitten' over hedge into my vatches [vetches/fodder crops]" (Lavers). And when different flocks of sheep, or herds of cattle, were mixed together, they were said to be 'aal amang one another' (Roach Smith).

Ramsdown Farm near Chillerton is almost certainly what it sounds: 'the hill of the ram' (though just possibly 'the hill where wild garlic grows' from Old English 'ramson'), and Lambsleaze close to Locks Green refers simply to 'pasture for lambs' (Mills). In the early 1800s the only road passing through Bonchurch was known as 'Shepherd's Lane' (Whitehead 1911). Shippards Chine close to Brook is no doubt identical in name origin with Shepherd's Chine near Brighstone Bay, but why are they so called? Shepherds were hardly likely to have encouraged their flocks to use such areas, though they may easily have lost stray sheep in the chines, and it is interesting that in the early 17th century Shepherd's Chine was known as *Kingetts Chine* after a local family (Mills).

Pigs

i) Wild Boars & Piggards

An excavation of an Early Bronze Age round barrow (*c*.2,000 BC) on Arreton Down in 1964 revealed a large pig tooth, together with an otter canine tooth and a lower jaw bone probably of a wild cat (Frazer 1990); and boars' tusks were found in a Middle Bronze Age barrow on Shalcombe Down, excavated in 1816 (Grinsell & Sherwin 1940). Wild boar as well as red deer would have rummaged the forest floor in the Roman period, and their tusks and antlers found at Brading Roman Villa indicate many successful hunting ventures (Tomalin & Hanworth 1998); a wild boar tusk of the same period was also recorded in a cooking pot found at Lake (Frazer 1990). The importance of the boar-hunt was stressed by classical writers such as Strabo, and wild boar were often depicted as symbols of warfare and aggression, though they could equally well become enchanted, Otherworld creatures in Celtic myth (Green 1992).

So valuable were wild boar and deer considered to be by the Middle Ages that in the reign of

William I, their illegal killing was punishable by blinding (Buczacki 2002). There are relatively few references concerning pigs on the Island in the medieval period, which is surprising considering the extensive woodland and its predominance of oaks (Hockey 1970). However, the Domesday Book of 1086 refers to "woodland at 20 pigs" (Calbourne and Shalfleet), "woodland at 2 pigs" (Heasley, Brading, Shanklin, and Watchingwell), and "woodland at 1 pig" (Wroxall, and Preston and Barnsley, both near Ryde) (Munby 1982), and whilst these figures probably represent a system of quantifying woodland and not actual pigs, they do at least make the connection between woodland and farming pigs (J Margham pers. comm.). Under the lordship of Isabella de Fortibus in the late 13th century Bowcombe became the most important manor, with 31 pigs and 35 piglets, and a boar for slaughter fattened on two bushels of beans; there were in addition 31 ploughing oxen and 17 cows (Hockey 1982). Then at the turn of the 13th century the monks at Carisbrooke priory possessed twelve sows, thirty porkers, twelve piglets and one boar, together with five horses, sixteen lambs, twelve good cows and ten of poorer quality, one bull, eight oxen and fifteen calves (Hockey 1982).

In his introduction to *The Oglander Memoirs*, W.H. Long affirms that by the early 17th century pigs were feeding on acorns in the parks of Appuldurcombe and Watchingwell, as well as in Alvington - now Parkhurst - Forest. There has been a Hogleaze Copse in the Whippingham area since at least 1534 (Kokeritz). During the 18th century Newport had its own 'Piggard' or pig driver, employed by the Court Leet: whilst pigs were allowed a certain amount of freedom round the town, it was this official's duty to see that they did not become a nuisance - a bit like today's dog wardens - and if they did, to round them up and put them in the pound; the same would be done for stray cattle. The job cannot have been a popular one as Court reports indicate that he was frequently obstructed in his duty, insulted and even assaulted, then to add insult to injury on one occasion in 1743 the Piggard was himself ordered to be set in the stocks for failing to have properly carried out his duties! (Eldridge 1952).

By the late 18th century an Island breed of pig had been developed, large and tall with black spots and producing good quality bacon for poorer households (Jones & Jones 1987). A species of crustacean called the sandhopper, resembling a shrimp, was plentiful in the vicinity of Shanklin at the same period, and "at low water they lie in vast numbers on the shore, and furnish the hogs in the neighbourhood with an excellent and nutritious repast" (Hassell 1790). Even in 1905 a pig farmer could confirm that pig-farming inland was less profitable than on the coast, where the sandhoppers still provided a nutritious and much-relished meal (Garle 1905). In 1929 the Island pig population per acre was assessed as the largest in England: fifty was the average number on a farm (Jones & Jones 1987).

ii) Sarren and Snoodlin'

In folklore terms, pigs were associated with the weather: they were said to be able to 'see the wind' and would rush round announcing its arrival; it was also believed that anyone who had slaughtered a certain number ran the risk of seeing the devil, who sometimes appeared in pig form (Newall 1971). Dialect words for pigs were many and varied. Young growing pigs were 'slips' or 'shoots', while a large fat pig was a 'suskin'; a young castrated boar was a 'barrow pig', while its old castrated counterpart was a 'boor stag' (Lavers). A farrow or litter of pigs was a 'straain': "My zow got a fine straain o' ten pigs this mornen" (Long); the smallest piglet in the litter was a 'dolly', and a weakling piglet a 'joey'. 'Sic', or sometimes 'sook', was the call made to pigs to come to the trough (Lavers), and 'sar' was a general term used for feeding animals: "I was gwyne to ax ye if ye wouldn't mind sarren my pig at dinner-time; I've mixed the vittles up all ready vor'n" (Long). The pigs might sometimes have been fed on 'pollards', a coarse bran, or 'graains', the remains of malt after brewing; and of course 'they there pigs' were often 'up to their bellies in swile', mud or filth. Any person setting about anything eagerly or impetuously might be referred to as 'taail-on-end, as ayger as a pig aater the wash bucket' (Long). 'Chammen' or chewing vigorously could be associated with several animals but especially pigs: "The pigs a' ben and chammed my smock frock all to pieces"; but applied to humans the word was used figuratively in the sense of chewing something over or ruminating over something niggling: "He keeps on chammen on't over" (Long).

'Tucks' referred to a boar's tusks; 'chopperkin' a pig's under-jaw, salted and smoked; 'liver and crow' a pig's liver or pig's fry; 'sowse' the ears, feet and tail of a pig, pickled and boiled; and 'haslet' the liver, lungs and heart of a pig (Long) (not to be confused with the name 'Haslett' - see under **Hares**). 'Hocks' denoted pigs' feet in particular (Roach Smith), and feet in general: "Don't putt thee gurt hocks up agen me" (Long). 'Brussells' referred not so much to sprouts as to a pig's bristles, which were often singed or scorched off: "I zay, meyaster, be ye gwyne to scald yer pigs, or sweal 'em?" i.e. "...scald the bristles off your pigs, or burn them off?" (Long).

'Snoozle' or 'snoodle' applied to animals, but particularly pigs, which nestled together: "I zee the wold zow and the little pigs be all snoozled in together" (Long). The word had the additional meaning of rubbing and scratching, and attending assiduously to pigs. W.H. Long refers to a case of pig-stealing tried many years previously, i.e. in the mid-19th century, at Winchester, when the chief witness for the prosecution was asked by the opposing council why he was so positive in swearing to the stolen pigs, as all pigs were very much alike. "I'll tell'ee for why: 'cause *I snoodled 'em*, and could prid near undertake to zware to every heer on their backs". The term completely mystified counsel and judge and an explanation was called for; when it was found to mean that the witness had attended to the pigs daily, feeding them constantly with different things, and then spent most of his leisure time rubbing and scratching their backs! (Long).

In terms of place-names, Yaverland is a development from the Old English *Ewerelande*, 'the cultivated land or estate where boars are kept' (Mills). It appears that the old name for Arreton Down was *Berdune*, and the first element of the name may possibly have been Old English *baer*, 'swine pasture', though it could equally well have been *bere*, 'barley' (Kokeritz). Likewise, a point on the Anglo-Saxon boundary between Shorwell and Brighstone parishes is recorded as *Swines heafod*, 'swine head', and may refer to a topographical feature on the nearby downland, though it may equally as well have nothing to do with pigs and refer to a local stream (Margham 2006).

Most cottages in the Bowcombe Valley once had their own pigsty, which was housed in the same building as the 'dunnekin' or privy, so visits to the latter must have been interesting, to say the least! (H Humber pers. comm.). Greening cites an amusing example of an early entry in the Best Boar class at the Royal Agricultural Show by the prison farm at Parkhurst: a pig that went by the name of 'The Governor'! (Greening 2001). And a nursery jingle once used in catching or counting children's toes - without doubt the local dialect version of *This Little Piggy Went To Market* - runs as follows:

"This gurt pig zays, 'I wants meeat';
T'other one zays, 'Where'll ye hay et?'
This one zays, 'In gramfer's barn'
T'other one zays, 'Week! Week!
I can't git over the dreshel [threshold]'." (Long)

Cats & Dogs

At Wackland near Hale Common in the early 19th century Squire Thatcher's cook received a visit from a witch in the appearance of a black cat - the most common form of witch's familiar spirit. The cook was frying pancakes at the time and threw a spoonful of lard on the cat, whereupon it ran off mewing with pain, and the witch-woman had a painful back from then on (Hargrove 1913).

In his book of essays on the Isle of Wight published in 1911, the poet Edward Thomas retells a story about a kitten from Henry Fielding's 1754 *Voyage to Lisbon*. There were no less than four cats aboard ship, and when a gale sprang up as it came to anchor off Ryde, the kitten went overboard. The captain was very upset about it and despite the cat's slim chances of survival the bosun leapt into the water, returning with the motionless animal in his mouth. Despite having been given up for dead by everybody, the kitten eventually recovered, to the great joy of the captain - but not apparently to the rest of the crew, "who asserted that the drowning [of] a cat was the very surest way of raising a favourable wind"! (Thomas 1911). Having a cat on board ship was certainly one of the numerous omens of bad luck by which seamen were once surrounded.

Like several other areas of the country, there have been many sightings of a big cat on the Island over the last two decades. The phenomenon took off in 1983, with 23 appearances of the Isle of Wight 'puma' between May and October, with changes to its coat from black to grey, sandy, silver and 'reddish'. By September 1985, there were said to have been more than 120 sightings on the Island, and intermittent ones have continued ever since (Fortean Times website).

Currently on display in the Guildhall Museum is an almost complete Roman copper alloy figurine from the 4th century AD, found on the Isle of Wight and representing a 'long-nosed hound', similar to the breed of dog now known as the Irish wolfhound. It rests on its haunches on a small rectangular plinth and glances upwards with its head turned to the right; its nose is elongated and its ears erect and pointed. In the Romano-British period dogs, like many other animals, often appear to have had divine attributes and may have been perceived as underworld creatures (Green 1992). On a more practical level, they played an important part in hunting, and British dogs in particular were famed throughout the Roman Empire (Green 1992).

Writing in 1926, Ethel Hargrove tells us that "until about seventy years ago [i.e. the 1850s] dogs played a large part in aiding Island traffic. Of lurcher breed, strong and wiry, two were harnessed to a cart, tandem or pair. No reins were used: people sat on one side of the vehicle with their legs dangling till they nearly touched the ground. These carts were very narrow, so consequently they could pass through the bridle-road gates. Oil or rag-and-bone men would often drive them furiously along the highway, and sometimes crockery was entrusted to this jolting form of transit" (Hargrove 1926).

A greyhound was often referred to as a 'long dog', while a dog given to lying before the fire became, appropriately enough, a 'vire spannel' (Long). In dialect a dog would 'pank' rather than pant: "How that dog panks under the taable!" (Long). 'Smellers' denoted the whiskers of both a cat or a dog. A 'sowl' was a dog's hold on the ear of an animal, and by association used of pulling a person's ears: "The dog gid the wold zow a middlen sowlen all round the ground, avore she got to the gap" (Long). 'Yappen' was also transferred from dogs to some of those barking or yelping humans (Turner); an alternative word was 'yowl', which manages to combine a dog's yelping or howling in one evocative word. A person being 'pecked upon' or kept under might well have complained: "I was pecked upon all the time I was there, and used wuss than a dog" (Long). The call 'hie' was used to encourage dogs to seek game (Roach Smith): it would certainly have been used on 'thucksters', an old Island word for coursers or hunting dogs (Lavers) - perhaps it was used in the vicinity of the Rodge Brook, which flows through Porchfield into Newtown Bay and whose name probably originated as 'the brook of the hunting dogs', from Old English *raecc* (Mills). There is a Dog Kennel Cottage near Thorley (Kokeritz), and two long, very twisted fields, one in Arreton and the other in Wootton, were traditionally known as *Dogtail* (Middleton 1986).

Birds

i) Sacred & Profane

The magpie has always been considered a bird of ill-omen; folk-belief gives the reason as its refusal to enter the Ark with Noah, alternatively its refusal to put on full mourning dress at the time of the Crucifixion (Newall 1971). There were traditional methods of protection against the sorrow which the sight of a single magpie could bring. People would cross themselves, raise their hats to the bird, or spit three times over their right shoulder and race towards the bird, saying, "Devil, Devil, I defy thee". "No Islander would willingly start on a journey after seeing a magpie cross his road" (Hargrove 1913).

By contrast, the robin - 'ridbreast' in dialect - was a sacred bird, and its red breast has given rise to many legends. One says that it was singed while taking water to sinners burning in hell; another, that it wounded itself while trying to lessen the agony of Christ's crown of thorns: it may also have been splashed with Christ's own blood at the same time (Newall 1971). "I heerd the robins twiddlen [whistling] in copse, and that's a sign o' raain" (Long). But a robin pecking at the window on the Island was supposed to foretell a death in the family (Hargrove 1913).

Writing in 1881, Charles Roach Smith was much taken with the couplet:

"But for the robin and the wren,
A spider would o'ercome a man"

and fervently believed that the old saying - representing the beneficial effect of insectivorous birds for humankind generally - "should be impressed upon every child in every school and home"! (Roach Smith).

ii) Pranked Jaas & Parsons

Isle of Wight dialect words for birds were many and varied. The blue tit was known as 'billy biter' from the severe bites it gave to small boys when caught (Roach Smith); its cousins the great and long-tailed tits were known as 'Joe Ben' and the 'long-tailed capon', respectively (Lavers/ Roach Smith). The jackdaw was referred to as 'daa' (Lavers), while their cries, along with those of rooks, were referred to by the term 'caa', which was also applied to the chatter of persons who talk too much (Turner). The word 'charm' was similarly applied to the chatter of both birds and humans: "Don't they fowls kick up a charm"; and "'Twas jest like a butter market charm" [i.e."Their confused chatter was just like the noise you get at a butter market"] (Long). Neither 'caa' nor 'daa' are to be confused with 'jaa', the name for a jay, sometimes also referred to as 'pranked jaa' - 'pranked' indicating its striped or mottled coat. The pied wagtail was alternatively known as 'moll washer', 'dishwasher' or 'Polly dishwasher'. 'Vanner hawk' referred to the kestrel, 'long tail' to the pheasant, 'chinky' or 'jinky' to the chaffinch, and 'vuz-chipper' to the whinchat ('vuz' of course meaning furze).

The house-sparrow was commonly referred to as 'spadger', hedge-sparrow as 'sprug', wood pigeon as 'quest' or 'wood quest', missel-thrush 'squawker', the whitethroat 'Peggy whitethroat', and the lesser whitethroat 'nettlecreeper' (Lavers). The wryneck was known as the 'barley bird' because of the time of its appearance at barley sowing, the heron as 'jackheyarn', the ringed plover as the 'bull bird', and what could be more evocative than the cormorant's image as an 'Isle of Wight parson'? (Lavers). 'Night hawk' generally referred to the nightjar but also to any bird that flies at twilight. There were several candidates for 'screech owl', the commonest being the barn owl: "She heerd a screech owl several times the night avore, and 'twas a sartain token o' death to zomebody or nother she knowed" (Long). One of the small handful of dialect words which have survived in common parlance is of course 'gallybagger', which appears to have superseded a couple of other, possibly lesser used, names for the scarecrow: 'Johnny Lent' or 'John o' Lent' (Roach Smith), and 'mommet', which no doubt derived its use in this context from its primary meaning of a puppet or any odd figure (Lavers).

iii) Clutched Hens & Chickabiddies

A 'biddy' or hen would be known to 'chackle' or cackle, and a 'settun' was a clutch of eggs put under a hen to be hatched: the customary number was thirteen. Once sitting on the eggs it became a 'clutched hen', which could then be used figuratively: "I zay, you, our Dick's ben and vell into the sheepwash, and come home all drillen [dripping] wet. A [He] won't show to noo vittles, and a zets hunched up in chimley corner like a wold [old] clutched hin" (Lavers). 'Vlux' referred to the action of an angry bird flying at and striking an intruder in order to defend her nest: "Don't goo in there, the wold hin's zetten, and she'll vlux ye if ye dooan't look out" (Lavers). The same idea is present with the word 'hackle', denoting the feathers on a cockbird's neck, so that when its neck feathers are raised in readiness for a fight it is 'showing hackle' - and of course the phrase also applies figuratively to humans (Long). 'Batter' denoted the action of a fowl in dusting itself (Roach Smith), but also seems to have had a secondary meaning of making great effort with little result, much like a fowl scraping the ground (Lavers). 'Gallanee' was the common name for a guinea fowl (Long); however, a 1608 will of William Haward from Brighstone contains an inventory with a reference to '4 gynnies' [guinea-fowls] and 9 geese and goslins [goslings] (IWCRO: Brighstone). A 'crabbun' signified a fowl which frequented dung-hills, and by association also applied to a coward (Roach Smith). A game-cock of the largest size had to make do with the somewhat dubious epithet of 'shakebag' (Roach Smith).

The word 'biddy' seems to have been quite flexible in its use, indicating not only a hen - and presumably giving rise to the phrase 'old biddy' - but also a chick, so that 'chickabiddy' came to be used as a term of endearment for a child (Roach Smith / Lavers); both words were certainly not exclusive to the Island and have passed into the English language more widely. 'Cheeup' or 'cheerup' meant quite simply to chirp or cry like a young bird (Lavers), whilst 'squab' applied not only to an unfledged bird but also by association to any person thick, fat and short (Roach Smith). 'Rooken' was used of any birds lying close together, as well as for a bird sitting upon her eggs (Lavers). 'Pip' referred to a disease in chicken (Roach Smith). 'Snobble' was applied to the sound made by ducks voraciously devouring their food (Turner), and, believe it or not, one might have called ducks in on a farm with 'Dill, dill!' (Roach Smith).

Cranmore was originally 'the marshy ground frequented by cranes or herons', Rookley 'the wood or woodland clearing frequented by rooks', and Kitbridge Farm near Newport 'the bridge frequented by kites' (Mills). Peacock Hill near Bembridge is self-explanatory, as are Kite Hill at Wootton and Eaglehead Copse just below Ashey Down, whilst Wroxall was once 'the nook of land or secluded hollow frequented by the buzzard or other bird of prey' (Mills). Pigeon Coo Farm near Shalfleet is an unusual whimsical name which appears to have been allocated since 1769, when it was called simply *Grove* (Mills). Lorden (Copse) near Shorwell is a contraction of its original medieval name *Leurkedone*, 'the down frequented by larks' (Kokeritz). Hoxall Cottage and Lane at Mottistone might well have originated as 'the spring or stream of the hawk', or alternatively, 'of a man called Hafoc' (the place-name Hauxwell in North Yorkshire has the same origin) (Mills). Goose Rock near the Needles was simply called *The Gosse* on Speed's map of 1611, no doubt from its original resemblance to the bird (Mills). The woodcock's curious habit of 'roding' its territory may be the origin of field-names such as *Cock-roads* and *Cock crows* in Whippingham (Middleton 1986), which also possesses a Curlews Copse (Kokeritz).

iv) Peregrines & Eagles

In 1505, Thomas Kingswell and others were accused of taking seabirds worth £10 from a rock in Weston Manor (Page 1912). The falcon hawk is referred to as building one nest, year by year, in the cliffs at Steephill during the reign of Henry VIII, and being exclusively claimed as royal property (Whitehead 1911); even in 1795 Albin could say of Steephill that "Many ravens build in the cliffs, and the falcon hawk is peculiar to them, being the only proper sort for the division of hawking" (Albin 1795).

Culver Cliff was always celebrated for the number of birds nesting there, the name deriving from Old English *culfre*, meaning 'a dove or pigeon'. Peregrine falcons nested at Culver, and Queen Elizabeth I set such store upon them that in 1564 she issued a warrant to Richard Worsley, then Captain of the Island, to make a diligent search after some that had been stolen, and also for the "persons faultie of this stealthe and presumptious attempt", thus indicating that Culver Cliff was a royal preserve (Du Boulay 1911). Falconry had a strict hierarchy in medieval times and the trained female peregrine was considered the noblest of all hunting birds: only royalty and great nobles could use them (J Jones pers. comm.). Even in 1920 J.M. Goodall could write: "The Peregrines were again at Whitecliff this year, the falcon proper, the female, being a splendid and very large bird" (Goodall 1920). Pairs of peregrines were also nesting at Freshwater cliffs, to the west of Shanklin Chine, and in the neighbourhood of Blackgang Chine in the mid 19th century (Davenport Adams 1856).

Interestingly, Bembridge Down is recorded in 1324 as *Puttokesdone*, 'the down of the kite', from Old English *puttoc* and *dun* (Mills). Sir John Oglander, writing in 1626, also records that his grandfather George Oglander had a lanneret (male falcon) that had been bred at "the White Cliff at Bembridge, which was the best hawk with the worst looking to, that was in England; for they never took care of her [sic], but gave her meat in the foot, scarce ever tied her but let her scratch for bones with the dogs; and when they came afield they cast her off and she would follow the dogs and kill whatsoever did rise - partridge, pheasant, bittern, heron, hare, or coney" (Long 1888). The hawk became 'haak' in dialect, and a hawk or kite flying round a farmyard was said to be 'cooastun about' (Roach Smith). In 1811 John Albin could write: "Although the game of the Island has suffered considerably by the multitude of sportsmen and military, yet there is everywhere plenty of hares and rabbits, partridges, pheasants, lapwings, woodcocks, and variety of wild-fowl" (Albin 1811).

Not only falcons but also eagles once had their eyries in Culver Cliffs, though according to Hubert Garle there is no record of their being seen after 1780. However, at the beginning of the 20th century he met with an old shepherd on St Boniface Down whose father had told him that in his youth many eagles were to be seen in the locality, a fact which necessitated careful watch being kept over the young lambs (Garle 1905). About the year 1828 a golden eagle made its appearance in the neighbourhood of Appuldurcombe and devoured several lambs, as well as the carcass of a sheep (Davenport Adams 1856). A tame white-tailed eagle was kept for many years prior to 1856 at the Hermitage, and one morning the attentions of the gardener and gamekeeper were arrested by the unusually loud screams of the bird: whereupon a wild eagle was seen to descend and alight near the tame bird. On being disturbed it flew to a neighbouring cliff, and after remaining there some hours took flight and was not seen again (Davenport Adams 1856).

v) Pet Birds

A story is told from the 17th century of a duck which went missing from a farm at the foot of the downs a mile and a half away from St Lawrence, and was found the following morning lying in an exhausted state by the spring in the lower part of the village. It was deduced that the duck had fallen into the farm well and found its way underground to St Lawrence. The cottage where it resurfaced became known as The Duck, then subsequently in the 18th century as Smugglers' Retreat, where smuggled spirits could be obtained at a cheap rate (Whitehead 1911).

There seems to have been a much greater propensity in former years to keep wild birds and animals as pets. Davenport Adams wrote in 1856: "The kestrel often becomes an amusing bird in a state of domestication. [He himself kept] two that were perfect wags, and both ultimately proved tyrants. One, that had been remarkably docile, became the terror of cat, dog, and servants. It would make its way to the kitchen, and after driving puss from her snug berth in front of the fire, and a setter dog from under the table, would turn upon the cook herself, who was frequently obliged to summon her master to expel the intruder" (Davenport Adams 1856).

A tame herring gull called 'Phil', who also became known as the 'Calbourne Gull', had an 1845 account of his exploits written by 'a lady of Sir John Simeon's family'. He was bought in the year 1802 or 3, by 'Grandmamma Barrington', from some boys who brought him in a basket. Phil would sit on the mat in the middle window of the drawing-room 'between Mamma and Aunt Jane', whilst they worked, seated on two stools at the open window. The bird would go regularly into the village to be fed with cheese-parings by the shop owner John Price, and the village children would give him part of their dinner. The Westover pond was a favourite resort but he always returned to the Rectory as his home. He would often depart for a few days, sometimes bringing a partner back with him. This carried on for 36 years at least, until he finally disappeared in 1839 or 40, though what became of him after that no-one knew (Davenport Adams 1856).

Special tribute is paid by Davenport Adams to Robert Loe of Newchurch, who died in 1848, 'a naturalist born': his knowledge of animal and plant life was second to none, and "seldom has one of his rank in life been so greatly or so widely respected". Of course, for its day being a naturalist inevitably meant being a marksman also: "Descended from a line of gamekeepers, he was admirably fitted for that calling; a capital shot with fowling-piece, in the use of the rifle he never met his match" (Davenport Adams 1856).

Rats

Haseley Manor at Arreton has displayed a mummified cat with two attendant rats in a wall cavity, where all three were found. The following information accompanied the display: "In pre-Christian civilisations a human sacrifice was made and buried under the foundations of a building to appease the earth-spirits. In later ages the master mason might lure an unsuspecting "victim" to the building site and then secretly measure him and hide his measurements under the foundations as a substitute sacrifice. [And we thought cowboy builders were a modern phenomenon!] Even as late as the Tudor period, cats were being buried under the house to ward off evil spirits and keep off the plague of rats and mice." (Haseley Manor). Rats were also thought of as uncanny creatures with a foreknowledge of death and misfortune, perhaps because, like mice, they are associated with the soul (Newall 1971).

The Newtown version of the Pied Piper story - the colourful character who rid the town of its rats then took the children too when the town reneged on the deal - is probably another 19th century imitation of its more well-known German counterpart by that inveterate storyteller - as well as story inventor - Abraham Elder, though he refers to the legend being "still rife among the neighbouring inhabitants", and it is just conceivable that he picked up a local version which had never previously made it into print (Elder 1843).

Kokeritz (1940) informs us that Muggleton Lane at Limerstone is all that remains of what was once the home of Richard de Micligtone in the 13th century, whose name was derived from Old English *miclan tune* 'at the large farm'; however, he would not have been too pleased to learn that 'muggleton' also came to be used as an Island name for a rat, albeit probably only in nursery stories (Lavers). The extraordinary name *Ratt* - standing for Rat Farm - which is cited in a tithe settlement for Arreton in 1631, appears, however, to be less about the creature than a derivation from Old English *ryt*, 'rubbish for burning', an intriguing enough derivation in its own right, though no doubt the locals would have made the most of the name's rodent-like development! (Kokeritz). A 'drip' signified a home-made trap to catch rats or mice by precipitating them into the water to drown them (Lavers). And all vermin became 'varmunt' in Island dialect (Roach Smith).

In the early part of the 20th century the Brooke & Mottistone Sparrow and Rat Club was in full swing, in an effort to control both species, as even sparrows were considered vermin at this period. An account for payments made survives:

278 Rats Tails @ 2d each
54 Sparrows Heads @ 3d per dozen
12 Sparrows Eggs @ 1d per dozen (IWCRO: Mottistone).

But by 1921 parish minutes for both Brook and Mottistone indicate that the Club was being wound down (IWCRO: Brook). However, the rat problem was one that never really went away, and by 1931 the curiously named Tertius Nobbs, Superintendent of Rats and Mice Destruction, was submitting regular reports to the County Council, including one in October with a request that an advert for National Rat Week be inserted in the County Press - one could be forgiven for thinking the rat was being celebrated! (IWCRO: 1931-2).

Bob Cassell of Brook tells an amusing story in *An Eventful Life* of an incident whilst working as a boy at Seaview Dairy, near Compton: "The butter was made in a great wooden churn every Wednesday. One day when I took the cover off I found a blessed great rat in the butter with its tail sticking out... I just got some butter pats and scooped around the rat and got him out with a little bit of butter all around him. I gave it an extra good wash after that. A local grocer used to take the butter, he had a butter round at Freshwater. The following week he came and said, "Whatever did you do to your butter last week, Mrs Cheek? I couldn't get enough of it. Everybody was crazy for it". I can see that rat's tail now" (Cassell 1997).

Cattle

i) Bulls & Hard Cheese

Numerous ox bones, many of which had been split open for the extraction of marrow, together with the teeth bones of a horse, were discovered in 1936 by Hubert Poole in a Mesolithic deposit on the east bank of the Newtown River (Poole 1936). By the Iron Age dairy and beef cattle together with sheep would have grazed the Island's meadows and oxen would have have been yoked to a wooden plough, or 'ard' (Tomalin & Hanworth 1998). Regarding the three-branched prehistoric flint implement known as a tribrach, which has remained something of a mystery since its discovery most probably at Ventnor in the 1850s, Hubert Poole conjectured (in 1941) that if displayed with its longer arm pointing downwards it bears a rough resemblance to the horned head of a bull, which could conceivably have been mounted on a staff and carried in procession (Poole 1941). This remains arguably still the best interpretation, though whether one would wish to concur with Poole that it might have been part of a phallic cult is perhaps less likely. Poole went on to draw an analogy with the Royal Antediluvian Order of Buffaloes on the Island, which used to carry at an annual church parade a pair of bull's horns mounted on a staff in much the same way that others carried a banner. The horns were sometimes decorated with a sprig of ivy (Poole 1941).

Two public houses on the Island still retain the name of The Bugle - Brading and Yarmouth - and another one at Newport used to be so called. They are all represented by the sign of a young ox: this is apparently rare nationwide. The most likely reason for its Island adoption is that the bugle, or wild bull, was the supporter to the arms of Henry Beauchamp, Duke of Warwick, crowned King of the Isle of Wight by Henry VI in 1443 (Long 1886).

Close to the Bugle in Brading is its famous Bull Ring, the only visible reminder of the former practice of bull-baiting, in which the unfortunate beast would be goaded by large dogs before being slaughtered. This was believed to improve the quality of the meat as well as providing a public "entertainment" (Jones 1989). The custom was particularly common in the 16th century: a large field in Niton is also named the *Bull Ring* and in 1595 had a cottage on it known as Bull Ring Cottage; another smallholding of one acre was known as *Bear Close*, so it is possible that bear-baiting was also indulged in (Whitehead 1911). In the *Assize for Butchers* (1636) we are informed "that Butchers may not kill or sell any bull or bulls unbaiten" (Mills), and Brading Town Hall records indicate that in 1592 William Smith was fined 6d. for killing a bull *without* baiting. There had also been a long-standing tradition from at least the 17th century for the Governor of the Island to give £5 to buy a bull for baiting on the Mayor of Newport's feast day, after which it was killed and its flesh distributed to the poor. The Mayor and Corporation, with mace-bearer and constables, would all be in attendance, and the first dog let loose at the bull was decorated with ribbons and called 'The Mayor's Dog' (Long 1888).

Towards the end of the 18th century, however, pressure for change was mounting. In 1785 Newport Borough strongly noted its disapproval of "the continued interruption of the peace of this town by the dangerous practise of Bull Baiting. We lament that bills [of prosecution] are preferred against those only in the lower class of life, as the punishment already inflicted on them... must in a measure have done away this evil, had they not been abetted by persons, whose conduct ought to have been an example of strict conformity to the civil laws of this borough" - in other words, the activity was being egged on by upper middle class individuals (IWCRO: Newport). In 1815 George Bull was being prosecuted for the act of baiting a bull at West Cowes, and bull-baiting was finally outlawed in 1835 (Jones 1989).

In her study of the 1630 Swainston Survey, Johanna Jones points out that inventories for the period list relatively small numbers of cows on most farms - between 3 and 13 - but the cowhouse at Swainston Manor Farm was exceptional, with thirty partitions for cows and four stalls: dairy farming here was a commercial activity, with opportunities for selling the produce at Newport market (Jones 2003); Sir John Oglander informs us that the beast market had been established in Newport in 1532 (Bamford 1936). Cowhouses are also listed for the various farms on the Swainston estate; Clamerkin had two with 'a little room for calves', the only example of weaning calves by hand, which gave them a gentler nature. There were by comparison just three oxhouses on the estate, numbering 24 stalls, or three ploughing teams of eight oxen apiece (Jones 2003).

In his agricultural survey of the southern counties at the end of the 18th century, William Marshall was less than complimentary about Isle of Wight cattle: "The cattle of this Island strongly evince the impropriety of mixing alien varieties... they propagate a degenerate race... Why not propagate the English breed of cattle, pure, and unmixed with foreign blood?" (Marshall 1798). Writing in 1860, Canon Venables observes: "Old persons still living may remember the time when the principal butcher at Newport always went to Salisbury at Christmas for his fat oxen, and on his return paraded his purchases round the town, bedecked with ribbons, refusing to sell any portion of them except to his regular customers during the rest of the year" (Venables 1860). He is rather less critical than Marshall about the Island's cattle: "for the most part crosses from the Norman breeds, large and profitable milkers, but with no great pretensions to beauty". But regarding the Island's cheese, a notoriously hard kind made from skimmed milk and known as 'Isle of Wight Rock', Venables observes: "Tradition relates that, a vessel being freighted to London with millstones and Isle of Wight cheeses, the rats ate the millstones and left the cheese untouched!" (Venables 1860). Reverend Warner had confirmed the tradition 65 years earlier: the cheese "is extremely hard, can scarcely be cut but by a hatchet or saw, is to be masticated only by the firmest teeth, and digested only by the strongest stomachs" (Warner 1795). Jenkinson adds that the cheese was 'consumed by labourers' (Jenkinson 1879); it no doubt formed a regular part of 'nammet', still known to all Islanders as the term for mid-morning and mid-afternoon bread-and-cheese refreshments, and which may lay claim to being the strongest dialect word still in regular use.

The last annual cattle market held in St James Square took place in December 1927 before moving to the purpose-built venue in South Street, where it lasted until 1983, then switching to Brickfields (Greening & Shepard 2002). We cannot say precisely which year the tradition of the Gilten Market began - which as far as one can tell appears to be fairly unique to the Island - but we do know that it is at least 150 years old, as there is a reference to this pre-Christmas market in 1858. The horns of the champion bull, otherwise known as the 'Gilten Beast', are gilded with gold paint - originally by the Newport mayor, now by the High Sheriff - before being auctioned; it has also been a tradition to hold a Gilten Dinner the following evening (Greening & Shepard 2002). The event was suspended for several years following the foot-and-mouth outbreak in 2000 but has since bounced back in style.

ii) Cows & Caaves

'Billy' was the standard dialect term, not so much for a goat, as for a bull, and 'beeasts' or 'beesties' referred to cattle or oxen in general: "Bist thee gwyne to sar [feed] the beeasts, Jack?" (Long). By contrast, an individual cow might be known as a 'hummick', at least at Princelett in the 1920s: "I must goo git the wold hummicks in vor milken" (Lavers); and a 'mud calf' was one brought up by hand - such as the hand-reared calves at Clamerkin Farm (above). To 'belve' was to bellow or roar like a bull: "That nipper was belvin' for an hour arterwards"; whereas to 'blare' was to low as a cow: "The wold dooman [old woman] went sniffen and blaren about the plaace, like a wold cow that's lost her calf" (Long); and a complementary saying used to be: "A blaring cow forgets her calf the soonest" (Roach Smith). 'Cup-cup' was a cry to bring the cows into the yard for milking, 'cowed milk' was, unsurprisingly, milk warm from the cow, and 'strokens' was the last milk drawn, but the spin-off word 'beeastings' was reserved for the first two or three milkings after a cow had calved (Lavers). When, however, "the cows be gone azew", they had reached the end of their milk-producing cycle (Long).

'Harlens' signified the hock joints of a cow or heifer: "The wold cows got stuck in the keert loose up over their harlens" [The old cows got stuck in the cart ruts above their hocks in mud] (Long). "Mind the wold cow don't hook ye" was a warning that might often have been issued regarding being struck or gored by any cow or bull with horns (Long). 'Churn' referred to a calf's entrails: "I be gwyne to Athervell to git a caave's churn tomorrow"; whilst 'lebb' signified rennet, the inner membrane of a calf's stomach used in the cheese-making process (Turner). 'Taailzoke' denoted a disease in bullocks' tails, and, charmingly, 'skent', or sometimes 'squitters', referred to the looseness of the bowels in cattle: "That 'ere heifer o' your'n es a *skenter*" i.e. an animal that would not fatten (Long). By contrast, the term 'proof' was applied to cattle food that had shown itself to have some body or fattening power: "There's zome proof in that clover haay, varmer" (Long). But animals suffering from eating too much green food were said to be 'blowed' (Lavers). Cattle or horses were bled with a 'fleyam', an instrument or lancet of an arrow-head shape, which in turn was struck by a short, thick wooden stick known as a 'bloodstick' (Long). 'Varming out' signified cleaning out either the cowshed or stable: "Git the dung prong, meyat, and let's varm out steyabul" (Lavers). And a dealer in cattle or horses was known as a 'jobber' (Turner).

A common way of distinguishing Islanders from Hampshire folks in the past was to refer to 'Hampshire Hogs and Isle of Wight Calves'. There is a Calving Close Copse in the Northwood area and a Cowleaze Chine at Brighstone (Kokeritz). Bouldnor literally meant 'the shore of the bull': the name may have referred either to the grazing of bulls here, or to the outline of Bouldnor Cliff, which rises steeply to a height of 200 feet and may have been thought to resemble the shape of a bull (Mills). However, Bull Rocks off Mottistone and Bulls Wood near Calbourne misleadingly have nothing to do with bulls but are both named after local families with that surname (Mills). 'Oxlays' referred quite simply to a meadow where oxen were kept (Lavers).

The two towers of St Catherine's Lighthouse have often been known as The Cow (main lighthouse) and The Calf (tower with foghorn), and these almost parallel the original naming of Cowes from two sandbanks off the mouth of the River Medina called *Estcowe* and *Westcowe* in 1413, 'the east and west cow', from their fancied resemblance to those animals. When, in about 1539, Henry VIII had two blockhouses or forts built to defend the coast against the French and Spanish, they in turn came to be called the *Est Cow* and the *West Cow*. Finally the plural name 'The Cow(e)s' came to be transferred to the settlements themselves on either side of the river estuary, giving the modern name *East Cowes* and *West Cowes* appearing on Andrews' map of 1769 (Mills).

Horses

i) Hags & Hoblers

Horses were credited with the power to see ghosts, and would shy and sweat when troubled by spirits. They were also thought to be particularly vulnerable to the Evil Eye, which is why their owners protected them with brasses - fashioned in the traditional spirit-repelling shapes, such as the symbols of the sun or the crescent moon (Newall 1971). From the Middle Ages, witches were said to 'hag-ride' horses to their coven meetings, bringing them back to their owners just before dawn, exhausted and drenched. This was a belief that lingered on for many centuries: "On one occasion, noticing that a particular horse was in profuse perspiration, I was told that probably the old hag had been riding it in the night" (Roach Smith). The Night Mare not only visited the bedchamber, but also the stables: "Horse-shoes are everywhere nailed in proximity to stables as a protection against evil influences" (Roach Smith).

In the 17th century nearly everybody travelled on horseback, the mistress on a pillion behind the master, and coaches were almost unknown. Sir John Oglander says that his coach was the second ever seen in the Island (Long 1888). He also gives some advice on horsemanship: "A good groom and good hay, with two bushels of oats a week, will make any reasonable horse good, and the better if thou seest him thyself once a day" (Aspinall-Oglander 1945). And a rather delightful cure for a horse with worms to swallow: "Chicken's guts, newly taken out of the belly and well-wrapped in bay-salt" (Bamford 1936).

Hubert Garle, who took a 'driving tour' of the Island by carriage in 1905, remarks "how strange it was" that until about 1744 it was not possible to hire a carriage in Newport. Even in 1758, when the landlord of the Bugle started a one-horse chaise for hire, people said it would be his ruin. The result seems to have been otherwise, as instanced by this advert in the *Hampshire Chronicle* for 10th October 1778:

> "Richard Prouse and wife, for several years butler and housekeeper
> to Sir W. Oglander; neat post chaises and good drivers will always
> be ready to attend ladies and gentlemen in their Island excursions."
>
> (Garle 1905)

In 1795 we are informed by the Rev. Richard Warner that the Island's horses "are of different breeds but in general large and black... and kept in excellent order" (Warner 1795). But only three years later, William Marshall's incisive comments about cattle extended also to the use of horses for ploughing: "The plow team is four heavy horses: even on the lighter lands!... An *unsufferable* practice"; by contrast: "The road team is of five horses. I saw nearly twenty teams of this length, collected together, at Newport market" (Marshall 1798).

Relevant place-names include the well-known Horsebridge Hill just outside Newport, and the less well-known Horseground Rew in the Calbourne area, as well as Horsecroft Copse near Stenbury Farm, which may be compared with a close in Arreton recorded in 1453 as *Horscroft* (Kokeritz). Horse Ledge near Shanklin and Horseshoe Bay off Bonchurch are both so-called from their shapes, the latter more pronounced on older maps (Mills). 'Hoblers' is a very old local word but not unique to the Isle of Wight: it refers to the sentinels posted at beacons across the Island, mounted on hobbies or small horses, whose duty it was to raise the alarm on the approach of an enemy to the coast (Long). Also referred to as 'mounted spearsmen', 'hobelars' are recorded as being on duty in defence of Yarmouth and Yaverland against the French in 1339, where their wages amounted to 6d. a day, half that of men-of-arms and twice as much as archers (Hockey 1982).

ii) Ploughing & Carting: Within Living Memory

Horses of course once played a pivotal role in the Island's agricultural economy, and though ploughing with horses as a daily part of the agricultural cycle has become but a distant memory even for older Island residents, several accounts have survived. Farm life at the end of the 19th century is recalled by the late Mabel Roach in the recent *Brighstone Village* compendium: "What lovelier sight than a team of heavy shire horses, all glorious with shining coats, washed and brushed tails and manes, with strings of brasses on their harness. The carters took pride in the stables and hung records of prizes on the beams" (Brighstone Village Museum 2004).

Boyhood memories of farm life in the Bowcombe Valley during the 1920s and '30s are recalled by Harold Humber in *Where the Stream Roked*: "Right from my earliest years of all the animals on the farm, horses were my great love... I am told that as a small boy I would keep walking behind the team ploughing till I dropped and was found asleep in the open furrow when they came round the next time. I remember when I was quite small feeding the horses in the stable. Five Shire horses and two boys to feed them." (Humber 2006). When he got married in 1950, the newly-weds had sixteen horse-bells to greet them as they came out of church (H Humber pers. comm.). Brian Greening recalls the sight, in the early Fifties, of the team of Suffolk Punches making their way from Chillerton Farm to the Isle of Wight Agricultural Show, then in Newport: "The horse brasses would gleam, the bells on their heads would be ringing, the cart wheels rattling over the uneven roads and the horses' coats shining as they noisily made their way out to Blackwater" (Greening

2001).

In *To Heaven in a Glass Wheelbarrow*, Freddie Hollis gives an account of hauling a four-ton wagonload of corn to town by horse power: "[The] wagon teams were one of the prides of the farm... They used to carry bells which were made up in sets of four. One set for each horse. These bells were all tuned and rang in harmony. They would be fixed to the horses' hames and when the team approached town the carters would put the bells up. The fore one carried the smaller bells and they got progressively larger until the thiller carried the biggest ones. Men who went on these expeditions told me that when the team arrived at its destination and the wagon was stationary the horses would move their shoulders occasionally to make the bells tinkle. They appeared to like the sound!" (Hollis 1992).

The "Tally Ho" coaches on the roads during the summer season hit a different pace, as Greening & Shepard reveal: "... a blast would be blown on a horn to give warning of their approach as they travelled very fast pulled by teams of four horses. At the Eight Bells in Carisbrooke and the Swan Hotel in Newport they used to change to a different team. The four horses left behind would be walked up the High Street and down to Town Gate Mill pond and allowed to cool their feet in the water. It was a daily occurrence during autumn and winter for a great many wagons and teams of horses, with bells ringing, to come through the town heading for the mills with their loads of corn and returning loaded up with linseed and cotton cake to feed the sheep and lambs" (Greening & Shepard 2002).

The launch of the Brook lifeboat in the days of horse power is recalled by Freddie Hollis: "To launch her it was necessary to harness up ten horses and haul the vessel... a distance of about a couple of furlongs... The horses came from neighbouring farms with bridles and collars as worn at work... My first move was to see the ten horses harnessed. It was a magnificent spectacle. The heavy Shires, the galvanised strong chains, and the highly polished lifeboat carriage with its brightly painted boat... Nowhere on the Island in those days would one witness such horse power" (Hollis 1992).

And the *Isle of Wight Within Living Memory* compendium produced by the Island's Federation of Women's Institutes has this account of 'the last journey': "When a farmer or sometimes a farm worker died his coffin would be taken on a farm waggon or cart drawn by a team of heavy horses. The undertaker walked ahead and the cart or waggon was driven by the head carter with one of the other farm labourers guiding the leading horse. Some people would ask that the bells on the horses should ring" (IWFWI 1994).

iii) Bither, Woot: Dialect Survivals

A large range of dialect examples have survived in connection with ploughing and carting. A 'stooan hoss' denoted a stallion, and to 'wicker' was to neigh or whinny like a horse. To 'shet in' or 'hatch on' was to harness however many horses into a cart or plough to form a team, depending on the work to be done. The 'thiller hoss' was the horse between the shafts, the 'body hoss' the one nearest to it, and the 'vore hoss' was the leading horse of the team. The phrases could also be used figuratively: "He's got the vore hoss by the head all right, I louz", meaning "He has the situation well in hand, I believe"; and "They don't sim to hatch hosses together noohow" i.e. "They don't seem to agree about anything" (Long). The 'thiltugs' were the chains attached to the collar of the thiller (Roach Smith). The 'trace harness' signified the harness of long chains worn by the leading horse in the team, and the 'trace hoss' was the one which drew in traces as distinguished from one in the shafts (Long).

The 'whippence' was a spreader or bar for yoking two or more horses to a plough or harrow (there is a Whippance Farm in Cowes), and 'droat-haps' signified the leather strap which went under the lower part of a horse collar and held the 'hames' together, the latter being the two pieces of curved wood or metal to which the traces were attached (Lavers). A 'wantey' signified a cart-horse's belly-band or chain. The 'britchen' was that portion of the harness passing round the hinder parts of the shaft-horse which enabled it to push backwards (Lavers). The rear horses in the team were controlled not by being whipped but by the carter holding the whip behind him in a position to encourage the horses to turn as necessary, and he would always hold the whip 'dree [three] brasses above the handle' (H Humber pers. comm.). A 'keert' indicated a cart or wagon, or the act of carrying on a cart or wagon, and the 'bleyads' were its shafts (Long).

Various directions would have been issued to the horses by the ploughman, including 'Bither' for "Turn left" - a term which appears to have been unique to the Island, or sometimes the word 'Mether' or 'Mither' was used. 'Woot', 'Oot' or 'Wutt' was the corresponding direction to turn right (Lavers). "Hold vast" was an expression used in the hay or harvest field as a signal to the horses to move on and for the men on top of the load to hold on. 'Whup' was the command to stop: "Hoot, touch up Pedlar!! Knock down Captain! Joit off Drummer! Whup! whup! whup!" Long could remember a time in the 1850s when old ploughmen would make the field ring with such interjections, "delivered in stentorian tones that could be heard at least a quarter of a mile off; and so often, that all the ploughboys in the neighbourhood had them by heart, and frequently shouted them in the hearing, and to the annoyance, of their original utterer" (Long). A 'zull' signified a plough (Roach Smith); 'drag' as a noun denoted a large kind of harrow, and used as a verb simply meant working the land: "We be gwyne draggen in Zix Acres tomorrow mornen" (Long). Ploughing the first furrow in a field was known as 'vareing out'. The 'beam' indicated the body of a plough to which all the other parts were attached (Lavers). With certain horses it may have been necessary to watch that they did not 'fling', or kick out: "Mind the wold mare don't fling at ye, mayet" (Long).

At the end of the day's work it was time to 'shet off', or unyoke the horses from the plough: "What time d'ye think 'tes, mayet?" "I dunno, you, but from the look o' the zun, I louz 'tes prid near shet off time" (Long). A 'journey' signified the whole day's work with a team of horses, on the road or in the field: "Wold Dobbin wuz purty nigh twickered out [exhausted] afore the end of the journey" (Turner). Then when the horses were finally back in the stable, it was time to 'rack up', or fill the wooden frames over the stalls with food the last thing at night before leaving them: "We must start to rack up, you, tes ver' near half-aater zeben" (Long). It was also necessary to 'litter up', or put the bedding under the horses for the night; the same would have been done for the cattle. The upper farm servant known as the 'haggler' had the special responsibility of looking after his master's horse (Lavers).

To 'tember keert' was to cart or go with a team of horses for timber, and a 'swifter' or 'zwifter' was part of the tackling that fastened a load of timber to the wagon (Lavers): "I zay, mayet, thee'st hay to be up sharp tomorrow mornen, and be off to Shawcombe, vor there'll be two teams on at tember keert all day" (Long). 'Hoss stopples' referred to holes made by horses in wetland, a 'ridgesty' indicated a deep wagon rut, and to 'lumper' was particularly used of a horse which had stumbled or struck its foot against an obstacle (Lavers). 'Raames' had the dual meaning of the remains or fragments of a joint of meat, and a half-starved horse: "Wold jobber Snow wanted to zill me a hoss. I never zid such a wold raames in my life: I toold'n I wouldn't hay 'en in a gift" (Long). 'Hogmane' signified a horse's mane cut quite short so as to stand erect (Lavers).

To 'warp' in dialect was to cast a foal: "That mare warped her voould" (Roach Smith). Whilst the dragonfly becomes 'hoss stinger' in dialect, Lavers simply translates 'hoss vlee' as the fly that stings horses. 'Hoss-monger' was one of the names for a dealer in horses (Lavers). An 'uppenstock' was a horse-block i.e. a block fixed in the ground with steps for mounting a horse (Long). 'Cock-hoss', or 'cock-a-hoss', signified riding two on a horse: a man and wife dressed in their Sunday clothes and riding to market or elsewhere were said to be riding cock-a-hoss (Roach Smith). And how words can change: a person riding horseback striking suddenly into a gallop was said to 'go off gaay' (Lavers).

Foxes

In 1790 John Hassell wrote that a parliamentary bill promoted by 'the gentlemen of the Island', secured "the farmers from the depredations of foxes, badgers, polecats, and other noxious animals, [and] the Island is kept very free from them. Even to let one of them loose is an offence punishable with transportation" (Hassell 1790). Despite these strictures, there is more than one account of the curious habit of keeping a fox as a pet; Hassell himself goes on to say that a fox reared from a cub at Newchurch broke his chain and made his escape to the cliffs at Shanklin, laying concealed by day and committing his depredations by night. Eventually the fox was shot carrying off poultry from Shanklin Farm (Hassell 1790).

It was in fact a pet fox that led to the first recorded foxhunt on the Island. In 1830 Parson Fenwick of Brook "kep' a darg vox [dog fox] on a chain i' his yard at the rear" (Stone 1933); inevitably the creature broke loose from its kennel and started causing havoc to chicken houses and lambing areas. Squire Thatcher of Wacklands was called in to help, though mindful that his hounds were trained to hunt only hare. The chase took place from Brook Down, via Pitt Place, Barnes High, Troopers, Presford Farm, Kingston Copse, The Wilderness, Ramsdown, Chillerton Down, Lorden's, Haslett Farm, and Bucks Farm, and was finally caught at Dungewood - a total of some fifteen miles in all (Poland 1990). The story is told at some length in "How They Ran The First Fox In The Wight", one of Percy Stone's collection of Isle of Wight dialect poems *Songs of the Soil*, published in 1933.

Despite the Squire's opposition to introducing foxes to the Island, it was his son William who in 1843 furtively brought eight more of them over to the Island, via the Portsmouth to Ryde ferry, and let them loose. When the Squire realised that they had been introduced, "his vile temper knew no bounds, swearing that if he could find the rascal who had introduced the foxes, he would lay his hunting whip across his shoulders!" (Poland 1990). Percy Stone again relates the tale in his dialect poem "How They Introduced Foxes To Wight", in which our beloved Squire once more takes the lead in the hunt, believing he is chasing a hare, but on this occasion the fox gets away (Stone 1933). Squire William Thatcher is described as "a small man with a big voice and red face, and when angry or excited in the field he would frequently break into somewhat forcible, though unparliamentary, language..." (Garle 1905).

Scarth-Dixon (1921) asserts that Benjamin Cotton of Afton and Henry Nunn imported foxes in 1845, the same year in which the Isle of Wight Foxhounds were established. Presumably these were the same foxes which, according to *A History of Newport Old and New*, were one of the earliest cargoes to be brought to the Island by the Croucher boats at Town Quay, Newport; and the boats were all named after a hunting theme: the 'Tantivy', 'Tallyho', 'Fox', 'Vixen', 'Huntsman' and 'Whip' (Greening & Shepard 2002). Whatever the case, the species has continued to thrive on the Island to this day.

Poland (1990) informs us that the Isle of Wight Hunt was also directly responsible for introducing the badger to the Island - though the latter may have been a *re*introduction. A dozen badgers were imported by the Hunt in the 1920s to drive foxes away from their diseased earths and clean them, thereby rescuing the foxes from the mange that was endangering them and forcing them to open fresh earths (Poland 1990).

The story is told of a milk-white dog fox which had been run into the open by the hounds, but as they approached him, doubtless in consequence of his unusual appearance, not one of them would touch him. He was conveyed to the stables of the master of the hounds and a suitable 'earth' set up for him, where he gradually overcame his natural timidity and would sit sunning himself on top of it. It was thought that he owed his colour to the paternity of an Arctic fox, yet another one which had escaped captivity; alternatively, he might have been an albino (Simeon 1860).

During January and February 1940 something of a scare took hold in the area between Ryde and Osborne House concerning reports of a monstrous wild animal roaming the area, leading to press and radio announcements. The beast was reported to have a head like a lion and the body of a dog, whilst its large footprints were tracked in the snow. Eventually it was shot at Bembridge and found to be a fox in an advanced state of mange: the poor creature must have been in a most pitiable state (Poole 1940).

In folk belief, Reynard the fox (or Renyard as he was known on the Island) had a sinister reputation and was often seen as the symbol of the devil (Newall 1971).

Insects

i) Bees & Tee-Holes

In Island dialect, bees inhabited a 'bee butt' rather than a beehive and it was always important to accord them the respect they deserved. When a death took place in the family it was necessary to inform the bees early on, particularly if the deceased happened to be the master or mistress; if neglected, it was thought they might fly away and never return. "A woman went to the [bee butt] and explained: 'Ah! bees, you've lost a good friend! Mr Roach is dead; *and mind I've told ye on't!*'" (Roach Smith 1883). In the compendium of parish reminiscences *Newchurch Remembered*, Mabel Groves expands on this theme: "Old fashioned folk believed in telling the bees everything about the family - births, marriages and deaths and any crises that might arise... I think it is true that people who keep bees are wiser than most and also they very rarely suffer from rheumatism, the fluid in the sting being good for the blood" (Newchurch W.I. 1988). Though whether Island beekeepers went so far as to serve their bees with food from the funeral table, as sometimes happened elsewhere round the country, is not recorded! The old dialect word for a bumble bee, 'dumbledore', was more widespread than just the Island, and it was a version of it that J.K. Rowling must have tapped into for her now famous professor in the Harry Potter novels. 'Tee hole' denoted the hole in a bee-hive by which the bees go in and out: "I putt my ferrets into the wheeat rick, and in vive minutes the rats zwarmed out like bees out of a tee hole" (Long). A hackle, in addition to signifying a cock's feathers, also referred to the cone-shaped covering of straw placed over a beehive to protect it from cold and wet (Lavers). And 'zwarm', transferred from bees to humans, signified a beating or thrashing: "If thee doesn't shet up thy mouth, I'll zwarm into thee in a minute or two" (Long).

Cheverton Down and Farm near Shorwell undoubtedly take their name from Old English *ceafor*, to give 'the hill or down infested with chafers or beetles'; and Cheverton Farm near Shanklin was once owned by a family called *Cheverton* who took their name from the Shorwell location (Mills): could this mean that the Shorwell version is the origin of the name in its entirety?

ii) Bobs & Mallishags

'Bob' was a general term in use for an insect or worm, with 'black bob' or 'straddle bob' denoting a black beetle, and 'chissel bob' the wood-louse. 'Mum' was another word for a louse or any small insect. 'Emmet', or ant, is of course one of those few dialect words which have survived virtually to the present day, and more widely than just the Island (Lavers); as a place-name it also survives in Emmethill near Kingston, with the obvious meaning 'hill infested with ants' (Mills); there is also an *Antils* at Arreton (Middleton 1986). A most unusual dialect word was 'eace' or 'eeas', signifying the earthworm; by contrast, the 'jarworm' was an 'ugly insect found in wet, marshy ground' (Lavers); 'glareworm' was the Island take on glow-worm (Roach Smith); and, delightfully, the 'maayworm' was a worm that breeds in the stomach (Lavers). Leechmore Farm near Godshill was originally named from Leechmore Pond, 'the pool where leeches are to be found' (Mills). And an earwig became a 'pincherwig': "I zay you, I left my clothes under hedge here, and now there's dree or vour gurt pincherwigs craalen about in my dinner bag" (Long).

Another well-known survival is 'mallishag', which strictly speaking originally referred to the caterpillar of the white butterfly but has come to denote caterpillars more generally: "I ben out in gearden to cut a cabbage or two vor dinner, but they be very near all spwiled, and vull o' mallishags" (Long). By contrast, the 'gooseberry wife' was a large caterpillar, or a bogey to deter children from picking the gooseberries: "If ye goes out in the gearden, the gooseberry wife'll be sure t' ketch ye" (Long). A snail with its shell, or simply the shell alone, was known by the extraordinary dialect word 'hodmandod' (Lavers); more generally, it could refer to any strange animal (Roach Smith).

'Hoppers' were small maggots which infected bacon or cheese (Lavers):

"She hung the puddens up on a pin,
The fat run out and the hoppers got in.
I shall never forgit, wherever I be,
What lumps o' pudden my mother gid me." (Long)

(Taken from 'Lumps o' Pudden', perhaps the only song, or at least this version of it, which can lay claim to being unique to the Island, though it appears that no-one can remember the tune!) 'Minty cheese' was likewise cheese full of 'mints' or mites, and considered by some labourers to be a delicacy! (Lavers).

iii) Vlees that Vlucker

There is a range of dialect words for insects which 'vlucker', flutter or fly about. A 'vlee' simply denoted a flea or a fly, a 'vlesh vlee' referred to the blow fly (Lavers), and a 'vleevlapper' is described simply as 'a thing to drive away or kill flies' (Roach Smith). A 'stout' signified the gadfly or horse-fly: "They heifers got the stout and be gone taail-on-end right down droo the clover and rish droo hedge into copse" (Lavers). Indeed, despite the rarity of Island fields named after insects, there are at least three 'stouts' - *Stouts mead* and *Stouts close* in Brighstone, and *West stouts mead* in Brading (Middleton 1986). The 'vuzz-owl' was the name given to the flying brown beetle we know as the cockchafer. The crane-fly or daddy-longlegs became 'granfer longligs' in dialect form, and a certain small white moth was known as a 'miller', but one can only guess why the burnet moth should have been called a 'bloodsucker' - perhaps owing to its red spots? - or the ladybird known by the stunning name of 'God a' mighty's cow' or 'lady cow' (Lavers). 'Wopse' was of course a wasp, and Long informs us that to 'zwarm a wopses' nest' - i.e. to burn out or destroy one - was a serious undertaking among small boys, and owing to the risks involved the leaders were regarded as heroes by their fellows. A field in Newchurch parish has the name *Wop acre*, another in Godshill was called *Moth butt*, and *Nit ditch* in Shalfleet could be yet another insect name (Middleton 1986).

The Island's iconic butterfly, the Glanville Fritillary, is named after Eleanor Glanville, that remarkable late-17th century Lincolnshire lady who was considered highly unusual by many, even mentally unstable by some of her relatives, simply on the grounds that she showed an interest in collecting butterflies and moths! (Pope 1987).

The dragonfly was known by two names denoting its stinging properties: 'hoss stinger' and 'snake's stang'. On the Island dragonflies were deemed to be of a larger size than usual, brilliant in colour, and with a sting as venomous as the bite of a viper. They were considered to be the guardians of the fish, and would sting all improper persons who attempted to catch them. Children held them in great fear, and on the appearance of a 'snake's-stang', used to sing or repeat a rhyme as a kind of charm or protection against the insect:

"Snake's-stang, Snake's-stang, vlee all about the brooks,
And sting all the bad bwoys that vor the fishes looks;
But let all the good bwoys ketch all the fish they can,
And car 'em away hooam to fry 'em in the pan.
Bren butter they sholl yet (eat) at supper wi' their fish,
But all the little bad bwoys sholl onny lick the dish." (Long)

W.H. Long adds that this begs the question as to how the dragonfly was able to distinguish between the good and bad boys - but therein of course lies the belief in their special magic!

Cockfighting

A licence was granted by royal prerogative for cockfighting to be held at the Castle Inn, Newport, in 1705 (Mitchell 1999/1). On the 12th May 1777 the *Hampshire Chronicle* gave the following announcement: "Cocking May 19th and the following two days. A main of cocks to be fought at Mr. Gregory's at the Green Dragon Inn, Newport, between the gentlemen of the East and West Medina. To show thirty-one cocks main and ten beys for five guineas a battle and a hundred guineas the odd one" (Mitchell 1999/1).

Long quotes a document written in 1790 in local dialect by a parish clerk or overseer:

"Whit Munday 1790.

"A mayn of cocks to fite for three ginneys prise, the sekunt best cock to have a hat for a faver, and 8 cocks only; and nayther cock to be over four pouns and a haf, to fite in the parish of Northwood, and to meet by 10 a clock, and to way by 11, and hosoever is a mind to putt in a cock must give in there names to John Dore, and to putt down haf a crown, and hosoever is not there to time, to forfit there haf a crown" (Long).

Around 1820 cockfighting was still in full swing, and one of its patrons, none other than Squire Thatcher, kept 50 game cocks. Great battles were fought in a barn at Lambsleaze, close to Hale (Garle 1905), and Island cocks fought 'All-England' at Westminster (Hargrove 1926); Sunday afternoon was also a favourite time for cockfighting at the nearby Fighting Cocks Inn at Hale Common (Hargrove 1913). A cockpit in use at the Squire's Wacklands residence from the 18th century onwards also survives as a circular rose bed at the front of the house (Winter 1984). There was once also a Fighting Cocks public house in Ryde, pulled down between 1800 and 1810 (Mitchell 1999/2); presumably so named for the same reason. A 'soourder' in dialect referred to a gamecock that had badly wounded its antagonist (Lavers).

Squirrels & Badgers

Given its special prominence in the Island's natural history and cultural life, it has proved quite a challenge to uncover anything of a folkloristic or cultural nature concerning the red squirrel. Even the story that a squirrel could once have travelled from one end of the Island to the other without touching the ground seems to be precisely that, just a story; perhaps it was a version which expanded in the telling of Davenport Adams' observation about Parkhurst Forest in 1856, that it "was so well thronged with noble trees, that a squirrel could have leaped through it from bough to bough" (Davenport Adams 1856). *Fauna Britannica* was unable to produce a single example of a place-name connected with squirrels, once so common and familiar, in the whole of Britain (Buczacki 2002). This is probably due to the fact that the red squirrel remained wild and hence did not feature in the local economy, and was not to any great extent hunted for food or sport.

Fossil remains of the red squirrel found in Britain have been dated to between 7,000 and 10,000 years old, whilst the earliest Island red squirrel fossils were found at the Undercliff and date to c.4,500 years old, i.e. the Late Neolithic period (Butler 2004). Its Latin name is *Sciurus vulgaris*, 'Sciurus' in turn originating from the Greek word 'skioros', which means 'shade-tail' and conjures up a delightful picture of a creature which sits in the shade of its own tail (Buczacki 2002). Squirrels have not, however, always been as popular as they are today. Their habit of chattering and scolding from an unseen vantage point was interpreted in former times as a sign of mischief-making, and they were even accused of causing accidents and other bad events (Holm 1987). In Anglo-Saxon myth - which was effectively Norse myth displaced - a squirrel would spiral up and down the World Tree, delivering insulting messages between the gods above and the underworld below (Holm 1987). In 1915 a request was made by the Forestry Commission for permission "to attempt to destroy if possible all rabbits and squirrels" in Parkhurst Forest (National Archives 1920-33); they were obviously considered vermin doing damage to forestry, but we do not have any record as to whether the request was acted upon.

The squirrels' nest has been called a 'drey' or 'dray' since the early 17th century, though its origin is unknown (Buczacki 2002). A drey found at Nokes Common was lined with the stuffing from a discarded mattress, and another one involved the theft of insulation from a caravan roof! (H Butler pers. comm.). In 1962 the County Press reported that shoppers in Ryde were surprised when a red squirrel dashed the full length of Union Street and then disappeared along the seafront; more recently another one made it into Sandown Tourist Office, where it charged round at lightning speed, refusing to be caught, and was only able to be released in the evening when there was less traffic (H Butler pers. comm.). Then in the early '90s a squirrel mysteriously appeared on board a yacht in the Medina river (Butler & Norledge 1994); yet another has appeared among the yachts in Yarmouth Harbour, racing around at the rate of knots before a rapid swim back to shore via the slipway (H Butler pers. comm.). Perhaps these last two were simply imitating the fleet of little red squirrels in Beatrix Potter's Squirrel Nutkin tales, who sailed across a lake on rafts with their fluffy tails held aloft like sails to catch the breeze! (Holm 1987).

There appear to be likewise few surviving Island stories about the badger, that animal much persecuted for seemingly no good reason. It is generally assumed that badgers were deliberately introduced to the Isle of Wight at about the same time as foxes in 1845 (Surujballi 1991) (see under **Foxes** above). They were certainly common on the Island in the 1870s and '80s but for some reason declined in the 1890s. Frank Morey reported them to be extinct at the turn of the century, though it is probable they remained undetected (Surujballi 1991). It appears that several pairs of badgers were introduced to Lynn Common in 1925 and within ten years were found in all their old haunts (Surujballi 1991). Several field-names on the Island have been called 'Badger' or 'Brock', whilst 'Brock-holes' refers specifically to badger setts, indicating that this creature was an old inhabitant (Middleton 1986); there is also a Badgers Lane at Brook and a Brocks Copse at Wootton. The name Bagwich, near Godshill, may refer to 'Bacga's dwelling' but it might equally well have denoted a badger's sett (Mills). The term 'sett' for a badger's den is in fact surprisingly new, first used as recently as 1898. The word 'badger' itself is first recorded only in 1523, its origin uncertain but thought to derive from the French 'becheur', 'a digger' (Buczacki 2002). There are persistent stories round the country of badgers ritually burying their dead (Buczacki 2002). It is also very encouraging to learn that badgers have the same fleas as humans! (Gunn 1971).

Hares

It is generally accepted that hares were a species native to the Island from prehistoric times**;** the hare was certainly sacred to the ancient British - Boudicca released one before leading her men against the Roman cavalry - and the Island has its own find of a beautiful Romano-British leaping hare brooch from an Anglo-Saxon grave on Bowcombe Down: the body of the hare is divided into three sections, each with a different coloured enamel - red, blue and green - and the brooch was three hundred years old when it entered the grave (Tomalin 1987).

Over time, however, the hare's star waned and it came to acquire a sinister reputation, featuring in many stories of witchcraft and transformation (Newall 1971). The Isle of Wight was no exception regarding such beliefs, and witches were long feared and implicitly believed in. The story survives of an old lady who lived at Hale Common and who was reputed to have turned herself into a hare, and needless to say it was again Squire Thatcher who pursued her with his harriers. She only escaped by disappearing through the keyhole of a door! (Hargrove 1913). In 1923 Frank Morey reported on a taxidermist's case containing a white-faced hare which had been shot at Niton in 1795; the hare appeared to have been in the Kirkpatrick family for 128 years. A label attached to the case read: "This curiously marked hare... had been repeatedly coursed, but had always succeeded in beating the greyhounds, and this fact, coupled with her strange appearance, led the Niton people to believe that she was a witch" (Morey 1923).

Despite the hare's antiquity, however, in contrast to rabbits - whose numbers exploded from the medieval period in the coverts and brakes - hares remained comparatively scarce until introduced by the Captain of the Island Sir Edward Horsey in 1574, as Sir John Oglander informs us: "Sir Edward procured many from his friends to be brought in alive, and proclaimed that whosoever should bring in a live hare should have a lamb for him: by his care the Island was stored" (Long 1888). Hare hunting grew in popularity and we know that by 1752 John Mitchell of St Cross, Newport, kept a pack of harriers. In 1812 William Jacobs of Chale Farm ran his harriers sixty miles: only five horses were in at the finish. In 1819 two rival packs were in existence: Squire Thatcher of Wacklands of course, and Sir Worsley Holmes of Newport House (Hargrove 1913); then Harvey's Crockford Harriers started up in 1820 (Garle 1905).

'Jack hare' was the local name for a male hare, and 'monkey', unlikely though it may seem, a dialect word for 'young hare', which appears in *Great monkey lands* in Whitwell parish, 'the land where the young hares are seen', and local people have often watched them playing in this field (Middleton 1986). 'Laa' signified giving a hare a good start before the dogs: 'Ghee 'er good laa' (Roach Smith). Haslett Farm near Shorwell is the contracted version of a name which was once Hareslade, or 'the valley frequented by hares' (Mills). The name is doubly interesting because it was adopted in the 13th century by Robert Carpenter, who upgraded his family name to Robert of Hareslade and kept a manuscript handbook which is now in the possession of Cambridge University, where it is of considerable interest to medieval scholars (Hockey 1982).

Rabbits

i) Warreners & Poachers

The traditional view that rabbits were first introduced to Britain by the Normans appears to have been superseded by recent archaeological evidence of rabbit bones excavated in Romano-British contexts (J Margham pers. comm.). But many traditional beliefs associated with the hare in turn brushed off onto its cousin; amazing as it may now seem, like the hare, the rabbit came to be seen in the late medieval period as a sinister witch animal (Newall 1971). That did not however stop the animal being bred on the Island in huge quantities. The word 'rabbit' itself was reserved for the young animals, while the parents were referred to as 'coneys', the term most prevalent in the mediaeval period. An account of 1225 for the manor of Bowcombe is in fact one of the earliest in Britain to mention rabbits: among the expenses we find the wages of the coney-keeper, and the sale of 200 rabbit-skins (Hockey 1982). Numerous similar records follow, and the Island rapidly gained a reputation for a high rabbit population through the absence of the fox and the wolf; a fact which is further evidenced by the prevalence of 'Warren' in place-names such as Headon Warren and archaeological finds of pillow-mounds, or medieval rabbit-warrens.

In 1243 King Henry III ordered 80 rabbits from two bishops' warrens in Hampshire and 100 from the Isle of Wight, most likely Swainston, which was then owned by the bishops of Winchester (Basford 1989). In fact, towards the end of the 13th century the latter were receiving 6s. 8d. (a significant sum then) in annual income from their 'coney-garths' - rabbit enclosures walled in with stone - at Swainston (Hockey 1982). Quarr Abbey was granted 'free warren' for its grange at Compton by Edward I in 1283 (Page 1912). The greater part of the manor of Thorley was once a warren, and in 1292 Isabella de Fortibus gave a fifth part of its coneys to the Prior of Christchurch. Subsequently, King Edward III bestowed the office of Warrener of Thorley and Wellow on a certain Walter White (Worsley 1781), and at this time the warren was producing 500 rabbits per annum, fifty for the tithe and the remainder sold at twopence a head for the King's benefit (Hyland 1984). John de Glamorgan was granted free warren in Brook and Mottistone in 1326, there was a rabbit warren on the coast at Freshwater, and a free warren was also mentioned in the manor of Afton in 1343 (Page 1912).

Parkhurst Forest seems to have supported one of the earliest commercial warrens in Britain and also provides some of the earliest references to the theft of rabbits. In 1255 Roger the forester arrested some poachers in the forest, hunting with greyhounds for rabbits, and they were fined two shillings, though they may well have had more important game in mind! And when a group of poachers armed with bows and arrows were surprised by two warreners on Geoffrey Roucle's land at Brook one midnight in November 1384, a violent confrontation ensued and one of the poachers, Thomas Smythe, was wounded in the forehead and subsequently died (Hockey 1982).

There was a small grove of rabbits at Kern in 1398, and in 1408 Quarr Abbey granted John Garston all the rabbits on the manor of Arreton to the south of the road from Standen to Haseley (Hockey 1970). In 1441 Lewis and Alice Meux of Kingston Manor were granted free warren for deer and coneys in Kingston and Shorwell and licence to enclose 300 acres of wood and pasture there (Page 1912); could this be the origin of the name Warren Hill in the Kingston area? (Basford 1989). In 1445 Humphrey, Duke of Gloucester, issued an order from Carisbrooke Castle for Thomas Roucle, a farmer in the manor of Freshwater and no doubt a relation of the Geoffrey Roucle already mentioned, to send two cartloads of coneys to Devizes Castle at a cost of 36 shillings (Hockey 1982). In 1491 eight brace of rabbits were paid by the tenant at Combley as part of his rent to Quarr Abbey (Jones & Jones 1987). By *c*.1560 century a 'coneyman' was visiting the Island once a week to buy rabbits for the London market and doubling up as a postman at the same time, taking back letters for the mainland (Hockey 1982).

ii) Catchers & Clappers

The demand for rabbits had not abated even by the 20th century. In *Put Out The Flag: The Story of Isle of Wight Carriers*, Derek Sprake updates us thus: "The need to control rabbits in the countryside provided those who lived there with a good income... and a good trade existed with many carriers buying them from their customers... Between 1936 and 1939 [Arthur Sprake] bought over 36,000 rabbits, all trapped in the Chale, Atherfield and Chillerton areas, and they were sold to a trader in Newport... The rabbit catcher would wait at his gate with his rabbits strung up onto a pole, carried over the shoulder, with their hind legs slotted together... This trade ended when the rabbit disease myxomatosis killed off most wild rabbits in the 1950s, and they became less acceptable as food" (Sprake 1993). In the 1920s and '30s there were five people in the Bowcombe Valley whose sole job was catching rabbits: this lasted until World War II, then afterwards there were none (H Humber pers. comm.).

A rabbit's burrow was known as a 'berry' or 'bury', a 'mesh' was the run of a rabbit or hare through a hedge, while a rabbit hole running right through a bank was referred to as a 'pop hole'; by contrast a 'squot' was the shallow hole a rabbit or hare makes in the ground (Lavers). Some fields on the Island with rabbit burrows were known by the unlikely name of *Clappers*, from the Latin word for rabbit *clapere* (Middleton 1986). Particularly intriguing was the local use of the word 'rabbit' itself as a mild kind of oath or expletive: "Od rabbit the bwoy!" (Long).

The Royal Hunting Forests

i) Medieval Deer Parks

There is evidence of stag-hunting in Britain from prehistoric times (Green 1992), and fragments of a red deer antler were found with the other bones in the Arreton Down round barrow mentioned above (Frazer 1990). It was, however, the Normans who introduced fallow deer into England, probably in the 12th century, originally for the supply of venison rather than as hunting preserves. The Domesday Book records the creation of 'The King's Park' at Watchingwell, thereby predating 1086, and one of the oldest known deer parks in England (Basford 1989). Situated in the south-west corner of the vastly more extensive Parkhurst Forest, it was separated by the track which later became known as Betty Haunt Lane, most likely meaning 'between the haunts', an appropriate name for a lane dividing two 'deer haunts'. A similar use of the word 'haunt' occurs in the name 'Dogs Ant', which is marked on an 1862 map in the north-west corner of Parkhurst Forest (IWCRO: O.S.1862). Watchingwell would have been used for the breeding of deer, which were then released into Parkhurst Forest - literally, 'the wooded hill in the hunting park' - where the chase took place (Basford 1989).

'Forests' in their original sense have always been a royal prerogative, and the Isle of Wight was no exception, with the Lords of the Island enjoying from the King the right of free forest and the privilege of taking or driving stags or harts (Hyland 1984). Three huntsmen sent by Henry III spent eighteen days in Parkhurst Forest until, with twenty hounds and twelve greyhounds, they had caught the hundred deer required to grace the young king's table with venison (Jones & Jones 1987). By 1279 Isabella de Fortibus had already claimed from Edward I the liberty of a free chase in the Forest, which was subsequently granted in Edward II's reign to the royal favourite Piers Gaveston. Edward III imposed on one John Maltravers that he should, in the season for buck-hunting, attend the king at Carisbrooke Castle (Worsley 1781); during his reign, in 1333, sundry poachers were prosecuted for entering the king's park and taking deer, and continual prosecutions followed (Page 1912). Parkhurst annually provided the Lords with thirty bucks and a crop of rabbits, while 150 cattle, forty pigs and a large number of geese were also turned out onto the pastures. Later accounts refer to the grazing of fifty sheep in the Forest (Chatters 1993). In 1650 Watchingwell Park still contained nine score deer of various sorts (Basford 1989).

Birchmore in the Arreton/Rookley area also formed part of the hunting ground of the early Lords of the Island, and was another liberty granted to Isabella in 1279 (Page 1912). Old Park within the Undercliff was a sanctuary for wild animals and reserved for hunting from the Late Middle Ages. On the western side of the estate is a large area of rough ground still named 'The Warren'. Early in Edward II's reign, 1309, a charter was granted to John de Insula and his heirs of free warren, a privilege which had been granted a few years earlier to the De Insulas on the adjoining estates of Bonchurch and Rew. Old Park lay within the medieval parish of Whitwell, and an indenture of 1689 recites the manorial rights to the Whitwell estate, reserving the rights of fowling, hawking and hunting, privileges conferred by the charter granted nearly four centuries earlier (Whitehead 1911).

There was certainly a deer park in the Shalfleet area by the later 13th century, for in 1278 Henry Trenchard complained that Amice, Countess of Devon, and her men had taken thirty of his oxen at Chessell and detained them at her manor at Thorley; moreover, they had broken his park of Chessell and "rescued the beasts lawfully impounded therein" and driven off the deer from his park at Shalfleet (Page 1912). In 1441 Lewis and Alice Meux were given licence to create a deer park out of three hundred acres of woodland and pasture in the parishes of Kingston and Shorwell (Basford 1989).

Borthwood Forest also served as a breeding-ground for deer, and in 1415 was granted by Henry V to Philippa, Duchess of York, with a small building called the Queen's Bower in an eminent position, from which she would perhaps view the chase (Worsley 1781). But there are at least two other claimants to this title. Queen Anne (1702-14) is also said to have had a 'bower' or arbour here, when she came at certain seasons for the excellent hawking (Kokeritz); an alternative tradition claims that it was Isabella herself who had a hunting-box here as far back as the 13th century, in what was then extensive forest (Mills). But there were strict prohibitions in force: Sir John Oglander refers to Borthwood also being stocked with heath-cocks and hens, and in 1585 a certain 'Old Forder of Newchurch' was dealt with severely by Sir Edward Horsey for shooting them (Bamford 1936).

ii) Royal Visits - and Disapproval

On a visit to the Island in 1499, Henry VII was entertained at the mansion-house at Brook and was so well pleased with his hunting and Dame Joan Bowerman's hospitality that he presented her with his drinking-horn and the grant of a fat buck of the season to be delivered to her annually from his forest of Carisbrooke (Watchingwell Park) during her lifetime (Page 1912).

The one visit by his royal son was not to prove so fortuitous. Henry VIII arrived 'a few years before 1545', as a guest of the contemporary Captain of the Island, Richard Worsley of Appuldurcombe. During this visit the king, accompanied by Lord Cromwell, was taken out hawking in Parkhurst Forest, but the local poachers had beaten them to it and the lack of sport so displeased

Henry that on return to London he issued a royal edict, a copy of which has been preserved at Nunwell. "It has come to Our notice that Our games of partridge and pheasant within Our Isle of Wight are much decayed by the sufferance of such lewd persons as, contrary to Our laws and pleasures, do daily take the same with nets and other engines." He went on to impress upon Sir Richard that game birds must be "cherished within Our said Isle for Our disport and pastime", and that he and all other landowners must "spare the said game in your grounds and specially abstain from suffering any pheasants to be taken with nets and such engines as totally destroyeth the breed". We may be sure that the edict was obeyed to the letter, but not to the king's advantage, as he never returned to the Island (Aspinall-Oglander 1945).

James I visited the Island twice, in 1607 and 1609. On the second visit, accompanied by his nine-year-old son Prince Charles, he was met by Sir John Oglander, hunted in Parkhurst and 'killed a bocke', or buck (Long 1888). In that same year, Sir John tells us, a stag was hunted out of the New Forest into the Island - in other words, it swam the Solent! - and lived many years in the Island, laying up at Rowborough "and in my grounds at Artingeshoote and Whitefield". King James had a great desire to hunt it, but was dissuaded as it was almost impossible to kill the creature, "because on all occasions he would take ye sea". It was thought that the stag went into the New Forest to rut and then returned again; but was finally killed by one Cave, "a country fellow with a musket" (Long 1888). One cannot resist the observation that such a noble beast deserved a better ending.

Charles visited a second time, still as prince, in 1618, and was waited upon at Carisbrooke Castle; Sir John relates that upon riding through Castlehold (Newport) afterwards they passed an inn sign showing a Lion clawing at a Friar, and when Charles enquired as to the meaning, perhaps with tongue in cheek Sir John replied that "we served all papists and priests in that manner" (Long 1888). When he arrived on the Island as king in less happy circumstances in 1647, Charles I used the pretext of hunting in Parkhurst for planning a quick getaway by boat, but the attempt was thwarted (Pigot 1990).

King Charles II in turn made several visits to the Island, and on what must have been his last visit on 8th September 1684 he travelled over from Southampton to Yarmouth, killed a stag whilst hunting at Thorley, and was entertained by Sir Robert Holmes whose residence later became the George Hotel at Yarmouth (Pigot 1990).

By 1798 William Gilpin could record of Parkhurst that "The deer, its ancient inhabitants, are now nearly extinct; and it is grazed by sheep, and little groups of wild horses, which are not less ornamental" (Gilpin 1798).

iii) Harts & Roes

In popular belief the deer was thought to shed tears. Shakespeare alludes to this several times, and Bartholomaeus, a medieval writer, says: "When the hart is arered [arisen], he fleethe to a ryver or ponde, and roreth cryeth and wepeth when he is take" (Newall 1971). A deer was also considered to weep each year for the loss of its horns (ibid.).

The sign of the White Hart Inn at Havenstreet "owes its name to the popularity of Richard II as king, whose coat of arms include as a main theme a white hart (an albino red deer). The adoption of a royal emblem or badge has always been an accepted way to name an inn. Despite the myth of this being the only white hart, like most species albinos are not so rare. The design is based on the Wilton Diptych, painted for Richard II *c.*1395, and now in the National Gallery" (information from the Inn itself).

Renham Down near Shorwell refers to 'the down frequented by roe-deer', while Rancombe, the deserted settlement in the same area, denotes the same animals but this time in a valley setting (Kokeritz). Rains Grove in the Bowcombe Valley may derive from an early version of a family name such as Rayner, but may equally be associated with a local name *Reyneris* recorded c.1241, whose probable meaning is 'area of brushwood frequented by female roe-deer or she-goats' (Mills). Stag Rock near the Needles is a pyramid-shaped rock which once formed part of the cliff; a colourful but not impossible legend has it that it owes its name to the fact that a stag, pursued by hounds, leapt on to it from the adjacent cliff at a time before the present degree of erosion had taken place (Mills).

Miscellaneous Words, Names & Curiosities

Any smart animal was known as a 'tickler', and the term was transposed to mean any shrewd or cunning person (Roach Smith). To 'chivey' after an animal was to run or chase after it: "We 'ad a rare chivey arter he this mornen" (Turner). Young animals sucking in the mouth were said to be 'quiddering'. A 'ridger' or 'ridgioner' signified a half-castrated animal, whilst a 'henge' was nothing to do with prehistoric monuments but denoted an animal's liver and lungs (Lavers).

The commonest dialect word for a bat was 'rattlemouse' but it was also known as a 'raw mouse' or 'rear mouse'. A mole could be called either a 'tape' or a 'want', and a mole-catcher a 'tape taker' or a 'want ketcher'. An eel, especially a young or small one, was referred to as a 'snig', a stickleback became a 'stucklen', and 'suss' did not involve checking anything out but denoted the small spotted dogfish (Lavers). There appear to have been few dialect words for snakes, at least that have been recorded, but an individual might have been 'quealed up like a snake' i.e. coiled or curled up, or a rope might have become 'kinked up like a snake' i.e. twisted or entangled (Long).

Froglands Farm in Carisbrooke quite obviously refers to 'the ground frequented by frogs', and it is near the stream which once gave its name to Carisbrooke (Mills). There is a Froghill in the Godshill area first recorded in l581, and a lost *Frog Hill* in Calbourne, recorded in 1775 (Kokeritz). Less obviously, the origin of Padmore in Whippingham is 'the marshy ground frequented by toads', from Old English *padde*, or toad (Mills). The old dialect term for a toad was 'Egyptian frog', while to be likened to a 'tooad under a harrow' was to be accused of being dominated or browbeaten (Lavers). A newt or eft became an 'evvet' or 'water evvet' (Lavers); while a tadpole was known as a 'todpool': "The hoss pond's vull o' tooad's spawn and todpools" (Long).

Sir John Oglander informs us that on the 20th February 1626 he "put into the pond by Whitefield House 200 young carp" (Bamford 1936). Regarding goats, he advises: "Keep no goats thyself, neither let thy tenants keep any, for it is the harmfullest beast there is. He spoileth all wood, young trees and quickset hedges" (Bamford 1936). The origin of the name Gatcombe is quite simply 'the valley where goats are kept'; Gatcliff Farm near Godshill had a similar origin, this time 'the steep slope or bank where goats are kept' (Mills). Pan and Great Pan Farm in Newport derive from '(the place at) the pen or fold for animals', from Old English *penn*: the development from Pen to Pan reflects the old dialect of the Island. The place-names Black Pan near Sandown and Walpan near Chale each have the same derivation: 'the black or dark-coloured pen or fold for animals' and 'the pen or fold by a ridge or embankment', respectively (Mills).

Niton, 'the new farmstead or settlement', was at one time known locally as 'Crab Niton' from the abundance of crabs caught off the coast here (Mills). Whale Chine is often assumed to be so called from the stranding of a whale along the coast here at some time, such as the 75-foot Greenland whale which was wrecked on the Island in 1842; the other possibility, however, is that the chine takes its name from the local *Wavell* family (pronounced *Wa-ull*) who owned nearby Atherfield Farm between 1557 and 1636 (Mills). Two fishy field-names are *Mackeral mead* at Arreton and *Fishes close* at Shorwell (Middleton 1986).

We have a record of some nicknames for the folk attached to the various Bowcombe Valley farms: Cheverton were 'Men', Rowborough 'Boys', and 'Idlecombe 'Lads', while Goldings were 'Mallyshags' (Caterpillars), Bowcombe Barn 'Rats', Clatterford 'Mice', Froglands 'Bulldogs', and Priory Farm 'Cocks and Hens' (Humber 2006). There must have been many more like these scattered round the Island.

The donkeys which have worked the well wheel at Carisbrooke Castle for time out of memory are too well known to require detailed repetition here; John Albin noted, however, that an ass which had worked in the well house for 45 years died in the year 1771, which would indicate that it had started work in 1726. Albin continues: "His Royal Highness the Duke of Gloucester, on a visit to the Island, seeing the extreme docility of [another donkey], was so well pleased, that he ordered him a penny loaf per day during his life" (Albin 1811). It would be delightful to imagine that any of these donkeys might once have been referred to by the old and somewhat unusual dialect words 'rantipike' and 'shouto' recorded by Lavers. A rather more familiar word for donkey was 'nutten', as in the story recorded by Long of an old man from Chessell whose donkey had to be shot following the loss of its foot in a road accident; convinced that the parson would say something about it at the next Sunday service, he took himself along, only to find that the lesson was about Balaam and his ass. "What a good sarmun," a [he] zed, "I knowed the paason 'ud be sure to preach about my poor wold nutten, 'cause a was sich a good 'un" (Long). "Donkeys pulling small carts were a common sight on the Island's roads before motorised transport - though the donkeys often had a mind of their own!" (IWFWI 1994).

Concerning otters, in 1856 Davenport Adams conjectured that "the individuals occasionally met with on the banks of the Medina and Yar are for the most part such as have crossed the Solent in the vain hope of finding with us better covert and more abundant food than on the mainland. If so, never did animal make more grievous mistake than in leaving the well-stocked rivers of Hampshire for the all but troutless streams of the Island" (Davenport Adams 1856).

The View from Brading

Apart from a few references it has not been possible in this paper to do justice to animal themes appertaining to archaeological finds on the Island, which would require a separate study in their own right; nor, given the importance of the Island's maritime history, does there appear to be a significant body of material of a dialectal or folkloristic nature concerning marine life. However, belatedly pulling these two strands together, it is necessary to draw attention to some of the remarkable symbolism of Brading Roman Villa, whose mosaics are now generally agreed - whatever else they may represent - to have been chosen expressly to symbolise the life of the villa, and prominent among a range of animal and mythological scenes are the two themes of agriculture and maritime life.

The Orpheus mosaic depicts the divine lyre-player charming the wild animals gathered round him: a monkey, two birds and a fox. Is the latter just conventional, or might it imply that foxes were, after all, present on the Island in this period and subsequently hunted to extinction? - we know that fur-bearing animals such as foxes and badgers were being hunted in the Iron Age (Green 1992). Another panel depicts what appears to be another - this time running - fox, though it may alternatively be a hunting dog (Tomalin & Hanworth 1998). Whilst a raven represents bad luck, peacocks symbolising immortality are depicted on the wall plaster, and a burial of a cockbird outside the building suggests a parallel with the mosaic of the much-debated cock-headed and cock-footed man inside the building.

The origins of agriculture are represented by Ceres, the corn-goddess, handing her son Triptolemus an ear of wheat: he is depicted holding the first plough. The four Seasons and the four Winds are all represented, again relating to the agricultural year and the position of the villa in the landscape. Winter holds up a dead bird, representing the dead period, while a shepherd in another panel reminds us of the villa's flocks (Tomalin & Hanworth 1998).

The power of the land is balanced by the power of the sea, which is depicted by a merman with tritons or sea-centaurs - half-man, half seahorse - at his sides, each with nereids, or sea-nymphs, riding on their tails. The merman has an oar to steer ships safely home, and the tritons carry symbols to demonstrate their role as the guardians of sailors; one sea-centaur even has a shepherd's crook to care for his maritime flock. The message is quite clear: recalling Brading's position at the head of what was then Brading Harbour, the villa's symbolism depicts its situation between land and sea and its key reliance on agricultural and maritime factors.

There are some remarkable parallels between this symbolism at Brading and the modern symbolism of the Coat of Arms of the Isle of Wight Council, in which both a horse and a sea horse predominate. The design is accompanied by the following text: "The insular character of the County is represented by the Island lapped by conventional waves of the sea... The supporters of the shield, in the forms of a horse and a sea horse, symbolise agriculture and the sea which have supported and conditioned the life of the Island in such a multitude of ways" - an astonishing continuity in how the Island has seen itself over nearly two millennia!

Tailpiece

This essay on the role of animals in Isle of Wight dialect, folklore and cultural tradition serves to illustrate to what extent the husbandry of some animals provided food, clothing, transport and companionship to our forebears, how the hunting/chasing of others provided sport, how yet others were a source of worship and symbolism, and how some remained a source of fear and suspicion. The detailed descriptions pinpoint and illuminate the symbiosis of humans and the natural world in the local context of Wight, and how this relationship manifested itself in terms of language, custom, tradition, values and belief. Despite some former practices which would not be acceptable today, it can be argued that our forebears sustained a much closer integration with animals and the natural world - and perhaps a greater honesty in dealing with them - than we do today.

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ISLE OF WIGHT BUTTERFLY RECORDS FOR 2007

Andy Butler

Species account.

NB. Many records come from transects and are obtained by a recorder walking the same set route through a site once a week from April to September. The number of each species seen on that route is recorded. First and last dates are given only where considered appropriate.

Small Skipper *Thymelicus sylvestris*

The first record for this species was on 21 June at Whippingham Fields (JR) but as the weather through the rest of June and July was not particularly good the numbers recorded generally were down. DAB reported a poor year at Brading but another reasonable year at Lake giving overall an average year which most other recorders agreed with. The transect results at Parkhurst Forest were very poor (JR) but an annual count of 352 at Whippingham was reasonable (JR). JMC recorded 8 on 8 July from Chale Bay, an area few records come from.

Essex Skipper *Thymelicus lineola*

There are a few more records coming in now of this butterfly as more recorders are taking the trouble to positively identify it. The first was at Bonchurch Landslip on 27 June (DTB/JMC) followed by 1 at Walpen Chine on 11 July (BR). Records were received from Castle Cove and St Martin's Down Wroxall (ASW) and Chale Bay (JMC). It now seem fairly obvious that the Essex Skipper has spread right across the Island in suitable habitat.

Large Skipper *Ochlodes faunus*

In keeping with many other species the Large Skipper emerged early and the first was seen on 30 April at Whippingham, probably the earliest ever record for the Island (JR). This butterfly seems to be still wide-spread but only in very small numbers, eg the Coombe Bottom transect gave a total of only 4 (NT). On the plus side VG reported a maximum of 16 on 18 July at Shalfleet in a managed hay meadow.

Dingy Skipper *Erynnis tages*

This butterfly continues to decline at what is now an alarming rate. The first was seen on the early date of 16 April on Afton Down (SK-J) but the poor weather in May and June did not help an already vulnerable species. ASW reported low numbers at all the suitable sites he visited and there were only single numbers on the Coombe Bottom and Bonchurch Down transects (NT). Going right against the trend and the only good news for this species were the records from the Brading Quarry transect conducted by DAB. He had a total count for the year of 50, a 200% increase on 2006 and a best day count of 22. This is very encouraging as it came after conservation work carried out in the quarries by IWC, thus perhaps showing that something can be done for this Skipper. There was a record of a second generation emergence on Afton Down with the first seen on 24 July and the last 28 August (SK-J).

Grizzled Skipper *Pyrgus malvae*

This is another species that is not doing too well in the Island and records were few and far between. The first to be seen was on Afton Down on 6 April (SK-J) followed by low numbers at the usual sites ; JR reported the almost complete absence of the butterfly from Parkhurst Forest, once a stronghold, and just a few at Whippingham Fields and none at Woodhouse Copse since 2001. BR followed this trend by saying he had not seen any at all for the first year ever. The exceptions were the 31 seen on Brook Down on 5 May (PC) and the 20 seen at Monkham Copse on 4 May (CD), records which are more than encouraging.

Clouded Yellow *Colias croceus*
Although 2007 was rather a poor year for this butterfly it was notable however for a number of early records possibly indicating successful over-wintering and emergence in the Island, but this has still not been proved conclusively. The first was seen at Wheelers Bay on 11 March (ASW) followed by 1 at St Catherines Point on 14 March (A&EB). There were then a few records through April, none in May and the odd sighting in June and July. From then on to October saw the bulk of the records such as one on 27 August at the Western Yar (BR) and one at Rofford Marsh (BR), 3 on 8 September at SCP (DT), 2 on 18 September at Compton Bay (KM), one on 5 October at the Medina Valley Centre (KM) and also 6 at SCP on 5 October (A&EB). On the 4&5 October low numbers were seen flying to shore from out to sea indicating a cross Channel migration. The poor summer weather which hindered any prolonged cross Channel movements caused 2007 to be a below average year for this butterfly. The last was on the very late date of 30 December on Culver Down (L&SS).

Brimstone *Gonepteryx rhamni*
This butterfly is wide spread on the Island and records this year reflected the fact but numbers were generally low. The first was seen on 6 March at Norton, followed by 6 at Parkhurst Forest on 11 March (both KM). Parkhurst is a major site for the Brimstone and JR noted a very good first generation emergence with a total of 232 and a maximum day count of 66 on 21 April on the Parkhurst NE transect. Numbers were reasonable elsewhere in the Forest but his transect at Woodhouse Copse was one of the worst years ever with a total of only 14 seen. An interesting sighting was of one flying south at Welcome Beach, Lake (DD).

Large White *Pieris brassicae*
This normally numerous butterfly was, as others, affected by the poor summer weather and consequently the general opinion was of an average or below average year. The first was on 6 April at Wheelers Bay (A&EB) and then seen regularly everywhere across the Island but in lower numbers than usual. JR recorded a total of 139 at Woodhouse Copse and a total of 221 on the Whippingham Fields transect. On 5 September A&EB observed many Large Whites leaving the shore at Bonchurch, flying out to sea and then making a wide circle and flying back again, giving the appearance of fresh immigrants. On 4/5 October many were seen coming in off the sea in the Ventnor area that appeared to be genuine immigrants. DAB also reported similar sightings in Sandown Bay at the same time.

Small White *Pieris rapae*
Another butterfly that emerged early with one seen at Ventnor on 11 March (A&EB) but again another species to suffer from the poor weather in early summer. Most observers noted a year with numbers well down on transects such as at Brading (DAB), Parkhurst (JR) and Whippingham (JR). VG reported a decline at Shalfleet despite ample larvae food-plants in her vegetable plot.

Green-veined White *Pieris napi*
There were more records sent in than usual for this butterfly proving that it is widespread across the Island. The first was seen at Werrar on 18 April (DTB) and then small numbers right through to September. Woodhouse Copse had an annual count of 67 which JR described as "disappointing" as was also Whippingham Fields. The last of the year was on 7 September at Gurnard (DTB).

Orange-Tip *Anthocharis cardamines*
The general consensus from most recorders was that 2007 was a disastrous year for the Orange Tip. At Woodhouse Copse JR reported the worst year ever and a "terrible" year at Parkhurst. Very few were seen anywhere and then only in low numbers. The Alverstone area seemed to be the only

place many were reported from with, for example, 6 on 15 April (BR). The only recorder to report an increase on 2006 was DAB at Brading Quarries. The first was seen at Brading on 2 April (DAB) and the last at Shalfleet on 2 June (VG).

Green Hairstreak *Callophrys rubi*
The first of the year was at Afton Down on7 April (SK-J). The year was generally poor for this butterfly with low numbers seen at usual sites across the Island with for example, only 2 recorded in Parkhurst Forest (JR) and none at all at Whippingham Fields after good results in 2006 (JR). DAB reported a very poor year at Brading and examples of other records are 3 on 29 April at Shalcombe Down (CD), 2 at Monkham Copse on 4 May and a best count for JMC was 3 on St Georges Down on 2 May. DD had a total of 5 from four sites. The only double figure count was 11 on Brook Down on 5 May (PC).

Brown Hairstreak *Thecla betulae*
Although a number of observers spent a great deal of time looking for the adult butterfly after the discovery of eggs in the Newtown area in 2006/7, not one was seen.

Purple Hairstreak *Neozephyrus quercus*
At Whippingham Fields JR reported an excellent year with a peak of 23 on 4 July and an annual count of 113 which was the best yet from this site. At Parkhurst and Woodhouse Copse the numbers were, low; only a few other records were sent in including 4 at Clamerkin on 22 July (BR/PG) and 1 at Ningwood Common on 23 July (BR/PG). It was also recorded at Shalfleet (VG), Newtown (BA) and Bouldnor (DTB). The first was at Whippingham on 1 June (JR).

White-letter Hairstreak *Satyrium w-album*
The colony at Shalfleet monitored by VG would appear to be lost; the Elm hedges died off at about 2m and the larger trees have mostly gone too. A nil return was recorded for this year. A similar result came from all transects walked by JR and BR reported none seen. The sad fact is that the only record this year was of a singleton in a garden at Wheelers Bay on 5 August (A&EB).

Small Copper *Lycaena phlaeas*
There were no large counts through this year with recorders logging mostly single sightings. The first was seen on Compton Down on 17 April (JMC) and in spite of the weather there is evidence of 3 generations with the last being seen at Whippingham on 4 November (JR) which points to this. Whippingham Fields must be one of the strongholds for this butterfly on the Island; JR recorded an annual total of 254 with a peak of 21 on 17 May at this site. He comments that these figures are down on the last three years but nevertheless are the best in the Island. Although DAB noted only small numbers at Brading there was a slight increase on last year. The annual total for Coombe Bottom was 27 (NT) and for Bonchurh Down a total of 10 (NT).

Small Blue *Cupido minimus*
There were more records than usual sent in this year, which is encouraging. The first was on Afton Down on 15 April (SK-J), a national record. This was followed by records from Compton Down (JMC&BR), Shalcombe Down (CD), Compton Undercliff (ASW) and Brook Down (PC) all in single figures but there was an interesting record of over 20 on the south flank of Afton Down by the main footpath through the golf course (DT). There was also another record from Wheelers Bay on 23 May (A&EB) but none from the usual site at Mount Joy Cemetery.

Brown Argus *Aricia agestis*
First seen at Afton Down on 17 April (SKJ) this butterfly went on to have rather mixed fortunes this year. At Brading DAB reported numbers well down with a best day count of only 6 on 11 August but he recorded excellent numbers of the first generation on Bonchurch Down with over 40 on 30 April. On the Coombe Bottom transect the annual total was a poor 69 (NT). There was a single record from St Georges Down on 6 June (SB), an area not often mentioned. At Whippingham Fields JR had an average year with a total of 106. There was evidence of an unusual third generation on Afton Down with the first seen on 7 October and the last on 26 October (both SK-J), a national record.

Common Blue *Polyommatus icarus*
BR described the year for this butterfly as very poor and that sums up the opinion of everyone else. DAB reported numbers well down at Brading and JR noted that the annual count at Whippingham Fields slumped from 938 in 2006 to 225 in 2007. At Shalfleet VG called it a "disastrous" year with the best day`s count being only 12 on the 18 July. At the Wheelers Bay to Bonchurch site there was a total count for the year of only 18 when in a normal year 20/30 are seen in a single day. The first record for the year was exceptionally early on 18 April at Wheelers Bay (A&EB) and the last was on 14 October at Afton Down (SK-J), a very late date.

Chalkhill Blue *Polyommatus coridon*
At Brading Down DAB noted that numbers were well down on the previous year and most other recorders concurred with this. Individual records from areas not covered by transects also confirm this but with the exception of Brook, Compton and Afton Downs where DT saw 'hundreds' on 7 August and Tennyson Down where CD saw over 200 on 4 August. The transects for Coombe Bottom and Bonchurch Down gave annual totals of 113 and 37 respectively (NT) which is very poor.

Adonis Blue *Polyommatus bellargus*
Due to the poor summer weather it was only to be expected that numbers would slump from the highs of 2006. At Brading DAB had only a single sighting which was a great disappointment after the last couple of years. A good example of just how bad things were in 2007 was the total of 123 for Bonchurch Down as against the last year total of 507 (NT).

Holly Blue *Celastrina argiolus*
First seen on 13 March at Sandown (DAB) this butterfly went against the generally poor trend experienced by other species and had what most recorders called "a very good year. At Whippingham Fields JR had his second highest total ever with 67 compared to the highest of 111 in 2002. There were quite a few records from the cycle path to the west of the Medina (SB&KM) and BR saw the butterfly in his garden at Carisbrooke for 14 consecutive days. At Wheelers Bay there was a total of 55 between 17 April and 29 May and a further 27 between 29 June and 1 August (A&EB). In his garden at Shanklin JMC had a total for the year of 48.

Duke of Burgundy *Hamearis lucina*
Although looked for by a number of recorders this butterfly was not seen at its last known site at Monkham Copse. This is the first year ever with a nil return.

White Admiral *Limenitis camilla*
After excellent years in 2005 and 2006 the White Admiral went on to have a more than reasonable year in 2007 in spite of the bad weather.lt was first seen at Parkhurst Forest on 7 June (BR) and Ningwood Common on the same date (CD). The total for Woodhouse Copse of 47 was above average (JR) and the transect total at Whippingham Fields was the highest ever. Other examples

were 8 in Walters Copse on 12 June (BA) and 10 at Ningwood Common on 20 June (JMC).

Red Admiral *Vanessa atalanta*
The first of the year was seen at 1l-10am on 1 January at Osborne (DTB) which is about as early it is possible to get and from then on sightings were frequent and widespread. On 3 August ones & twos were observed heading to shore from out to sea between Luccombe and Bonchurch and on 4&5 October again numbers were seen coming in off the sea in the Ventnor area indicating a cross Channel movement(A&EB). The fine autumn gave many reports of the butterfly with the last one being seen on 7 December at Gurnard (DTB).

Painted Lady *Vanessa cardui*
The first of the year was at Wheelers Bay on 23 May (A&EB) and as 2007 was not a particularly strong year for migrants the numbers seen of this purely migratory butterfly were consequently low. DAB reported a poor year as did JR but at the coastal sites of Bonchurch, Ventnor and St Lawrence a total of over 70 were seen between 6 June & 4 September (A&EB). The highest day count was of 12 in Wheelers Bay on 26 August (A&EB) and the same number at St Lawrence upper cliff on the same date (A&EB). There were a few recorded flying in off the sea at Ventnor on 4&5 October and the last of the year was on 14 October at Wheelers Bay (A&EB).

Small Tortoiseshell *Aglais urticae*
At Whippingham Fields JR reported the worst year ever with an annual count of only 42 and at Shalfleet where VG saw the first of the year on 4 March, the count was again very low and described as 'disastrous'. On the other hand on the Brading transect DAB noted a very small increase and at Ventnor A&EB also saw a small rise in numbers to a total of 14. BR logged a grand total of only 9 from all the sites he visited.

Large Tortoiseshell *Aglais polychloros*
Early in the year there were a number of records of emerging hibernators and these are as follows;-
1 on 17 February at Whitwell (John Morris)
1 on 21 March at Atherfield (A&EB)
1 on 4 April at Cranmore (C Fletcher)
1 on 9 April at Afton Down (SK-J)
There then occurred an unprecedented influx of this butterfly on 20 June, even more remarkable as cross Channel migration of any insect was very scarce this year. These records are as follows:-
1 on 20 June in a garden at Wheelers Bay (A&EB)
1 on 20 June on Littlestairs Cliff, Lake (C.Meany)
1 on 21 June at Newport (N George)
1 on 5 July at Atherfield (G Sparshott)
1 on 6/7 July at Seaview (R Trueman)
1 on 7 July at Ningwood (K Strevens)

Peacock *Inachis io*
Most recorders thought that the Peacock had an average to above average year but BR reckoned it was his best year since 1990 and JR said that 2007 was an 'exceptional year' at Whippingham Fields. The first was on 10 January at Afton (SK-J) and the last at Whippingham on 12 November (JR). Most observers saw only individual butterflies albeit in good numbers but there were a few multiple sightings such as the 6 together on Ivy flowers in Victoria Recreation Ground, Newport on 3 October (SB).

Comma *Polygonia c-album*
Generally thought to be a poor to average year, the first was seen at Osborne on 3 February (DTB) followed by mostly single sightings throughout the rest of the season. BR had only one in his garden during the whole year, the worst count since 1975 but at Whippingham JR had an annual count of 120 which was the second best ever. A number of recorders noted the importance of blackberry fruit and ivy blossom as a food source for this butterfly in the autumn.

Small Pearl-bordered Fritillary *Boloria selene*
Some recorders made a point of looking for this butterfly in 2007 and confirmed that the population at Ningwood can be described as stable. The first was on 7 June with 8 seen (CD), 10 on 10 June (CD), 6 on 11 June (DTB) and 4 on 20 June (DTB/JMC).

Pearl-bordered Fritillary *Boloria euphrosyne*
This butterfly edges ever nearer to extinction on the Island. On the Parkhurst NW transect JR had only a single sighting, on the NE transect a total of 10 and none on the SW transect. With an overall total of only 11 for the whole Forest it is obvious that this is not a sustainable population.

Dark Green Fritillary *Argynnis aglaja*
The first record was of 2 on Limerstone Down on 4 July (BR), possibly a previously unrecorded site. There were also records from St. Martin`s Down above Wroxall (ASW) which is another site where the butterfly has not been recorded regularly. The small colony in Coombe Bottom is still extant but only in very low numbers (NT). DAB reported very good numbers in the Tapnell and Afton Down area with a best day count of 133 on 24 July. There were 5 on Tennyson Down on 4 August (CD) which was the last record sent in.

Silver-washed Fritillary *Argynnis paphia*
Most records came from Walter`s Copse Newtown, where the first from this site was seen on 12 June (BA). Peak numbers at this site were 14 on 29 June (BA) and there was also reports of smaller numbers at a good number of other locations ranging from Bouldnor in the west (DTB&CD) to Briddlesford, Collingwood and near Combley Great Wood (DD). At Firestone Copse BR logged 10 on 28 July including one *valezina*. This green form was also seen at most other sites. On the Woodhouse Copse transect JR reported a very good year with the second best count ever of 15. There was also a sighting from Binstead on 11 June (DAB) the first of the year and also a new area for the butterfly.

Glanville Fritillary *Melitaea cinxia*
2007 saw the earliest ever emergence of this butterfly with 3 recorded in a garden above the cliffs at Bonchurch front on 8 April (G&K Wheeler). This is 21 days before the previous earliest date. By the end of April most sites had seen the butterfly emerge and indeed by May 2 the Wheelers Bay area saw a peak count of 252, an all time record (A&EB). There were reports from Redcliff (DAB) and Bonchurch Landslip (DD) showing that these two vulnerable sites are still just viable as is the small colony at Whippingham Fields where JR saw one on 3 June. There was a record count at Castle Cove with, for example, 96 adults on 4 May (ASW) who also reported a singleton on St Martin`s Down.

Speckled Wood *Pararge aegeria*
After the first at Osborne on 6 March (DTB) the Speckled Wood went on to have an average year according to most recorders. At Woodhouse Copse the annual total was the second best ever at 358 (JR) as was also Whippingham Fields at 420 (JR) but Parkhurst was well below average. At Shalfleet VG reported an average year with a best day count of 8 on 30 July. On 29 September

there were 10 along the Newport to Cowes cycleway (SB). The last was at Gurnard on 6 November (DTB).

Wall Brown *Lasiommata megera*
In spite of the weather this year there were many sightings of this butterfly right across the Island. Given that it is declining nationally and that 2006 saw this trend mirrored in the Island, 2007 proved to be slightly more encouraging. DAB reported a good year at Brading with an increase in numbers over the previous year, the annual total for this transect being 52. At Whippingham however, JR had the worst ever year with a total of only 32. There were 3 at Pinkmead by the Medina on 19 April, which were the first of the year (SB) and single sightings from many locations both coastal and inland. The fine autumn produced a third generation with the last at Afton Down on 26 October (SK-J).

Marbled White *Melanargia galathea*
The first of the year were on 8 June at Brading (DAB) and Wheelers Bay (A&EB). This is still a common butterfly and although the summer weather was poor it was seen in good numbers at most sites. At Whippingham Fields the annual count was 1326 with a peak of 405 on 21 June (JR). At Shalfleet VG reported a peak of over 100 on 18 July. There were over 30 in a paddock by Vesta's jetty along the Medina on 17 June (SB) and over 50 on Ningwood Common on 23 June (BR) who also recorded 122 in Carisbrooke Castle Moat on 18 July. The last one to be seen was on the late date of 25 August at Wheelers Bay (A&EB).

Grayling *Hipparchia semele*
The only record received this year was 12 on Bleakdown on 7 August (DD).

Gatekeeper *Pyronia tithomus*
Although seen in the usual good numbers at most sites there was still an underlying trend of an adverse effect due to the inclement weather. At Whippingham Fields the annual count was 1939 which proved to be just average (JR) but Woodhouse Copse with only 135 was the worst ever (JR). The Coombe Bottom transect gave a total of only 55 and the Bonchurch Down transect only 30, both down on 2006 (NT). At Shalfleet VG recorded "100s" on 18 July and on the same date BR counted 84 in Carisbrooke Castle Moat. The last was at Whippingham on 2 October (JR).

Meadow Brown *Maniola jurtina*
This butterfly seemed to survive the poor summer weather quite well and gave average to above average results from most sites. At Shalfleet it is increasing its range and was seen in its hundreds (VG). At Whippingham Fields it emerged on the 22 May, the first in the Island, and gave an annual total of 11395, an impressive number. The last of a reasonable year was at the same site on 18 October (all JR).

Ringlet *Aphantopus hyperantus*
First seen on 19 June at Bouldnor (DTB) the butterfly then had an average year according to most observers. At Woohouse Copse the annual count was 30 which was the best recorded there (JR). The Coombe Bottom transect gave an annual count of 46 (NT) which is quite good but at Shalfleet VG had a nil return. Other reports were of small numbers from appropriate woodland sites, much as should be expected.

Small Heath *Coenonympha pamphilus*
It was not a particularly good year for the Small Heath and only low numbers were reported from most sites. The first was at Sandown on 19 April (DAB) and virtually all records from then on

were in single figures. The exception was at Whippingham Fields where JR logged an impressive total of 873, his second best result ever there. He comments that at this site the farmer had stopped using the fields for beef cattle about five years ago and has since only used them for hay. This year, due to the weather, they were cut late and the butterfly seems to have responded to this well with a considerable increase in numbers.

Scarce Immigrants

Monarch *Danaus plexippus*
One was seen by many observers in Ventnor Botanic Garden from 8 August for a number of days. It was almost certainly a release or escape.

Camberwell Beauty *Nymphalis antiopa*
One was present at Sandford near Godshill on 27 August (Zena Cowley).

European Swallowtail *Papilio machaon gorganus*
One on Culver Down on 1 September (E Lyons).

Discussion
The topic of the year for 2007 has to be the extraordinary early emergence of many butterfly species, not only in the Island but on the mainland as well. Unfortunately the unusual weather conditions that probably caused this event did not last and from mid May onwards to August the wet, windy and cooler weather proved detrimental to the butterflies emerging during this time. Already vulnerable species became even more depleted and some, such as the Duke of Burgundy, were not seen at all. The Pearl-bordered Fritillary were at their lowest number ever and look to be heading for extinction. Although 2007 was noted as a year that was very poor for immigrants, there was, however an influx of Large Tortoiseshell in June and it is highly possible that this insect will re-establish itself as a resident. Butterflies are renowned for their resilience and can recover from serious downturns quite quickly if conditions improve so although the year can be deemed generally poor for many species a reasonable 2008 may restore the balance.

Observers
BJ Angell (BA), S Blackwell (SB), D Britton (DAB), A&E Butler (A&EB), Dr DT Biggs (DTB), P Cambell (PC), JM Cheverton (JMC), D Dana (DD), C Dudley (CD), P Gaylor (PG), V Gwynn (VG), SA Knill-Jones (SK-J), K Marston (KM), National Trust (NT), B Ransom (BR), J Rowell (JR), L&S Street (L&SS), D Tucker (DT) and A Wright (ASW).

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FLOWERING PLANTS AND FERNS – 2007

Colin R. Pope

Once again, new and interesting records of Island plants have been made to add to our already well documented flora. Particularly noteworthy this year have been a number of new hybrid records, some of them either extremely rare or under recorded. We have to thank the astute and perceptive eye of Paul Stanley for bringing these to our attention.

There has also been a good batch of arable plant records particularly from new or recently unrecorded sites and Geoff Toone has been particularly vigilant in recording these. Relatively new crops have brought in a selection of otherwise rarely seen casuals. Two new crops have received particular botanical scrutiny. One of these, game cover crop, has been sown widely and comprises mixes of maize, sorghum and millet. A second crop is a wild bird seed mix for which there is an incentive for farmers to sow under the Entry Level Stewardship Scheme. It comprises mixes of corn, sunflower, millet, niger and quinoa and has particularly been taken up by farmers along the Military Road, to benefit farmland birds. Botanists are now starting to record these crop species and, as the seed has been imported, generally from Eastern Europe, there are good opportunities to discover interesting casual species amongst them.

Altogether 15 new taxa have been recorded this year. This does not include brambles (*Rubus* spp.), where David Allen has made some important discoveries, which will be reported in a forthcoming paper. Additional sites were discovered (or re-discovered) for a good number of scarce species.

Thanks are due to everyone who sent in records. All confirmed records are entered into an 'Aditsite' access Data Base, but not all of them find their way onto these pages.

The abbreviations used at the start of the accounts are:
N. Native; C. Casual Alien; E Established Alien.

Field Horsetail x Marsh Horsetail (*Equisetum* x *rothmaleri*)
N. A population found growing on the cliffs at Brambles Chine, Colwell 3388 PS. Pat Acock (referee) has examined herbarium material and writes, 'Either *Equisetum palustre* or, more probably *E.* x *rothmaleri.*' A first record for the Island of this rarely recorded hybrid horsetail with a very small scatter of well dispersed confirmed records from across the country.

Adder's-tongue (*Ophioglossum vulgatum*)
N. Recorded from two previously unrecorded sites this year namely the Riverside picnic site by the Medina just north of Newport 5090 SB; and from one of the lower fields at Locks farm, Newtown 4290 CP.

Lemon-scented Fern (*Oreopteris limbosperma*)
N. A welcome rediscovery in its only Island site, by the roadside near Bohemia Bog, Godshill 5183 RS, from where it had been thought to have been lost following several intensive searches in recent years. It remains vulnerable, because of the very small quantity of the plant here.

Narrow Buckler-fern (*Dryopteris carthusiana*)
N. A single plant found in a new and surprising locality, by the edge of Seaview Duver lagoons 6291 JN.

Stinking Hellebore (*Helleborus foetidus*)
C. One flowering clump in a hedgebank by Niton Radar Station, well away from any houses 4976 CP.

Rough Poppy (*Papaver hybridum*)
N. Recorded from an arable field on Cheverton Down, from where there are no modern records 4584 GT.

Prickly Poppy (*Papaver argemone*)
N. Four plants growing on imported soil in front of an industrial unit on the Medina Industrial Estate, Newport 4989 SB.

Dense-flowered Fumitory (*Fumaria densiflora*)
N. Further arable margin sites have been discovered for this rare fumitory by Geoff Toone. It was recorded from several fields on Fore Down and Cheverton Down, Shorwell 4483 and 4584 GT (conf. Rose Murphy).

Nettle-leaved Goosefoot (*Chenopodium murale*)
N? A few plants growing on deposited heaps of spent tomato compost on Fore Down 4483 PS *et al.*

Water Chickweed (*Myosoton aquaticum*)
N. Several plants were found growing in a damp, shady verge at the top of Howgate Road, Bembridge, well away from its known extant sites in the Eastern Yar and Medina valleys 6487 AC.

Rock Sea-spurrey (*Spergularia rupicola*)
N. Two plants recorded growing on the seawall at Puckpool, well outside of its known range 6192 PS.

Night-flowered Catchfly (*Silene noctiflora*)
N. This scarce and declining arable plant was found at two previously unrecorded sites this year. They were both fields sown with a game cover crop on Cheverton Down, Shorwell 4484 GT.

Pink-headed Knotweed (*Persicaria capitata*)
E. This is a popular small plant for bedding schemes and hanging baskets. It has become well-established as a pavement weed in Castle Road, Newport having originated from an earlier hanging basket 4988 SB.

Clustered Dock x Wood Dock (*Rumex* x *ruhmeri*)
N. Recorded from Niton; the second Island record of this hybrid 5075 PS.

Wild Pansy (*Viola tricolor* ssp. *tricolor)*
N. This scarce arable species was recorded from game cover crops on Fore Down, Shorwell 4384, 4484 GT; and from a field margin at Cridmore Farm 5080 GT.

Eared Willow x Grey Willow (*Salix* x *multinervis*)
N. A single bush growing on Bleak Down of this infrequent hybrid 5181 PS.

Pink Shepherd's-purse (*Capsella rubella*)
E. This alien species appears to have now become established on waste ground in Newport. It was recorded from several sites at Robin Hood Street on the Pan Estate 5088 SB.

Smith's Pepperwort (*Lepidium heterophyllum*)
E. This plant still persists around Embankment Road, Bembridge Harbour. A few plants were recorded by a footpath here 6388 GT.

Dewberry x Raspberry (*Rubus* x *pseudoidaeus*)
N/E? This vigorous hybrid was recorded growing on the disused railway track at Wroxall behind houses. It has not previously been recorded from the Island. 5580 PS *et al.*

Hautbois Strawberry (*Fragaria moschata*)
E. A few plants just outside of a garden in Nodgham Lane, Carisbrooke 4888 PS.

Sherard's Downy-rose (*Rosa sherardii*)
E. A bush in the grassland at Harcourt Sands, Puckpool 6192 PS.

Sweet-briar (*Rosa rubiginosa sens.str.*)
N. Remarkably frequent (about forty bushes) on one part of Mottistone Down 4184 PS.

Wild Plum x Blackthorn (*Prunus* x *fruticans*)
N. One bush of this hybrid seen alongside the Tennyson Trail on Bowcombe Down 4787 PS.

Slender Bird's-foot-trefoil (*Lotus angustissimus*)
N. This lost species was rediscovered in 2005 at Shorwell by Geoff Toone, in rough, dry grassland taken out of cultivation. This year he discovered the plant again at a different site, the crest of a ridge above set-aside land at Knighton, growing with Common Cudweed 5786 GT. This raises the possibility that it may be found elsewhere in the coming years. In 2007, *Lotus angustissimus* was found in two sites Sussex for the first time in over 70 years in rather similar circumstances. Again, the sites were margins of sandy fields, one of them well recorded and accompanied by a rich dry grassland flora including Common Cudweed.

Slender Tare (*Vicia parviflora*)
N. A nationally scarce species which was known from three extant sites. Consequently, the discovery of an additional site in 2007 was very welcome. It was recorded from an ex-arable field sown with a game cover crop on Mersley Down, and possibly introduced with the crop 5587 GT.

Clustered Clover (*Trifolium glomeratum*)
N. Recorded from Alum Bay putting green, a previously unrecorded site 3085 PS.

Water-purslane (*Lythrum portula*)
N. Recorded on Bleak Down in a damp hollow, following scrub clearance. It was last recorded from here in 1986 5181 mo.

Great Willowherb x Broad-leaved Willowherb (*Epilobium* x *erroneum*)
N. Recorded from disturbed ground in Brighstone Forest 4385 PS, MB. This is the first Island record for this hybrid.

Hoary Willowherb x Square-stalked Willowherb (*Epilobium* x *palatinum*)
N. Recorded from disturbed ground at Kingston 4881 PS, GT, EJC. This is the first Island record for this hybrid.

Water Primrose (*Ludwigia grandiflora*)
E. This is a very showy introduced aquatic species with large yellow flowers. Despite its attractive appearance, it is highly invasive. There have been very few records from this country to date. The first was made by Margaret Burnhill in a pond on a golf course in Hampshire. It was Margaret who has now recorded the first Island site, a small reservoir in a field at Chapel Furlong farm, Mottistone 3983 MB (conf. EJC). During the summer months, the plant spread right across the water. It is very likely that this showy thug will soon be recorded colonizing other water courses.

Sea Spurge (*Euphorbia paralias*)
N. This plant is now becoming established on a sand spit at Thorness Bay. Three or four clumps were recorded this year 4693 SR.

Cypress Spurge (*Euphorbia cyparissias*)
E. Recorded spreading on a roadside verge at Sandford, near Godshill 5381 GT.

Buckthorn (*Rhamnus cathartica*)
N. Two substantial old, gnarled bushes were recorded at Corfe Camp, Shalfleet, in light woodland fringing the estuary 4190 mo.

Indian Balsam (*Impatiens glandulifera*)
E. This alien plant continues to consolidate its hold on water courses and was recorded from several sites in the Medina catchment in 2007. A few plants on the south verge of the Folly Lane, Whippingham 5193 AM; and many at Sandy Lane and some by the Blackwater/Shide cycle path 5086 SB.

Giant Hogweed (*Heracleum mantegazzianum*)
E. One plant by Towngate pond in Newport 4989 SB.

Deadly Nightshade (*Atropa belladonna*)
N. Two new plants have appeared along a ride in plantation woodland on Westover Down; the previous plants were lost when brushwood was piled onto them 4185 HH.

Henbane (*Hyoscyamus niger*)
N. Recorded from a field by Grange Chine, a previously unrecorded site 4282 PS.

Buffalo-bur (*Solanum rostratum*)
C. A casual on ground disturbed through development by the side of the main road at Ningwood 3989 DB.

A Morning-glory (*Ipomoea indica*)
C. A casual on ground disturbed through development by the side of the main road at Ningwood 3989 MB.

Tuberous Comfrey (*Symphytum tuberosum*)
E. A clump recorded by the roadside at Calbourne Bottom 4184 PS.

Common Calamint (*Clinopodium ascendens*)
N. Recorded at intervals along the footpath from the Bowcombe Road northwest towards Bowcombe Down, a slight extension of its previously recorded range 4687 GT.

Large Thyme (*Thymus pulegioides*)
N. A single patch recorded from a trackside on Limerstone Down, the only known native extant site for this species 4383 PS (conf. EJC).

Sharp-toothed Mint (*Mentha* x *villosonervata*) (*M. longifolia* x *spicata*)
E. Established by a parking bay alongside the road onto Ventnor Downs. This is the first Island record of this hybrid 5678 GT.

Round-leaved Mint (*Mentha suaveolens*)
N. Frequent along the entrance to Knighton sandpit 5686 GT. There are many historic records from the Knighton area but this is the first since 1978.

Rosemary (*Rosmarinus officinalis*)
C. A single small plant growing in chalk grassland by the roadside close to the coastguard cottages, West High Down 3085 PS.

Mintweed (*Salvia reflexa*)
C. A few plants found growing in a game cover crop sown on Cheverton Down. The first Island record. 4484 GT.

Moth Mullein (*Verbascum blattaria*)
E. About twenty plants recorded growing in a small disused pit on Bowcombe Down 4687 GT.

Weasel's-snout (*Misopates orontium*)
N. Recorded growing on disturbed arable soil along a field margin at Princelett Shute, Apse Heath. There have been other records in this general area but not for over twenty years. 5583 GT.

Yarrow Broomrape (*Orobanche purpurea*)
N. It is a rare event to record this nationally scarce species from new sites but this year two such sites were discovered. Sixteen plants were recorded on a scruffy road verge at College Close Industrial Estate at Sandown 6085 GT; and 6 plants were found well scattered in old grassland in St Luke's Cemetery, Bembridge 6587 mo.

Oxtongue Broomrape (*Orobanche artemisiae-campestris*)
N. The population growing by the roadside on Afton Down has increased considerably and expanded its range. A maximum of over 200 flowering stems was recorded in 2007 3585, 3685 mo.

False Cleavers (*Galium spurium*)
C. This is an extremely rare arable species nationally. There are no historic records from the Island but it was found in several fields around Cheverton Down, Shorwell in 2007, all fields sown with a game cover crop. It is likely that they were introduced as a seed contaminant. Although superficially similar to Cleavers, once spotted (initially by Paul Stanley) the plants have a number of distinctive field characters in addition to the non-tuberculate hooks on the fruits (var. *vaillantii*) which are only visible under a lens. 4484, 4583, 4584 PS, EJC, JN, GT *et al.*

Greater Burdock (*Arctium lappa*)
N. One plant at the edge of field sown for game cover crop on Renham Down, Shorwell 4583 PS *et al.*

Cornflower (*Centaurea cyanus*)
N. A few plants growing in arable stubble on the west side of Merseley Farm Road 5586 GT.

Smooth Cat's-ear (*Hypochaeris glabra*)
N. This nationally scarce plant was recorded from two previously unrecorded sites this year. A large population (in excess of 200 plants) on arable land north of Gaggerhill Farm, Brighstone 4283 GT, PS, EJC; old gravel pits on Fore Down, Shorwell 4483 GT.

Great Lettuce (*Lactuca virosa*)
N. Several plants in a roadside verge by Froglands Farm, Carisbrooke 4887 SB; one plant near Lych Lane, Westover Plantation 4185 PS.

Rough Hawk's-beard (*Crepis biennis*)
N. Recorded from two previously unrecorded sites by Freshwater Marshes, south marsh 3485 and 3486 PS.

Common Cudweed (*Filago vulgaris*)
N. Geoff Toone has made a special effort to make detailed records of this plant from arable and ex-arable sites across the Island. As a result of this, he has found many well-scattered sites, some new and some historic and some holding substantial populations, on sandy soils south of the chalk. Arable fields taken out of cultivation in set-aside or for grant-aided tree planting schemes have been particularly productive indicating how resilient the seed bank is for this species which, a few years ago, was believed to be heading for local extinction. 3984, 4382, 4680, 4681, 4682, 4880, 4881, 5281, 5484, 5685, 5785 and 5786 GT.

Small Cudweed (*Filago minima*)
N. This is a rare and extremely local species of sandy soils with us, so it is most encouraging that an additional site was recorded in 2007. A few plants were present in an ex-arable field at Parsonage Farm, Newchurch, now planted with trees under a Forestry Commission grant 5685 GT.

Blue Fleabane (*Erigeron acer*)
N. A single plant of this increasingly scarce species was recorded from a grassy bank near Freshwater Bay 3486 PS.

Nodding Bur-marigold (*Bidens cernua*)
N. Lack of river management has resulted in a substantial decline of this and the next species but, where riverside mud becomes exposed in the River Yar, plants will often appear. Nine specimens found growing on a mud apron around the reconstructed bridge at Alverstone, where one of the arches has been re-opened to the river 5785 SR.

Trifid Bur-marigold (*Bidens tripartita*)
N. Similar comments apply as to Nodding Bur-marigold. One plant appeared at the same site as the above this year 5785 SR.

Marsh Arrowgrass (*Triglochin palustre*)
N. Recorded from the sheep grazed pasture at Plaish meadows, Bowcombe, 4887 ML. This is a well-know site but it could not be found in the previous two years despite intensive searching.

Italian Lords-and-Ladies (*Arum italicum* subsp.*italicum*)
E. This is the cultivated subspecies with cream-veined leaves. Recorded from Springvale, Seaview 5691 BK; a large patch by the roadside in Rowlands Lane, Havenstreet 5689 CP; and from a roadside verge at Rew Street, Gurnard 4692 DB. All these sites are some distance from gardens.

Floating Club-rush (*Eleogiton fluitans*)
N. Rediscovered in very small quantity following clearance of the pool towards the north end of Bleak Down during a Society general meeting 5181 PS & GT. It was last found here in 1994.

Grey Sedge x False Fox-sedge (*Carex divulsa* ssp. *divulsa* x *C. otrubae*)
N. This hybrid has the appearance of an extremely robust Grey Sedge. It was found growing on a roadside verge at Thorncross with both parents 4381 PS (conf. EJC). According to 'Sedges of the British Isles' (2007) by A.C.Jermy *et al* there have been many records for this hybrid in the British Isles of which most have been considered to be doubtful. This would appear to be the fifth British record.

Thin-spiked Wood-sedge (*Carex strigosa*)
N. This faithful old woodland indicator species was discovered in the north end of Withybed Copse at Wilmingham, a previously unrecorded part ancient wood 3688 CP.

Long-bracted Sedge (*Carex extensa*)
N. Found growing on Brading Marshes in marshy grassland around a pool behind Embankment Road, a previously unrecorded site 6388 GT.

Dwarf Sedge (*Carex humilis*)
N. This remarkable find by PS was reported in 2006. The find was made in the summer, and so in 2007 efforts were made to find the plant in flower. A search by the Botany Group on 18 March found little evidence on flowering but by 6 May, several of the clumps were showing their characteristic flowering spikes with ripe anthers.

Blue Fescue (*Festuca longifolia*)
N. A small number of plants found on an acid headland at Barnes Chine, east of Brighstone 4380 PS (conf. Arthur Copping). Although the national distribution of this species is unclear due to confusion with other glaucous fescues, it is considered to be a scarce species confined to coastal sites and inland dry, sandy areas. This is the first Island record

Hard Fescue (*Festuca brevipila*)
E. Found growing on the eastern verge of the Blackwater Road south of Newport 5087 PS. This is the first Island record of this species, which occurs as an escape from grass seed mixtures.

Borrer's Saltmarsh-grass (*Puccinellia fasciculata*)
N. A few plants growing on gravel at Brown's golf Course, Sandown 6084 GT.

Early Meadow-grass (*Poa infirma*)
N. This early flowering, diminutive grass has become well established in suitable niches around the Island. Nevertheless, it was a surprise to find a plant in flower at Dodnor on the causeway by the river on 27 August following prolonged wet weather SB 5091.

Hybrid meadow-grass (*Poa infirma* x *P. annua*)
N. A plant was found growing in a pavement crack at Brighstone library close to both parents on 7 March PS 4282 (conf. T.A.Cope). This was a remarkable find of a rarely recorded hybrid, and a new Island record. Thomas Cope says, ‘ *Thank you for your letter of 13th March. You are quite right about the anthers of your specimen. Although the plant looks acceptably like Poa infirma, the anthers are quite wrong. On close inspection it is also clear that these anthers are indehiscent and empty of pollen. Poa infirma, as you probably realise, is very close to P. annua and with the current spread of P. infirma in southern Britain hybridisation between the two is becoming more and more widely reported. I have no doubt that your plant is one of these hybrids.’*

Wood Meadow-grass (*Poa nemoralis*)
N. Found growing on a roadside bank along Upper Lane, Brighstone 4282 PS.

Bulbous Foxtail (*Alopecurus bulbosus*)
N. Refound in 2007 on the marsh behind Seaview Duver JN 6291.

Field Brome (*Bromus arvensis*)
C. About 50 plants were found growing in a grass ley field on Bowcombe Down 4687 PS (conf. EJC). This is the first Island record of the casual weed of arable and grass fields for almost a hundred years.

Tor-grass (*Brachypodium pinnatum*)
N. A single clump found growing close to Coastguard Cottages on West High Down 3085 PS. This highly invasive species of chalk grassland appears on the West Wight downs sporadically and is assiduously removed by the National Trust.

Pampas-grass (*Cortaderia selloana*)
E. This garden species is showing signs of becoming a thug on certain soils. At Seaview Duver, it is actively colonising waste land, having self seeded from a derelict garden 6291 SC.

Yellow Bristle-grass (*Setaria pumila*)
C. A casual in a game cover crop on Renham Down, Shorwell 4583 GT. Found growing along the cyclepath by the Medina at Dodnor 5291 SB.

Field Garlic (*Allium oleraceum*)
N. Found to be growing in an extensive area along the path at the top of the inner cliff, Steephill 5477 PS. It has been here a long time; there are old records from the site. However, it is frequently prevented from flowering by mowing and the extent of the population was recorded from the wintergreen leaves.

Spineless Butcher’s-broom (*Ruscus hypoglossum*)
E. A solitary long established plant in woodland at East Dene, Bonchurch within the vicinity of a derelict Victorian fernery 5778 CP.

Autumn Lady's-tresses (*Spiranthes spiralis*)
N. Found growing in two semi-improved coastal fields at Binnel Bay, St Lawrence 5275 SC; and at the top of the inner cliff at St Lawrence by St Rhadegund's Path 5275 PS. There are very few modern records from this part of the Island.

Recorders

AC	Anne Campbell	JN	John Norton
AM	Anne Marston	MB	Margaret Burnhill
BK	Bill Keatley	ML	Mark Lang
BS	Bill Shepard	mo	Botany Group of IWNHAS
CP	Colin Pope	PS	Paul Stanley
DB	David Biggs	RS	Ray Smith
DD	Dave Dana	SB	Sue Blackwell
EJC	Eric Clement	SC	Simon Colenutt
GT	Geoff Toone	SR	Sean Ridler
HH	Hilary Higgins		

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SURVEY FOR THE WOLF SPIDER *AULONIA ALBIMANA* (WALCKENAER) AT NEWTOWN RANGES, ISLE OF WIGHT 2007

Adam Wright

INTRODUCTION.

Although quite widely distributed in Europe, the nationally endangered spider *Aulonia albimana* has only been recorded from three sites in the U.K.(Bratton, 1991). Two of these sites were disused quarries, near Dunster, Somerset, where *A. albimana* was found amongst stones and running on the quarry floor. At one Somerset site the species was recorded in the 1930's, whilst at the other *A. albimana* was found in the 1960's and 1970's. It is believed to be lost from both these sites, and the latter site has been used as a landfill site.

The third U.K. site is at Newtown Ranges, Isle of Wight where *A. albimana* was recorded as juveniles in May and as adults in June 1985 .(Roberts & Roberts, 1985). All sightings were from a small area of sunny damp grassland which was sheltered from the wind by an embankment and scrub on the northern, western and eastern sides, but open to the sun from a southerly aspect. Adults were located in a small depression in the soil at the base of dense grass stems.

During 2007, the author was commissioned by the Newtown Ranges Conservation Group to undertake a survey of the known last location of *Aulonia albimana* at Newtown, and to investigate other areas of Newtown Ranges for the presence of this spider. Funding was generously made available through a grant under the Frazer bequest from the Isle of Wight Natural History and Archaeological Society.

METHODS.

The following survey techniques were employed during the course of the search for *A. albimana:*

1). General visual searching and grubbing amongst vegetation at the base of plants and amongst gravel in certain areas. This occupied the bulk of the survey, and particular attention was paid to small sheltered hollows or depressions within the grass, particularly around the area where the species was last recorded. This method was also employed on the grassy slopes formed by the installation of raised areas from which firing onto the target area is undertaken. The gravel within these areas was also searched for *A. albimana.* The areas surrounding the target area were also searched, since these formed a South facing slope with a number of sheltered areas around its perimeter. There were also some areas to the North - west of the target area where gravel had been laid, which were searched, as was a sheltered dry ditch to the North of the target area..

2). The laying of roofing felt refugia in suitable areas. These absorb heat and are favoured as sheltering areas for many invertebrate species. A total of four refugia were laid; two of these were adjacent to the last known site at SZ 44058 91071 and SZ 44054 91067. Both of these were laid on short grassy areas. A further felt was sited on an area of very short vegetation and bare gravelly ground at SZ 44022 91069 and the final refugium was laid on short grassland and gravel edge by a firing bank at SZ 43963 91075.

3). Sweep - netting through grasses, both in rank and short sward vegetation.

Pitfall trapping was not undertaken since this method can kill a large number of specimens, and since the population of *A. albimana* (if present) is likely to be small and highly localised it was felt that this could result in a deleterious effect on any extant population.

The site was visited on 17th and 26th June and 13th July 2007, when *A. albimana* should be in its adult stage. All visits were made during suitable weather conditions.

RESULTS.

No specimens of the spider *Aulonia albimana* were recorded during the survey.

DISCUSSION.

The original location of the spider was deemed no longer suitable, having suffered from considerable scrubbing over, particularly by Blackthorn *Prunus spinosa* and Bramble *Rubus fruticosus* agg., resulting in the area being in almost continuous shade. Survey was therefore concentrated on the nearest available area of grassland to the South of the scrub. Although this area was only a few metres from the last known site, it is likely that it was not as sheltered as the original site. Given that *A. albimana* is a thermophilic species in England this may have been deleterious to its survival. None of the other areas on Newtown Ranges which were surveyed as being likely to provide a suitable microhabitat for *A. albimana* yielded the spider.

Although this survey failed to find *A. albimana* this does not prove that the species is no longer present elsewhere on site. Much of the site has remained relatively unchanged over the last few decades, and given the large area of the site it is feasible that the species continues to exist in localised areas elsewhere within the Ranges.

CONCLUSIONS.

It is deemed highly unlikely that *Aulonia albimana* exists in the immediate area in which it was previously recorded, due to habitat and subsequent microhabitat changes over the last 22 years. However, its continued existence elsewhere on Newtown Ranges cannot be wholly discounted.

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AN ACCOUNT OF SOME NEW ISLAND SPECIES OF HETEROPTERAN BUG FOUND IN WILSON FRAZER'S COLLECTION

Dr D.T. Biggs

E.A. Butler published an account of the Heteroptera of the Island in Morey's Guide to the Natural History of the Isle of Wight (1909). Additions to the Heteropteran fauna were published in the Proceedings in 1997, 1998 and 2001 (Biggs, D.T.)

In 2004 the author was able to examine a collection of 477 Island Heteroptera made by Wilson Frazer as well as to read his field notebooks. The result has been that twelve new species of Heteropteran bug have been added to the Island list.

Wilson Ray Frazer, OBE was an expert amateur entomologist and one of the country's leading authorities on crickets and grasshoppers (Pope, 2005). He retired to the Island in 1939 to be near two of his sons, one of whom Oliver was and still is renowned as having been probably the greatest teacher and enthusiast for natural history the Island has had since the time of Morey himself. Wilson Frazer spent holidays on the Island from 1934 and collected specimens of Heteroptera from 1934 to 1956. He died on 3rd October 1963, aged 90 years.

The account which follows is of the twelve species of Heteropteran bug found on the Isle of Wight, not described by Morey nor in the three papers by Biggs. Wilson Frazer's collection is now held in the Society's headquarters at Salisbury Gardens, Ventnor.

A table of Heteropteran bugs for all English counties was published by A.M. Massee in 1955. In this table Hampshire and the Isle of Wight were considered as one county. Each of the following species was included in Massee's list for "Hants & I.W." But no record has been published of them previously for the vice-county of the Isle of Wight.

PENTATOMIDAE

Picromerus bidens (Linnaeus, 1758)

Freshwater	one specimen	9.10.1944

This is a predatory shield-bug, widely distributed throughout Britain though local in distribution, apparently preferring three distinct habitats, heathland, chalk downland and marshy areas. It is a typical shield bug in shape but with two long spines extending on either side from the thorax. It is bronze-green in colour with red legs and antennae, and 10-12mm in length.

LYGAEIDAE

Gastrodes grossipes (Degeer, 1773) (= *Gastrodes ferrugineus* in WRF)

Freshwater	two specimens	8.1933 and 8.1934
Bouldnor	one	23.8.1937
Freshwater, Tennyson Lane	three	12.8.1941
Freshwater	one	27.4.1956

This is called the Pine-Cone Bug as Scots Pine, *Pinus sylvestris* is its main host plant although it can also be found on Norway Spruce and other species of pine. It is found throughout Britain. Between 5.9mm. and 6.8mm. in length this is a very wide and flat chestnut-red bug with a black head and antennae, and chestnut legs.

Rhyparochromus pini (Linnaeus, 1758) (= *Aphanus pini* in WRF)

Parkhurst forest	one specimen	26.8.1935

Found in the midlands, southern England and south Wales in sandy heathy places. This is a grey and black bug 7.0 – 7.7. mm. in length and it is a seed-feeder. Its status is defined as Nationally Scarce or Notable. It is usually encountered on pine litter in summer or under bark in winter.

TINGIDAE

Dictyla convergens (Herrich-Schäffer, 1835) (= *Monanthia humuli* in WRF)

Freshwater marsh	two specimens	3.8.1937

This lace-bug is recorded from much of Britain but is local and is confined to damp and swampy localities and margins of ponds, its host-plant being Water Forget-me-not , *Myosotis scorpioides.* It is a small bug 3.4 – 4.0 mm. long, pale yellowish-brown with darker brown and black markings.

Physatocheila costata (Fabricius, 1794) (= Monanthia quadrimaculata in WRF)

Freshwater	one specimen	24.8.1940
Freshwater,	one specimen, from Hawthorn	3.9.1940

Another lace-bug of the same size as the previous species, the usual habitat of this one is lichen-covered Apple Trees. It is defined as Notable or Nationally Scarce. Very local and possibly declining. As are most lace-bugs it is of various shades of brown, with the tips of the antennae and the tarsi black.

NABIDAE

Nabis ferus (Linnaeus, 1758).

Newtown	one specimen	12.8.1934
Tennyson Down	one	8.8.1935
Bouldnor	one	25.8.1937

The Field Damsel Bug. Pale greyish-brown with a black and yellow scutellum, a black longitudinal stripe on the head and thorax, densely pubescent with silvery hairs and with legs with brown spots, this predatory bug is elongate and 8.0-8.5mm in length. It is found throughout the British Isles amongst grass in fairly dry conditions.

MIRIDAE

Capsodes gothicus (Linnaeus, 1758) (=*Lopus gothicus* in WRF)

Alverstone	two specimens	9.6.1938

This bug is generally found by searching at the roots of coarse vegetation growing in marshy situations, especially amongst Greater Bird's-foot-trefoil, *Lotus corniculatus.* It is black, 5.8 – 7.00 mm in length, with long black erect hairs and with an orange scutellum and cuneus. It is found throughout England.

Heterocordylus tibialis (Hahn, 1833)

Alverstone	two specimens	5.6.1938

Found throughout the British Isles and common on Broom, *Cytisus scoparius* and when present is usually found in considerable numbers. It is a dull black bug, 5mm in length, clothed in a pubescence of both simple black hairs and yellowish flattened scale-like hairs. The tibiae are a light reddish-brown.

Megaloceraea recticornis (Geoffroy in Fourcroy, 1785) (= *Megaloceraea linearis* In WRF)

Newtown	one specimen	4.8.1935
Arreton Down	one	5.8.1935
Newtown	one	24.8.1936

This grassbug is an elongated and elegant species, 8.0 – 10.00 mm. long, bright green with yellow antennae. It is reported to be local but abundant where it occurs. It is found at the margins of woods where the grass is long and uncut, favouring False Brome, *Brachypodium sylvaticum.*

Phytocoris dimidiatus Kirschbaum, 1856 (= Miridius dimidiatus in WRF)

Arreton Down	two specimens	5.8.1935
Freshwater	one	6.9.1936
Freshwater marsh	two	24.8.1937
Tennyson Down	one	11.7.1941

6-7 mm. in length and elegantly shaped, pale brown with darker brown mottling with very long antennae and banded legs, this insect is widely distributed in the British Isles on deciduous trees, especially oak, apple and plum.

Pilophorus perplexus (Douglas & Scott, 1875) (= *Pilophorus cinnamopterus* in WRF)

Freshwater	one specimen	9.8.1936

With a black head and thorax, a chestnut-brown body with a very distinctive transverse band of silvery hairs and chocolate-brown wings this bug is an ant mimic and it preys on the aphids which the ants attend. It is small, at 4.5.mm and only known from the south of England.

Polymerus palustris (Reuter, 1905) (= *Poeciloscytus vulneratus* in WRF)

Alverstone	one specimen	9.8.1938

Found throughout southern England, this insect feeds on Common Marsh-bedstraw,*Galium palustre.* Mainly black with the apex of the scutellum and the cuneus yellow, this bug is 4.5 – 5.0 mm. in length. Whilst preparing this account I came across an earlier record of this insect on the Island. E.A. Butler in his Biology of the British Hemiptera-Heteroptera (1923) has the following: "I found one male and one female amongst rushes in a wet field just outside the town of Carmarthen, and one female at roots of rushes at Rookley Wilderness (Isle of Wight)". [No date given.]

Pseudoloxops coccineus (Meyer-Dűr, 1843) (= *Loxops coccinea* in WRF)

Freshwater	one specimen	20.8.1934

This is a flat, oval bug 4.2 – 4.5 mm in length, pink with red antennae, and found on Ash, *Fraxinus excelsior* where it is thought to feed on the seeds. It is found throughout England.

Teratocoris antennatus (Boheman, 1852) (= *Megaloceraea antennatus* in WRF)

Freshwater Marsh	one specimen	3.8.1937

With Sea Club-rush, *Bolboschoenus maritimus* as its main food-plant this bug occurs throughout England and Scotland in marshes and swamps, especially near the coast. The specimen referred to and labelled as this species had disintegrated and I was unable to confirm its identity.

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A 12th- CENTURY CORBEL AT GATCOMBE CHURCH

Dr Isobel Thompson

Summary

Examination of original sources and the structure of the church itself has led to revision of its received history, some conclusions from which are presented here. Various elements, notably the carved head over the porch entrance, imply a 12th century date for the construction of the church in masonry.

Introduction

It can be taken as a general rule that any ancient church has a much more complex structural history than is usually appreciated, or represented in the written sources, and that clues to this history may be found in the building itself. I am a professional archaeologist, although with no great experience of church archaeology. However, I do have plenty of experience of how vital it is to search original sources, and some knowledge of how an archaeological approach can illuminate the study of a church. I came to examine Gatcombe Church because it needed a new guidebook. It was soon apparent that even the easily accessible printed sources had not been used for a hundred years, and in the meantime a sort of Chinese Whispers effect had taken over. Each new description was derived, with subtle changes of wording, from a previous one, and the result has become increasingly misleading. The new edition of Pevsner (Lloyd & Pevsner 2006), for instance, says that the carved head over the porch entrance dates to 1910, an unlikely statement immediately disproved by the primary printed work.

St Olave's, Gatcombe, 'Dedicated in 1292'

It must be said straight away that no historical documentation has been found for this statement, which is painted on the board at the churchyard gate (worse, this has sometimes been taken as the date of construction, although dedication does not necessarily date a building). It is likely that the date is a consequence of research carried out for the board listing 'Rectors of Gatcombe since 1294', which hangs in the north-west corner of the nave and was dedicated in 1966. As the CRO has a reference to a Robert, parson of Gatcombe, in a document of about 1280, and the Pontissara Register (Deedes 1924, 597, 600) refers to *ecclesia* [church] *de Gatecumbe* in a document listing churches in the diocese c1286 (but which is thought to be a copy of another document of c1270) the year 1292 is best forgotten.

It has been generally agreed that the standing building is 13th century in origin. This is based on Percy Stone's meticulous scale drawings and description published in 1891. 'The church, built in the 13th century by one of the Esturs, for the use of the Gatcombe tenants, belongs to the category of private or manorial chapels' (Stone 1891, 35). This statement has been quoted many times, but it needs clarification. What he is actually saying is that the earliest datable feature he could discern in the standing building, the lancet window in the south wall of the nave, is 13th century. The font is also partly 13th century. The Esturs (descendants of William fitzStur, who held Gatcombe in 1086) were then still lords of the manor, and must have been responsible for this work; and when Stone wrote it was still commonly said that churches like Gatcombe, standing next to the manor house, were 'private chapels'. This has led to later misunderstanding, that somehow this was not a parish church. But Gatcombe is plainly a manorial church, built by the lord for his estate and tenants. So in origin are the majority of parish churches, and like so many of them, this one was built next to his house for his own convenience.

There are two lines of argument to consider here. One is the dating of the standing building, which will be looked at in a moment. The other is that the earliest discernible element cannot be taken as the date of the original foundation of the church. In other words, is it likely that Gatcombe had no church until the 13th century?

The manor and parish of Gatcombe

Domesday Book tells us that before 1066 Gatcombe was an estate shared by three brothers; in 1086 it was held by William fitzStur. He owned other manors on the Island, but Gatcombe was worth considerably more than many of them. No priest or church is recorded in the list of its assets, but this tells us nothing. It does not mean that there was no church. The high population recorded in 1086 appears to be due to the fact that the estate included Chillerton (Sewell 2000, 41; Margham 2000, 122, fig 4), and Whitwell (Stone 1912, 202-4). More informative is the shape of the medieval parish, which appears to have been split off from that of Carisbrooke (Hockey 1982). The pattern of the medieval open fields in the two parishes supports this (pers comm Vicky Basford). Although 'there is no historical document stating an *ecclesiastical* link between Carisbrooke and Gatcombe' (Sewell 2000, 41) the emergence of Gatcombe appears to be part of the breaking up of the large later Saxon minster estates into smaller land holdings, whose lords built their own churches. By the late 11th century the minsters, such as Carisbrooke, were losing their authority (Blair 2005, 426, 449). The local churches, daughters of the primary minsters, were largely in place by the time the parochial system emerged during the 12th century (Margham 1997, 92, 98), and Gatcombe was one of these. There may have been first a timber church, about which we know nothing.

A 12th century church?

There are two other factors which make it likely that there was a church at Gatcombe in the 12th century. One is the patron saint, St Olave. This is an English spelling of Olaf, king of Norway from 1016 to 1029, 'whose forceful attempts to convert his subjects to Christianity drove them to revolt and murder him' (Anderson 1971, 55). In Norway he is now venerated as the bringer of Christianity to the country, and 'his cult spread quickly after his death in 1030' (Margham 1997, 96). 'The swiftness with which interest in Olave's cult developed is indicated by his appearance as a dedicatee in Exeter and York before 1066' (Morris 1989, 176). But these and almost all the churches dedicated to him are urban foundations. There is another St Olave's on the mainland in the Chichester area (Morris 1989, 53, fig 14), and this is by far the closest; there are no others nearer than London itself. There was a settlement of Scandinavian merchants in Chichester in the 11th century (VCH Sussex vol.3 (1935), 164), as there was in London, and these may account for the urban dedications. Why the church at Gatcombe, remote from any urban settlement, should have this dedication is unknown.

But there was a strong cultural affinity between England and Scandinavia in the earlier 11th century, a time when England was part of Cnut's empire, many churches were being built, and Englishmen were organizing Christianity in Scandinavia. This is a factor not always appreciated; but 'the many eastern English dedications to St Clement and St Olaf can be located in the early to mid eleventh-century Anglo-Scandinavian context' (Blair 2005, 425). The church at Gatcombe may also have its origin in this context. Alternatively, and perhaps more likely, its foundation belongs to the late 11th-early 12th century, as set out above, The dedication is likely to have been specified by the founding lord himself, and there is no sign that the original dedication has ever changed.

The other, more circumstantial point to consider is the building of St Radegund's chapel at Whitwell. This was *Cantaria manerii de Gatcombe*, the chantry of the manor of Gatcombe (Warner 1795, 122; Stone 1912, 202-4), and the Gatcombe lords were responsible for it. The oldest surviving elements of St Radegund's date to the later 12th century, and it is not likely that the lords of Gatcombe would have built a chapel for their Whitwell tenants before they had built their church next to their house.

Gatcombe's south porch, and a 12th century survival

Most parish churches have their main door on the south side of the nave, and Gatcombe is no exception. While Norman churches did not shelter the door with a porch, from the late 12th century onwards they gradually became a standard feature (Friar 2003, 355-6), although 'it was not until around 1300 they began to increase in popularity' (Brown 1998, 112). The south porch then became a place of great functional importance as well as a shelter. Before the Reformation the first parts of baptism and funeral ceremonies took place in the porch, as did marriage contracts and business transactions and later, display of public notices (Brown 1998, 112-13; Anderson 1971, 71, 77-8).

It is as well to remember this, as recent descriptions of the church have engendered some confusion. In 1891 Stone published a drawing of the porch in his impression of the church in 1860 (his Pl. LXXXIV; Fig. 1). It looks remarkably similar to the porch today. In 1910 the porch was apparently 'rebuilt' by Robert Urry of Hill Farm, to mark his 45 years as churchwarden. There is supposed to have been a small plaque to this effect on the porch north wall, although this is not now visible (and if it existed, was certainly inaccurate, as the church rate book records that Robert Urry resigned in 1899 after only 36 years). Lloyd & Pevsner (2006, 148) baldly state that the porch dates from 1910; and Lane (2001, 18) goes so far as to write that 'the porch was not built until 1910'. These are both derivative statements, gleaned from earlier guides (Green 1969, 98; Winter & Winter 1987, 81), which themselves derive from Evans (1965, 11). James Evans was rector of Gatcombe in the years 1965-73, and he is the first to state that 'the porch was erected in 1910' by Robert Urry.

How much work was actually carried out in 1910? The Listed Building description regards Gatcombe's porch as 13th century (although see below), only the roof being thought a 1910 replacement. From the appearance of the stonework, and comparison with Stone's 1891 drawings, the lower portion of the stone walls and arched entrance are original medieval work. The upper half of the stonework is a different build, although evidently reusing the original stones (the doorway dressings are medieval work; the gable copings 'are perhaps not medieval but are several centuries old'; Warwick Rodwell pers comm). The roof is of sandstone tiles upon a timber substructure. Presumably these stone roof slabs were also the old ones, reinstated. Such stone slabs occur elsewhere in Island churches. They are 'formidably heavy…; unfortunately the life of these roofs is also dependent on the supporting timber framework, which in time is likely to give way under the weight' (Clifton-Taylor 1974, 75). It is this roof which is (supposedly) Robert Urry's memorial, using timbers said to have come from HMS Thunderer, which had fought at the Battle of Trafalgar in 1805.

HMS *Thunderer*

In 1910 this was a famous warship, carrying a name with a long pedigree (Nichol nd). A huge new Thunderer, the last warship to be built on the Thames, was launched in 1911 and served through the First World War. But was the ship from which the south porch timbers were said to have come the Thunderer which fought at Trafalgar? It was this ship which signalled to the Victory that the French fleet had been sighted. Launched at Rotherhithe in 1783, she was a 74-gun two-decker which served right through the French wars until 1814. She was broken up in the same year, and it is unlikely that her timbers were available for reuse in 1910.

But there were other Thunderers (ibid). A new one was built in 1831, an 84-gun Second Rate battleship. She was still a wooden ship, but with certain innovations which made her revolutionary. Her design, by Sir William Symonds, meant that her hull was much longer and stronger, enough to take steam machinery during the 1840s. This Thunderer fought at the battle of Sidon in

1840, which marked the change from wooden sailing ships to steam fighting vessels. In 1863 she was fitted with iron plating for trials of new armour-piercing guns. In 1872 another innovatory Thunderer was built, an iron battleship. The old one was too useful to scrap. She was renamed *Nettle* and was not decommissioned until 1901, by which time she was 70 years old. If the south porch timbers indeed came from 'HMS Thunderer', they are likely to have been from this ship. This conclusion finds support in the fact that timber from the Nettle was certainly used in Island churches: examples are the seating in the chapel of St Nicholas in Castro at Carisbrooke Castle, rebuilt by Percy Stone in 1905-6 (Stone 1904-6, 253; Young 2003, 12-13), and the reredos in Shalfleet church, constructed to Percy Stone's design in 1908 (Mead 2002, 7).

The lych gate of Christ Church, Totland (a Victorian church built in 1875 and extended by Percy Stone in 1905-10) was built from, according to a plaque, '*the timbers of HMS Thunderer 74 guns which fought on the lee line at Trafalgar'*. The designer of this lych gate was, again, Percy Stone (Lloyd & Pevsner 2006, 145). Dedicated in March 1906, 'the superstructure is the work of an Island craftsman, J H King, of Blackwater' (Wheeler 1976; it is interesting to note in the same source that 'current opinion… supports the view that the timbers came from a later ship of the same name'). James H King of Blackwater was a carpenter who also made the timber ceiling of the chapel in Carisbrooke Castle during its refitting under Stone's direction as the Island War Memorial in the 1920s (*County Press*, 20 March 1920; 24 April 1920). According to the church rate book, King certainly did repairs at Gatcombe and made the porch noticeboards, so he may also have been responsible for the porch ceiling. We might suspect that Percy Stone himself had an active role in the use of the Nettle's timber around the Island.

The monster

The last, and most important, element in the south porch to be considered is the stone 'monster head' surmounted by a cross at the apex of the gable over the porch opening. Stone's perspective impression of the church in 1860 (1891, pl. LXXXIV) shows a cross, but not the monster, and it is presumably for this reason that Lloyd (Lloyd & Pevsner 2006, 148) states outright that the monster dates to 1910. But stylistically it looks primitive, individual, and quite unlike either 1910 work or a consciously medievalising piece. In fact Stone himself shows that the head was not a 1910 addition, as it is plainly present on his south elevation drawing and is used in the text as a decorative initial motif (1891, 35, & pl.LXXXV; Fig. 2).

In stylistic terms the Gatcombe monster is a 12th century piece (confirmed by Dr Ron Baxter, Corpus of Romanesque Sculpture in Britain & Ireland, Cortauld Institute). It is carved on one end of a rectangular sided block, and was clearly originally a corbel, a projection from a wall supporting a weight, and often decoratively carved. Grotesques are common enough in corbel tables, and string courses (as on Gatcombe's late 15th century tower), but heads in this position over a porch entrance or on Norman doorways are not. The surmounting cross is not original to it (inf R Marshall).

Description and parallels (Fig. 3)

The corbel is of weathered greenstone. The face is just over 30cm from top to teeth, and 27cm across at the base. It is a representation of a grotesque head, with lenticular-shaped and drilled eyes deeply set beneath bushy incised eyebrows and furrowed forehead. In the centre of the forehead the furrowing is a nested group of Vs. The rounded cheeks bulge somewhat in the manner of a monkey, on either side of a worn nose, and their outlines run down to a ringed slightly open mouth which contains a row of teeth. The head fills the end face of the block and only the narrow oval mouth projects downwards, onto the block's under side. The block has been tipped slightly backwards in its reset position. This was possibly deliberate, to produce the best angle for seeing the image from the doorway.

Corbels 'came to England from the Continent and soon became one of the foremost features of English Romanesque architecture' (Zarnecki 1951, no.33). A search of the many examples on the website of the *Corpus of Romanesque Sculpture in Britain & Ireland* came up with others using similar iconography, grotesque heads with teeth, but nothing closely comparable in style. This is not surprising. The survey has not yet fully covered those counties (such as Hampshire) which might have the closest examples, and these heads are nothing if not individual. It will take much research to explore fully the stylistic parallels for this head, and even then it is unlikely that a more precise date can be given to it than '12th century'. However, some conclusions can be drawn. Gatcombe's head is not typical of those which are part of a corbel table, on the outside of a building. These are usually rounded or in deep relief and each projects from its block, in order to be seen from some distance below, and for the same reason they are often comparatively simple in form. Nor does it have the degree of wear which external corbels have usually suffered. It may have been an internal piece, although there is a more elaborate set of corbel heads with some similarities to Gatcombe's (notably their square aspect and furrowed brows) on the outside of the Norman Tower at Bury St Edmunds, built 1120-48 (Whittingham 1971, 7, 24). A bearded head at St Michael's, Cumnor (Berks), one of a set with some similarities to Gatcombe, has the square aspect and V-shaped furrows on the forehead, but is more primitive in execution. Others at Castle Acre Priory (Norfolk) also have lenticular eyes, square shape and open mouths.

Implications

Stone's drawing of the church as it looked in 1860 shows no head over the porch doorway. This was intended as a view of the church before the rebuilding of the chancel in 1864, and was based on information from the architect. In the 19th century church rate book is an entry listing expenditure on 'Gatcombe Church Restorations' over the period 1867-69 (when the nave roof was replaced), which includes smaller sums spent on the tower and the porch. Mr King was paid £4 1s 6d, and Mr Williams, a stonemason, £3 10s, for work on the porch. The resetting of the corbel is likely to have been part of this major overhaul, as there does not seem to be another opportunity before Stone recorded the church in the 1880s; but where did it come from? There are two possible original positions: in the chancel, or the nave.

The first possibility is that the medieval chancel incorporated a 12th century corbel which was removed in 1864 when the chancel was demolished and replaced. There is no direct documentation, but we do know that the 17th century communion rails and perhaps also the surviving fragments of late medieval glass were resited elsewhere in the church, so other elements considered to have no place in the smart new chancel may also have been kept. It would follow that the demolished chancel was itself 12th century. This would either be the first church on the site, or a rebuilding in masonry of an earlier timber church. One would expect the chancel to be rebuilt first, and then the nave, as resources allowed. Gatcombe's nave, in this case, could indeed be 13th century, with the lancet windows of which one survives. Alternatively, the corbel was removed from the nave when its roof was replaced in 1867-9. This would give a 12th century date to the existing nave walls.

There may have been other corbels at Gatcombe which did not survive the work. As it is, the re-use of this corbel as a saddlestone surmounted by the porch cross is plainly a deliberate image of the triumph of the cross over evil. In the 1860s this may have been seen less as a marker of the threshold between the evils of the outside world and the safety of the holy place within, as it would have appeared to the medieval mind (Bildhauer & Mills 2003), so much as an oblique reference to St Olave, who fought to impose Christianity on his pagan subjects.

When was the porch built?

Although the south porch is undoubtedly medieval, without the saddlestone it is absolutely plain, and similar in form to many others on the Island and elsewhere. The simple arched opening cannot be earlier than the 13th century. Brown (1998, 114) notes that 'porches from the Early English period are rare… [But] by the 14th century a porch began to be regarded as a necessity, even for the village church'. So the porch at Gatcombe may not have been built until the 14th century (Clifton-Taylor 1974, 121, confirms that 'hardly any parish churches had [porches] before the 14th century). Brown also makes the interesting point that steps from the porch into the nave imply that 'the porch was not the original entrance' (op cit, 112-13). What this means is that when a porch was added to an older church, the inevitable rise in ground level in the churchyard since the nave's construction (and the greatest rise would be on the south side of the church, preferred for burial) would mean that the new doorway would have to be higher up, with steps down to the nave floor. At Gatcombe there are three steps down into the church. The nave is, therefore, considerably older than the porch.

When was the nave built?

As explained above, the nave walls may be 12th century, or 13th; they are at least as old as the lancet, and older than the porch. Any earlier windows could have completely disappeared, as newer, larger ones were inserted. Pevsner (1967, 745) drew attention to the north door, describing it as 'plain Late Norman'. This is because the doorway is round-headed. It could be 12th century, but its original appearance is obscured. Detailed examination of the stonework might provide the answer, but this would only be possible if the plaster were removed. For the present, the date of the nave remains uncertain, but full of possibility.

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Figures

1. 'Gatcombe Church from the SE in 1860': Percy Stone's impression of the church as it looked before the alterations (Stone 1891, pl. LXXXIV)
2. Percy Stone's scale elevation of the south side of the nave: detail showing the south porch (Stone 1891, pl. LXXXV). This drawing must have been done at some time in the later 1880s.
3. The corbel, close-up view.

A 12th- CENTURY CORBEL AT GATCOMBE CHURCH

FIG. 1

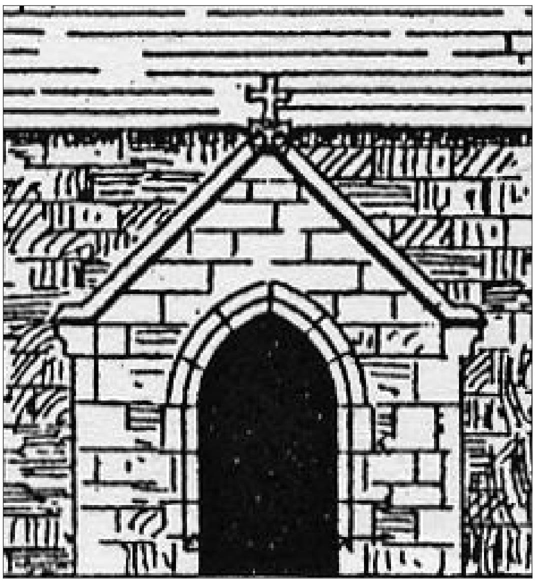

FIG. 2

FIG. 3

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NOTABLE MOTHS RECORDED ON THE ISLE OF WIGHT DURING 2007

Sam Knill-Jones

With one new macro-moth and two micro-moths new to the Isle of Wight, it was an average year for rarities on the Islands. This compared to a disappointing year for most collectors on the mainland.

Nationally, the Summer of 2007 was one of the wettest since records began, with July being the wettest for two hundred years. The year started promisingly enough with March being the sunniest on record and April the warmest, sunniest and driest on record, with 2.4mm rainfall at Freshwater.

This was followed by one of the wettest May, June & July on record with each of these months recording over 100mm rainfall. This was followed by a warm & sunny August and a mild and fairly dry Autumn. February and November had over 100mm rainfall and the above average total for the year was 847.7mm. The wettest month of the year was May with 121.2mm rainfall.

There was one macro-moth new to the Isle of Wight and this was the Alder Kitten *Furcula bicuspis* (Borkh.)), (**Photo**), which was recorded at a meeting of the Alverstone Village Natural History Club at Alverstone Mead Local Nature Reserve on 1st August. There is but one confirmed Hampshire record, from New Milton, S. Hants, in 1945. This record has caused much excitement and the possibility of a breeding colony at Alverstone may be proved in the next few years.

The two micro-moths new to the Island are given below:-

Ectoedemia heringella (Mariani). Dr. David Biggs discovered mines of the larva of this species on Holm Oak, *Quercus ilex* at Osborne House on 3rd February. Every leaf contained mines of this moth and its identity was confirmed by Dr. John Langmaid. The first record of this species was taken at South Kensington in 1996, but was not positively identified until 2001.

Caloptilia azaleella (Brants.). I recorded this species, which is new to the Island, at Totland on 11th October and it was identified by Brian Elliott. This is an introduced species which occurs in the wild amongst Azalea spp. in several of the southern counties, and more widely in greenhouses.

There were a large number of home-bred migrants present due to the previous mild Winter and a good number of rarer primary migrants. The highlight of the year was the capture of the Blair's Wainscot, *Sedina buettneri* (Her.) at Totland on 12th October, which is the first record for fifty-six years since it occurred at Freshwater Marsh. This was most likely a primary migrant, as two others were recorded on the South coast at the same time.

Other rare migrants recorded are given below :-

Striped Hawk-Moth , *Hyles livornica* (Esper.). One at Totland on 18th June.
Orache, *Trachea atriplicis* (Linn.), (**Photo**), One at Cranmore on 24th July.
Hoary Footman , *Eilema caniola* (Hb.), One at Bonchurch on 26th August.
Asian Moon Moth , *Actias semele*, (**Photo**) an escape, at light at Totland on 10th August.
Clifden Nonpareil, *Catocala fraxini* (Linn.). One at Bonchurch on 25th September and one at Totland on 6th October. Both of these were females from which ova were obtained.
Porter's Rustic, *Athetis hospes* (Freyer). One at Bonchurch on 13th August and another on 3rd October. These were probably home bred examples.
Scarce Bordered Straw, *Helicoverpa armigera* (Hb.). Bonchurch 11th & 13th October.
Golden Twin-spot, *Chrysodeixis chalcites* (Esp.). A female from which ova were obtained at Bonchurch on 29th October. It was successfully bred with imagines emerging at the end of December.

Flame Brocade, *Trigonophora flammea* (Esp.). One at Totland on 3rd November and one at Bonchurch on 27 November.
Four-spotted Footman, *Lithosia quadra* (Linn.). Bonchurch on 24th & 25th July and on a house wall at Ventnor on 1st November.
There were sixteen records of the Blair's Mocha, *Cyclophora puppillaria* (Hb.), (**Photo**), and nearly six hundred examples of the Delicate, *Mythimna vitellina* (Hb). and it would seem that these were home bred examples given the very mild Winter which might well become established permanently. There were a number of records of the Pyralids *Evergestis extimalis* (Scop.) and *Dioryctria sylvestrella* at Bonchurch and it appears that these two species are now established in this part of the Island.

Amongst the other noteworthy moths were:-

Great Oak Beauty, *Hypomecis roboraria* (D.& S.), (**Photo**). One at Newtown MOD Ranges On June 5th taken by Andy Butler. This is the first record since one was taken at Alverstone (Stowell, 1937, Entom. 70. 224.
Rosy Wave, *Scopula emutaria* (Hb.). An example of this local species was recorded at Cranmore on 7th June.
Cloaked Carpet, *Euphyia biangulata* (Haw). One at Totland on 31st August. This is the first record for the West Wight.
Calybites phasianipennella (Hubn). Am example of this rare species was taken at Totland on 13th July. The last record for the Island was over a hundred years age when it was found in rolled up Sorrel leaves (Hervey's List).
Ptycholomoides aeriferanus (HS.)). One at Totland on 18th July. This is only the second record since one was recorded at Shanklin on 10-7-1982.
Neosphaleroptera nubilana (Hubn.). One at Totland On 20th May which is the first record for about a hundred years.
Eucosma tripoliana (Barr.). An example of this salt marsh species was recorded at Totland on 8th July.
There were several out of season species with the Mottled Umber, *Erannis defoliaria* (C1) being recorded at Cranmore on the exceptionally early date of 19th August. A second brood Lime Hawk, *Mimas tiliae* (Linn.). was noted at Bonchurch on 3rd October.
Finally a Pale Brindled Beauty, *Phigalia pilosaria* (D & S.) and a Spring Usher , *Agriopis leucophaearia* (D & S.) were recorded on 30th December at Cranmore.

Acknowledgements
I should like to thank Andy Butler, lan & Cathy Fletcher for providing photographs and to Dave Wooldridge for reading and commenting on the manuscript. My thanks also go to Dr. David Biggs, Brian Elliott, James Halsey, Madge Joiner (Weather), Anthony Mitchell, Steve Pittis, John Ralph, whose records, along with my own, form the basis of this paper.

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Moths
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Birds (over)
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Asian Moon Moth *Actias semele*
Photo Ian Fletcher

Blair`s Mocha *Cyclophora puppillaria* (Hb.)
& Banded Form. *Photo Ian Fletcher*

Great Oak Beauty *Hypomecis roboraria*
Photo Andy Butler

Orache *Trachea atriplicis* (Linn.)
Photo Ian Fletcher

Alder Kitten *Furcula bicuspis* (Borkh.)
Photo Ian Fletcher

Hybrid Swallow/House Martin *Hirundinidae* sp

Marsh Warbler *Acrocephalus palustris* (Bechstein, 1798*)*

Turtle Dove *Streptopelia turtur* (Linnaeus, 1758)

Photos Anthony Roberts

BIRD RINGING REPORT 2007

Dr A H N Roberts and Dr D A Watson

Introduction

2007 produced some important and interesting results. Of national significance is the presence on the Island of Britain's longest surviving Barn Owl *Tyto alba* The bird was ringed by James Gloyn as a nestling in Knighton in 1992. It was caught at the Haseley Reserve in 2004, and again in 2007. Aged 14.5 years it was nearly one year older than the previous record. Remarkably another bird ringed on the same day survived for just under 14 years before being found dead. There is only one record of a Barn Owl ringed in Britain moving to the Continent (from the Isle of Wight). Movement across water is exceptional, and the bird ringed in Wiltshire and moving to the Island is therefore very unusual.

The Pied Wagtails *Motacilla alba* which have been colour ringed at the winter roost on Ryde Pier produced several local sightings during the winter, mainly from Brading and Bembridge, and then one of the birds was reported breeding at Beachy Head 100km east. Our thanks are due to those who sent in their sightings.

The most unusual bird ringed was a Swallow/House Martin hybrid (**Photo**). This was one of 3 Swallow/House Martin hybrids ringed in the UK during 2007. (see photograph). A separate paper is to be submitted to the Bird Report.

Our major event was the first Isle of Wight ringing course to be held. 12 students and 6 instructors from around England participated for four days during the autumn migration period. A total of 702 birds of 25 species were caught. The British Trust for Ornithology has requested that the course is repeated in 2008.

Ringing Activities

The Barn Owl study of James Gloyn had a very successful year with 55 nestlings being ringed. The value of the study has already been demonstrated in the introduction.

The major ringing site was the Haseley Reserve. 2,714 birds (1885 new birds) of 52 species were caught. Turtle Dove *Streptopelia turtur* (**Photo**), Marsh Warbler *Acrocephalus palustris* (**Photo**) and Siskin *Carduelis spinus* as well as the hybrid previously mentioned were new species for the reserve. Siskins were a new arrival presumably responding to the flowering alders which had been planted in 2002.

At Head Down, Niton 386 birds of 22 species were caught. There was a preponderance of tits and greenfinches which were responding to the feeding station at the site. The Blackbird *Turdus merula* ringed at Head Down and recovered in Norway again indicates the addition of wintering continental birds to our native population.

The Pied Wagtail roost on Ryde Pier was visited on three visits with a total of 107 birds (102 new birds) caught. As well as the standard metal ring with the British Museum address, a plastic yellow ring (season 2006/7) or a red ring (season 2007/8) was placed on the other leg. Please report any sightings to one of the authors (Anthony Roberts 01983 865420 or Daphne Watson 01983 731114). Ideally the date and place seen, the colour of the ring and which leg it is on.

Because of poor weather the ringing at Palmer's Farm was reduced in 2007. Two previous years ringed Reed Warblers *Acrocephalus scirpaceus* were re-caught.

Our thanks are due to the owners of the sites for permission to ring.

Training

Before anybody can ring birds in the United Kingdom on their own a Government licence must be obtained. Training is through a series of steps. A person first becomes a trainee for a minimum of one year working under the supervision of a recognised trainer, and then progresses to a three years before being independently assessed, and if satisfactory progressing to an "A" permit. "A" permit holders are allocated their personal rings and can work independently. Following this they can again be assessed and become a trainer.

During 2007, Dr Watson has joined Dr Roberts on the training panel, Dr Jolliffe has progressed to a "C" permit, and three new trainees have joined two more senior trainees. This has enormously strengthened the ability to carry out useful research. There is still opportunity to become a trainee, and anyone interested should contact one of the authors.

Totals Summary

Definitions

Full Grown - A bird capable of flying

Pullus - A bird in the nest, or out of the nest but too young to be able to fly.

Retrap - A previously ringed bird caught within 5km of the ringing place.

Control - A previously ringed bird caught, or the ring number read more than 5km of the ringing place.

Recovery - A bird found dead. When known the cause of death is recorded.

	Full Grown	Pulli	Retraps/ Recoveries	Total
Mute Swan	3	0	0	3
Greater Canada Goose	0	3	1	4
Mallard	4	0	0	4
Sparrowhawk	3	0	3	6
Kestrel	1	18	0	19
Moorhen	19	0	18	37
Coot	2	0	0	2
Woodpigeon	3	0	1	4
Turtle Dove	1	0	0	1
Barn Owl	3	55	1	1
Little Owl	0	4	0	4
Kingfisher	3	0	4	7
Green Woodpecker	3	0	1	4
Great Spotted Woodpecker	1	0	0	1
Sand Martin	18	0	0	18
Swallow	643	1	3	647
House Martin	39	0	1	40
Meadow Pipit	74	0	0	74
Yellow Wagtail	1	0	0	1
Grey Wagtail	2	0	0	2
Pied Wagtail	103	0	5	108
Wren	75	0	108	183
Dunnock	64	0	105	169

BIRD RINGING REPORT 2007

	Full Grown	Pulli	Retraps/ Recoveries	Total
Robin	**87**	**0**	**124**	**211**
Redstart	**1**	**0**	**0**	**1**
Stonechat	**1**	**0**	**1**	**2**
Blackbird	**123**	**2**	**133**	**258**
Song Thrush	**29**	**0**	**17**	**46**
Mistle Thrush	**1**	**0**	**0**	**1**
Redwing	**2**	**0**	**0**	**2**
Sedge Warbler	**19**	**0**	**2**	**21**
Marsh Warbler	**1**	**0**	**0**	**1**
Reed Warbler	**28**	**0**	**3**	**31**
Lesser Whitethroat	**1**	**0**	**0**	**1**
Whitethroat	**78**	**0**	**23**	**101**
Garden Warbler	**11**	**0**	**0**	**11**
Blackcap	**79**	**0**	**10**	**89**
Chiffchaff	**156**	**0**	**15**	**171**
Willow Warbler	**66**	**0**	**2**	**68**
Goldcrest	**37**	**0**	**33**	**70**
Firecrest	**1**	**0**	**0**	**1**
Long-tailed Tit	**75**	**0**	**58**	**133**
Blue Tit	**89**	**0**	**157**	**246**
Great Tit	**108**	**0**	**98**	**206**
Jay	**3**	**0**	**0**	**3**
House Sparrow	**3**	**0**	**0**	**3**
Chaffinch	**72**	**0**	**20**	**92**
Greenfinch	**72**	**0**	**3**	**75**
Goldfinch	**56**	**0**	**8**	**64**
Siskin	**17**	**0**	**0**	**17**
Bullfinch	**2**	**0**	**0**	**2**
Yellowhammer	**5**	**0**	**2**	**7**
Reed Bunting	**4**	**0**	**2**	**6**
Hybrid Species	**1**	**0**	**0**	**1**
Total:	**2293**	**83**	**962**	**3338**

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Recoveries 2007

Species	Ring No	Ringed	Date	Recovered	Date	How	Time(days)	km moved
Wood Pigeon	FV72989	Haseley	26 07 05	Haseley	21 07 07	Dead	725	0
Wood Pigeon	FA09815	Haseley	06 04 07	Arreton	23 06 07	Shot	78	2
Barn Owl	GH72329	Knighton	07 06 92	Haseley	29 01 07	Retrap	5349	3
Barn Owl	GH72337	Cranmore	07 06 92	Chillerton	22 03 06	Dead	5036	12
Barn Owl	GN70615	Wiltshire	24 07 03	Newchurch	01 06 07	Control	1408	84
Sand Martin	T510690	Haseley	17 09 05	Offaly, Eire	08 06 07	Control	629	504
Swallow	V829384	Ladymire, Scotland	13 08 07	Haseley	22 09 07	Control	40	745
Wren	BVA362	Haseley	29 09 07	Haseley	27 11 07	Dead	59	0
Blackbird	RC61895	Haseley	10 12 04	Arreton	30 06 07	Cat	923	2
Blackbird	RH87233	Niton	14 12 04	Borre,Norway	26 03 05	Control	102	1233
Song Thrush	RV24720	Haseley	02 02 06	Haseley	01 04 07	Window	423	0
Whitethroat	T511006	Haseley	02 07 06	Bournemouth	16 05 07	Window	318	43
Blackcap	T511355	Haseley	23 09 06	Worthing	21 04 07	Control	210	64
Chiffchaff	BVA338	Haseley	21 09 07	Icklesham	25 09 07	Control	4	136
Blue Tit	V472576	Haseley	05 09 07	Haseley	03 11 07	In Building	59	0
Great Tit	T511099	Haseley	23 08 06	Horringford	05 04 07	Cat	225	0
Greenfinch	VN23439	Haseley	24 05 07	Horringford	08 09 07	Dead	107	0
Greenfinch	VK34701	Haseley	22 09 07	Horringford	30 10 07	Window	38	0

COMPARATIVE STUDY INTO THE CURRENT DISTRIBUTION OF WATER VOLE (*Arvicola terrestris*) IN SELECTED WATERCOURSES ON THE ISLE OF WIGHT

Richard Grogan and Andy Rothwell

Introduction

The Water Vole *Arvicola terrestris* is a medium sized rodent, which, uniquely to the British Isles, is confined in its distribution to water bodies, rivers and streams. Long-term studies have revealed that it is the fastest declining mammal species in Britain and faces further declines in the light of mink predation, diffuse pollution and unsympathetic management of suitable habitats.

In 1996 a survey was conducted on the Isle of Wight (Grogan and Strachan 1997) to establish the distribution of the water vole along the main rivers and their tributaries of the Isle of Wight. Water courses on the Isle of Wight were identified and split into sections of 500m to be surveyed systematically. The survey methodology is described below The results were used as a baseline for a further survey conducted in 2003 using the same techniques. From the six main catchment regions recognised, it was observed that overall the number of river sections with water vole presence had decreased between the two surveys from 131 (1996) to 109 (2003) (n=323; $p<0.001$), and is shown in Figure 1.

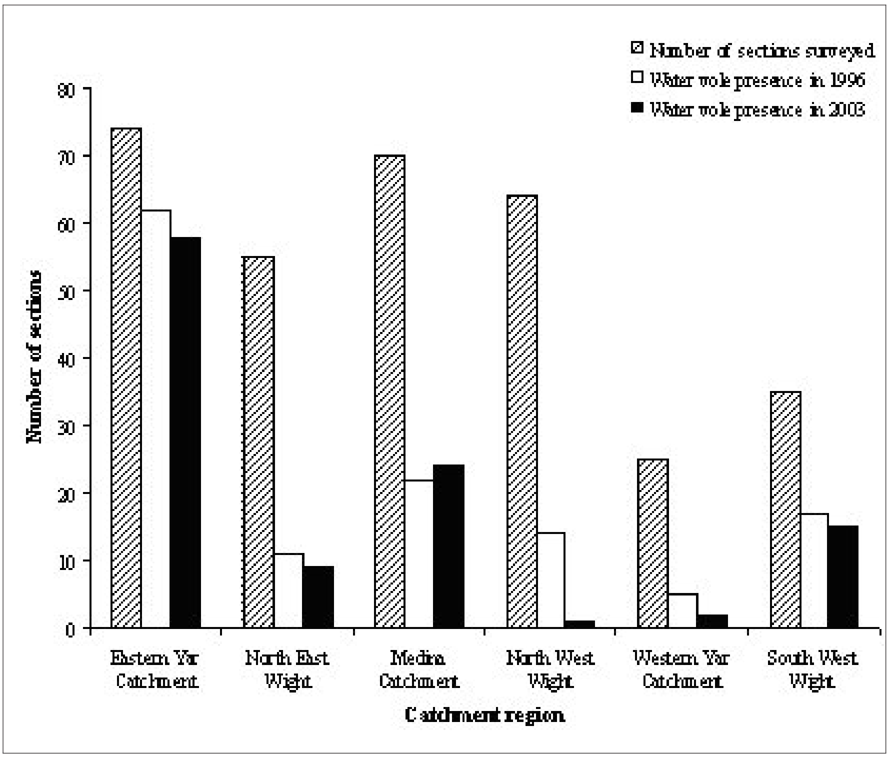

Fig.1 Number of river course sections with water vole occurrence found during two survey periods.

The North West Wight Region (n=64 sections) was largely devoid of water voles and demonstrated a significant decline ($p>0.001$) compared to the baseline survey.

The need for further investigations regarding the decline of the water vole activity on the Isle of Wight has been raised and an interim survey was conducted on several of the notable areas of concern. These were the Caul Bourne Stream (entire), from the North West Wight Catchment; Western Yar (section 9), and the Thorley Brook (sections 1 to 3), both from the Western Yar Catchment.

In contrast, the best site from the 2003 survey (Wroxall Stream, section 1), was also re-examined, to act as a control for assured water vole activity. The findings of the interim survey are assessed in this article.

Methodology

At each site the banks of the river were traversed and intensively examined for tracks and signs; which included latrines (distinct area of droppings), burrows, footprints and feeding remains (often left in discrete piles, frequently accompanied by droppings).

Where practical the water course was examined from within the channel itself. In the event of dense vegetation or other obstruction disabling a thorough search of a designated section, a series of spot checks would be employed, at all available access point along the water course. The number of latrines and burrows found were tallied to give an indication of water vole activity per site.

One of the target rivers, the Wroxall Stream, is one of the main tributaries of the Eastern Yar. Consequently, to reach the Wroxall Stream it was also practical to survey section 20 of the Eastern Yar. Sketch maps were produced in the field to give a generalised view of the site with habitat type and any water vole activity illustrated. In addition to the water vole, the occurrence of three other important riparian mammals was also noted; namely the otter, mink and brown rat.

Results

This survey was conducted between 22nd and 26th October 2007, during favourable weather conditions. Water vole activity was found on the Eastern Yar, Wroxall Stream and the Western Yar. Due to time constraints, only half of section 1 of the Wroxall Stream was surveyed. The Caul Bourne and Thorley Brook showed no evidence of water vole activity at this time. All field data was compared to previous survey results and summarised in Table 1.

Eastern Yar (Section 20)

This section of the river Yar has always represented a low level of water vole activity. From the baseline survey in 1996, just 10 latrine sites were observed. During the second full survey in 2003, only four latrines were found, three of which were old and no longer maintained (Rothwell, 2003). The apparent decline in water vole activity alone this section of the Yar is also reflected from the results of the current interim investigations. Although no latrine sites were found from this survey, water voles were still utilising this part of the Yar, as indicated from several dropping sites with feeding remains.

Despite the land use remaining the same, cattle had access to more of the river side as the fencing had not been maintained and fallen throughout most of the site. Consequently much more of the toe bank had been poached and heavily grazed.

Wroxall Stream (Part of Section 1)

From the 2003 survey, the Wroxall Stream had the highest level of water vole activity, and was shown to be a significant increase from the baseline survey. In reflection, this survey demonstrated this area still to be at a very high level. However there was a slight drop in the number of latrine sites found (52 latrines on half of Section 1; compared to 63 in 2003). It was also noted that an increase in bramble scrub intrusions, covered a much greater area than previous surveys.

Caul Bourne (Entire)

The major decline in water vole activity in the North West Wight Catchment region was largely related to the findings on the Caul Bourne Stream. In 1996 ten sections showed signs of water vole utilization, with 37 latrine sites found in total. Whereas in 2003, only one section had potential evidence of water vole activity; however this was only an unconfirmed nest site in tussock sedge. Without a second determiner, this field evidence may have been of little value. There was no water vole evidence of any kind observed on the Caul Bourne during this survey. Conversely, when comparing the number of sections with brown rat presence, it had increased from 20% (in 2003) to 60% (in 2007).

It was also noted that the tree covered over the stream had increased, together with a few more areas of scrub intrusions.

Western Yar (Section 9)

The last section of the Western Yar (part of Afton Marsh Nature Reserve) showed a significant level of water vole activity during this survey. Along with 16 latrines and four burrows, numerous dropping sites were found, together with many food caches and feeding remains consisting predominately of sedges and young *Typha*. These field signs were located along the flanking reed beds, south of the Afton Marsh woodland. In 1996, eighteen latrine sites were found, whereas in 2003 no evidence of water vole activity was observed at all. The results from this survey have shown a positive return of the water vole in this area, to a level observed during the baseline survey.

Thorley Brook (Sections 1 to 3)

No evidence of water vole activity was found along sections 1 to 3 of the Thorley Brook. This was also the case during the second full survey conducted in 2003. However, from the baseline survey in 1996, water voles were present in sections 1 and 2 only. A 100% increase in rat occurrence was noted from all three sections, when compared to previous surveys.

Survey Implications

The aim of this survey was to implement further investigations regarding the decline of water vole activity on several notable areas of concern. In contrast, the best site from the 2003 survey, was also re-examined, to act as a control for assured water vole activity.

In summary this survey has shown water voles to be present on the Eastern Yar and Wroxall Stream, but at slightly lower levels of activity. The Caul Bourne and Thorley Brook continue to be void of water voles, whereas the Western Yar had shown a positive return of the water vole to levels observed during the baseline survey.

Despite these findings, there are many influences on survey effort. For example this survey was conducted during the third week of October, which is towards the end of the water vole breeding season. Therefore, any substantial activity is likely to be lower at this time of year.

Land management can also influence the distribution of water voles along a stretch of river. It was noted that an increase in bramble scrub intrusions occupied a much greater area than before, particularly on the Wroxall Stream and Caul Bourne. Although water voles will utilise bramble for food and refugia, excessive coverage of bramble scrub is likely to decrease the diversity of riparian vegetation, thus reducing the more favoured food sources such as herbs, grasses and sedges. Conversely, dense scrub can also greatly impede the observer, and field signs could have easily of been overlooked.

With cattle gaining access to more of the river side on section 20 of the Eastern Yar, the disturbance level would increase, together with the physical damage to the river banks. This is likely to have negative impacts towards water voles utilising these areas. The results from this survey may be direct evidence of this fact.

The brown rat is not only one of a host of predators of the water vole, but will also compete for resources (burrows and food). An increase of rat presence was observed on the Caul Bourne and Thorley Brook. With a continued absence of water voles on these rivers, the high level of rat activity may inhibit any recovery of the water vole to these areas.
See Table 1.

Future Surveys

The aim of previous full surveys was to evaluate the occurrence of the water vole along the main rivers and their immediate tributaries. However this left a considerable proportion of other water bodies un-surveyed. Whether these were natural or artificial, they included wetland areas, reservoirs, country parks, and substantial garden ponds.

Many of the aforementioned examples could be found adjacent to main river systems. If for example the main rivers were of sub-optimal conditions, water voles may seek the neighbouring water bodies, thus giving a low impression of utilisation on the main rivers. It is important therefore to identify such areas and allow them to be examined, either as a separate project or be included in future repeats of the main survey.

During the baseline survey (Grogan and Strachan, 1997), an effort was made to include an additional selection of 1km square areas, 55 in total; where upon all aquatic habitats within them were surveyed for the presence of the four target riparian mammals. This identified many drainage ditches that would otherwise have been missed in the main survey and acted as a control to confirm water vole presence on the main streams.

Of all the kilometre squares surveyed, 60% of them showed signs of water vole activity (Grogan and Strachan, 1997). It would therefore also be worth repeating the survey of the 55 selected sites, with additional kilometre squares considered for inclusion:

It may also be of significance to conduct a thorough investigation on the apparent localised extinction of the water vole on the Caul Bourne and Thorley Brook. Many factors can influence the health of a river system, of which many may not be obvious from a presence/absence wildlife survey.

Regardless of the additional survey sites and parameters, the full River Corridor Vole Survey would still need to be repeated in order to determine the population status on a regular basis. These surveys would also be required to verify that all sympathetic management and conser-

Table 1. Presence/absence of water vole and rat on selected water bodies during three survey periods.

Water Body	Section	1996				2003				2007			
		WV	Latrines	Burrows	Rat	WV	Latrines	Burrows	Rat	WV	Latrines	Burrows	Rat
Eastern Yar	20	**Positive**	10	present	Negative	**Positive**	4	1	Positive	**Positive**	0	1	Positive
Wroxall Stream	1*	**Positive**	14	present	Negative	**Positive**	63	4	Positive	**Positive**	52	5	Positive
Caul Bourne	1	Negative	0	0	Negative	Negative	0	0	Negative	Negative	0	0	Positive
Caul Bourne	2	Negative	0	0	Negative	Negative	0	0	Negative	Negative	0	0	Positive
Caul Bourne	3	**Positive**	1	present	Positive	Negative	0	0	Negative	Negative	0	0	Positive
Caul Bourne	4	**Positive**	9	present	Negative	Negative	0	0	Positive	Negative	0	0	Positive
Caul Bourne	5	**Positive**	4	present	Negative	Negative	0	0	Negative	Negative	0	0	Positive
Caul Bourne	6	**Positive**	9	present	Negative	Negative	0	0	Negative	Negative	0	0	Negative
Caul Bourne	7	**Positive**	6	present	Negative	Negative	0	0	Negative	Negative	0	0	Positive
Caul Bourne	8	**Positive**	4	present	Positive	Negative	0	0	Positive	Negative	0	0	Negative
Caul Bourne	9	**Positive**	2	present	Negative	Negative	0	0	Negative	Negative	0	0	Positive
Caul Bourne	10	**Positive**	0	present	Negative	Negative	0	0	Negative	Negative	0	0	Negative
Caul Bourne	11	**Positive**	2	present	Negative	Negative	0	0	Negative	Negative	0	0	Negative
Caul Bourne	12	Negative	0	0	Negative	Negative	0	0	Negative	Negative	0	0	Negative
Caul Bourne	13	**Positive**	0	present	Negative	Negative	0	0	Negative	Negative	0	0	Positive
Caul Bourne	14	Negative	0	0	Negative	Negative	0	0	Negative	Negative	0	0	Negative
Caul Bourne	15	Negative	0	0	Negative	Negative	0	0	Positive	Negative	0	0	Positive
Western Yar	9	**Positive**	18	0	Negative	Negative	0	0	Negative	**Positive**	16	4	Negative
Thorley Brook	1	**Positive**	1	present	Negative	Negative	0	0	Negative	Negative	0	0	Positive
Thorley Brook	2	**Positive**	2	present	Negative	Negative	0	0	Negative	Negative	0	0	Positive
Thorley Brook	3	Negative	0	0	Negative	Negative	0	0	Negative	Negative	0	0	Positive

* Note: Only half of section 1 of the Wroxall Stream was surveyed in 2007; the results for 2003 represents data found in the equivalent surveyed length. The Wroxall Steam data for the 1996 survey represents all signs found within the whole of section 1 (exact location information unobtainable).

Acknowledgements

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ODONATA RECORDS FOR 2007

J M Cheverton

The most striking aspect of this report is the large number of species for which the date of the first sighting for the year was the earliest since recording began in 1978. These were *Calopteryx virgo, Ischnura elegans, Enallagma cyathigerum, Coenagrion puella, Erythromma viridulum, Erythromma najas, Anax imperator, Cordulegaster boltonii* and *Orthetrum cancellatum.* In addition four species *Calopteryx virgo, Enallagma cyathigerum, Orthetrum cancellatum* and *Sympetrum fonscolombii,* were seen at their latest dates, the longer flight seasons perhaps caused by global warming. While *Calopteryx splendens* and *Pyrrhosoma nymphula* occurred in low numbers, *Calopteryx virgo* and *Sympetrum sanguineum* were seen in the largest numbers since recording began. Migrants were well represented by two sightings of *Anax parthenope,* while the twenty five sightings of *Sympetrum fonscolombii* must surely have included some migrants although local breeding was confirmed.

Systematic List

Calopteryx virgo (Beautiful Demoiselle)
The total number recorded this year was 353, by far the largest since the first were recorded in 1989. Most were seen at "Wild Tracts", Shalfleet (SZ4189), but the first was recorded nearby in Shalfleet on 27th April (JMC), the earliest date since recording commenced in 1978. The last was at "Wild Tracts" on 27th August (VG), the latest date yet recorded. The species was also recorded at new sites: Ningwood Common (SZ3989), Brighstone Mill (SZ425823) and Thorncross Farm reservoir (SZ439818) (all CD) and Clamerkin, pond in woods (SZ438908) (DT). Records from these new sites may well mean that the species is spreading. There were no reports that indicated breeding at any site although it almost certainly occurred.

Calopteryx splendens (Banded Demoiselle)
The total number recorded was only 92, a large decrease on that for last year and the lowest since 2000. The first was seen at Sandown Levels (SZ593853) on 2nd June (DD) and the last at Alverstone (SZ577857) on 1st September (DT), the latest date yet. Breeding was confirmed at Marvel Farm fishing ponds (SZ502872) and Wroxall stream, near the donkey sanctuary (SZ547810) (both DD).

Lestes sponsa (Emerald Damselfly)
An uncommon damselfly on the Island. The total number recorded was 29 with the first at Clamerkin (SZ4490) on 19th June (BJA) and the last at Little Poverty, Newtown (SZ436906) on 2nd September (CD, ER). Probable breeding was reported at Longlands Farm disused reservoir (SZ560819) (DD).

Platycnemis pennipes (White-legged Damselfly)
None have been reported since 1992.

Pyrrhosoma nymphula (Large Red Damselfly)
A poorer year for this species with only 161 recorded. The first was seen in a garden at Wroxall (SZ551802) on 14th April, where breeding was confirmed (DD) and the last in the same garden on 28th August (DD).

Ischnura elegans (Blue-tailed Damselfly)
The total recorded this year was 840, a little less than that for last year and below the 10-year average of 993. The first were seen in various ponds at Haseley Manor on 29th April (DD), the earliest yet, and the last at Combley Fishing Lakes on 21st September (DD). Breeding was confirmed at many sites. Form *rufescens* was reported at a Carisbrooke garden pond (SZ482886) on 25th May (KM).

Enallagma cyathigerum (Common Blue Damselfly)
This species remains widespread and common, but the total seen was again lower than that for last year with 2393 individuals reported, a reduction of 1342. The first were seen at a pond at Haseley Manor (SZ547847) on 29th April (DD), the earliest date yet, and breeding confirmed. The last was recorded at Meadow Farm reservoir, Bathingbourne, (SZ544831) on 5th October (DD), the latest date yet.

Coenagrion pulchellum (Variable Damselfly)
None have been reported since 1997.

Coenagrion puella (Azure Damselfly)
The total number recorded was 2030, considerably more than last year and much larger than the ten-year average of 1785. The first was seen in woodland at Clamerkin (SZ438908) on 19th April (DD), the earliest date yet, and the last at Blake's Hill ponds, Limerstone (SZ435832) on 27th August (DD). Breeding was confirmed at many sites.

Erythromma viridulum (Small Red-eyed Damselfly)
The total count of 408 was the lowest since the first were recorded in 2000 but there were indications of a spread to a few new sites. The first were seen at Godshill Park Farm, ponds under Gatcliff (SZ534806), on 21st June (DD), the earliest date yet. The last were recorded at Combley Fishing Lakes (SZ548883) on 21st September (DD). Ovipositing was noted at many sites.

Erythromma najas (Red-eyed Damselfly)
The total number of 107 recorded this year was only one more than that for last year but still the highest yet. The first was seen at Merstone Fishing Lakes (SZ533838) on 14th May (DD), a new site and the earliest date yet, and the last at Parsonage peat pond (SZ562858) on 14th July (DD). Copulation and ovipositing was seen at several sites.

Brachytron pratense (Hairy Dragonfly)
Three were reported this year. The first, a vagrant, appeared in a garden at Westhill, Shanklin (SZ576810) on 17th May (JMC) and then flew southwest. A male was recorded at Birchmore pond (SZ509857) on 20th May (DD) and a female near pond no. 9, RSPB Reserve, Brading Marshes (SZ629878) on 20th June (DD).

Aeshna juncea (Common Hawker)
None were reported this year.

Aeshna grandis (Brown Hawker)
There was only one record this year. One was seen in Ventnor Botanic Gardens (SZ547768) on 31st July (JMC).

Aeshna cyanea (Southern Hawker)
This species had a good year with 157 reported, well above the ten-year average of 130. The first was seen at Bonchurch Landslip (SZ582783) on 6th June (DT) and the last at Westside Farm, Chale (SZ478787) on 11th October (DD). Breeding was confirmed at several locations.

Aeshna mixta (Migrant Hawker)
A very good year with 325 individuals reported, the second highest number since recording commenced in 1978. The first was seen in a garden at Havenstreet (SZ550889) on 17th July (DD) and the last at Yarmouth Station (SZ358894) on 3rd November (CD). Ovipositing was noted at several localities.
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Anax imperator (Emperor Dragonfly)
The total number recorded was 175, only three fewer than the ten-year average of 178. The first was seen at Walters Copse (SZ4390) on 12th May (DT), the earliest date yet, and the last at Alvington Manor Farm (SZ474887) on 15th September (DD). Breeding was confirmed at two localities.

Anax parthenope (Lesser Emperor)
There were two records this year of this rare migrant. The first was seen at Brandywell, Lessland Lane (SZ545828) on 9th August (DD) and the second at a slumped cliff at Atherfield Point (SZ452791) on 12th September (DTB). Both records have been submitted and approved by the Migrant Dragonfly Project.

Cordulegaster boltonii (Golden-ringed Dragonfly)
The total number recorded was 31 marking a return to more usual numbers after the high of 2006. The first was seen at Dark Lane (SZ4886) on 12th May (JMC), the earliest date yet, and the last, a male, at Mornhill & Little Pan (SZ5188) on 21st August (CD). Probable breeding was noted at one locality.

Libellula depressa (Broad-bodied Chaser)
The total number recorded was 142, equalling the previous highest total recorded in 1997. The first, an immature female, was seen at Yaverland Landslip (SZ620854) on 18th April (DD) and the last at Briddlesford Nature Reserve (SZ544910) on 6th August (DD). Breeding was confirmed at one locality.

Libellula quadrimaculata (Four-spotted Chaser)
Ten were recorded this year, all on 4th June at the usual locality of Brading Marsh RSPB Reserve (all DD). One was at pond no.9 (SZ629878), one at drain no.7 (SZ631876) and eight at drain no.8 (SZ628876). There were no indications of breeding.

Orthetrum coerulescens (Keeled Skimmer)
Fewer visits were made to the cliffs in the Chale Bay area this year and a total of only 68 individuals was recorded. The first was seen at Whale Chine (SZ4778) on 8th July (BR) and the last (66) at Chale Bay cliff ledges (SZ4777 and SZ4877) on 11th August (DD) when breeding was confirmed.

Orthetrum cancellatum (Black-tailed Skimmer)
This was a good year with 340 individuals reported, well above the 10-year average of 254. The first were seen at Bouldnor Copse, main pond (SZ380902) on 3rd May (DD), the earliest date yet

and where breeding was confirmed. The last was seen at Ashhill Farm reservoir (SZ462803) on 11th September (DD), the latest date yet.

Sympetrum flaveolum (Yellow-winged Darter)
None reported this year.

Sympetrum fonscolombii (Red-veined Darter)
Another good year with 25 individuals reported. The first was a male that was seen at Brading Marsh RSPB Reserve (SZ628876) on 4th June (DD) and the last, a female, seen in scrub at Luccombe Down (SZ572793) on 4th October, the latest date yet (DD). An unusual sight was of 12 males perched on the ground in windy conditions at Meadow Farm reservoir, Bathingbourne (SZ544831), on 6th June (DD). Breeding was confirmed at Leycroft Farm reservoir (SZ452807).

Sympetrum striolatum (Common Darter)
The total number of 772 recorded this year was well above the 10-year average of 624. The first was seen at Brading Marsh RSPB Reserve (SZ621874) on 4th June (DD) and the last at the MoD Range, Porchfield (SZ4490) on 3rd November (DTB). Breeding was confirmed at many localities.

Sympetrum sanguineum (Ruddy Darter)
The 1144 individuals recorded this year exceeded the previous largest number, seen in 1997, by a margin of 664. The first were 180 seen at Brading Marsh RSPB Reserve (SZ6387) on 4th June (DD) followed by 635 there on 20th June. The last were seen at Thorness Marshes (SZ4593) and Clamerkin (SZ4490) on 12th September (DD and BJA). Breeding was confirmed at several localities.

Observers
I thank the following observers who have contributed records, only a small number of which are shown above.

Mr B J Angell (BJA)	Dr D T Biggs (DTB)	Mr A J L Butler (AJLB)
Mrs E Butler (EB)	Mr M Cahill (MC)	Mr D Dana (DD)
Mrs C Dudley (CD)	Mr C Enary (CE)	Ms P Gaylor (PG)
Ms V Gwynn (VG)	Mr K Marston (KM)	Mr B Ransom (BR)
Miss E Rice (ER)	Dr A Roberts (AR)	Mr D Tucker (DT)

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FUNGAL GALLS ON THE ISLE OF WIGHT, PART 1 : GALLS CAUSED BY RUST FUNGI

Dr D T Biggs

In previous accounts published of the gall-causing organisms found on the Isle of Wight (Biggs, 1997, 1999, 2003 (a),2003 (b), 2007) reference has been made to E.W. Swanton's 1939 list of Island galls and any work undertaken since has been based on that account. However, Swanton did not give much attention to fungal galls, in fact only including six in his list, only one of which was a rust.

Swanton previously (1934) had published a list of Isle of Wight fungi, based on his fieldwork and that of J.F.Rayner (published in Morey ,1909) and included in Swanton's list were records of 54 rust fungi found prior to that date on the Island. He did not state in this account whether any of the rust fungi were causers of gall formation. Some rust fungi that are cecidogenic (gall-causing) are only facultatively cecidogenic, i.e. galls (hypertrophied plant organs) are not necessarily always formed. The list of gall-inducing rust fungi which follows includes both species which are always cecidogenic and those which are facultatively cecidogenic. Those rust fungi which never induce galling are not included.

Rust fungi are members of the order Uredinales and belong in the Basidiomycota. They have a complicated life-cycle with up to five spore states and often utilize two different host plants. The different spore stages have been given different names by authors in the past but they have a generally accepted nomenclature and have been ascribed roman numerals as abbreviations to indicate the different stages:-

O	spermogonia	bearing	spermatia
I	aecia, aecidia	bearing	aeciospores, aecidiospores
II	uredinia, uredia, uredosori	bearing	urediniospores, uredospores
III	telia, teleutosori	bearing	teliospores, teleutospores
IV	basidia	bearing	basidiospores

Not all rusts demonstrate all spore stages. If two different host plants are necessary for completion of the life-cycle stages O and I are borne on one plant and stages II and III on the alternate host.

I am indebted to Dr. Tom Preece formerly of Leeds University and now happily and actively retired in Shropshire for identification or confirmation of many new rust species first described in this account as Island species; and especially for his gift to me of his dilapidated, much-loved and invaluable copy of Wilson and Henderson, without which this paper could not have been written.

Tom Preece was the co-author of the chapter on fungal galls in British Plant Galls by Redfern *et al.* (2002) and the chapter on British gall-causing rust fungi in Plant Galls edited by Michèle Williams (1994). These two texts together with Wilson and Henderson (1966), and Buhr (1964) have been the authorities to which I have had recourse in deciding whether to include in this paper a particular rust fungus.

Each rust species described is written up in the following format:-
Name of rust fungus following Legon and Henrici (2005).
Name of host plant following Stace (1997.)
Roman numeral to indicate spore stages found.
Indication of alternate host.
Months found e.g. 1-12 = January to December.
Brief description of rust and cecidogenic effect.
Date of first Island record e.g. Swanton 1934.
Description of first record if not in Swanton.

Following the species accounts there are maps indicating in which 10-kilometre squares the rusts have been recorded since 1982. The numbers on the maps correspond to the numbers allocated in the species accounts. Open circles represent records prior to 1982 not confirmed since. Closed circles represent records since 1982.

The species accounts and the distribution maps are based on fieldwork undertaken between 1982 and 2007, from the time of the visit to the Island in October 1982 of the British Mycological Society, incorporating their records, the records from Annual Fungal Forays led especially by the late Dr Derek Reid, records from my own fieldwork, and from specimens sent to me by many members of the Isle of Wight Natural History and Archaeological Society.

Rayner wrote in 1909 : " Our list must be regarded as preliminary merely, the publication of which ……..will, it is hoped be the means of evoking further research amongst Island naturalists and of amassing large additions to the Island fungus flora".

Swanton (1934) wrote : " It is to be hoped that [this list] will provide a stimulus for further investigation." I can only concur and I hope that this paper will serve as a further incentive to others to try to increase our knowledge of the natural history of the Island.

1. *Coleosporium tussilaginis* (Pers.) Kleb.
0,I on Pines, *Pinus sylvestris, P. nigra, P.pinaster* galling the needles. 3-7.
II, III on many different Angiosperms, sometimes inducing swelling and distortion of leaves and stems. 3-12.
Swanton 1934. On *Delairea, Euphrasia, Odontites, Sonchus, Tussilago,* but no galling. Common and widespread.

2. *Cumminsiella mirabilissima* (Peck) Nannf.) on Oregon-grape, *Mahonia aquifolium*
0, I,: II, III. No alternate host.
Found on the underside of leaves and on the fruits. On the leaves it occurs on red or purple spots. It can gall the leaves inducing rounded whitish-yellow swellings. Native to N. America, it was first recorded in England in 1930. Now apparently common. II, III 3-9.
2006. One record only. In profusion on one bush in the grounds of St Dominic's Priory, Carisbrooke 18.4.2006. No galling. Probably under-recorded.

3. *Frommeëlla tormentillae* (Fuckel) Cummins & Y.Hirats.
on Cinquefoils,*Potentilla spp.*
0, I,: II, III. No alternate host. Rare 6-11.
O, I on reddish swollen spots on upper leaf surfaces of Tormentil, *Potentilla erecta* and Creeping Cinquefoil, *P. reptans,* 6-7.
II, III later on undersides, non-galling, 7-11.
1982. The only record was made by the BMS from Parkhurst Forest, 13.9.1982.

4. *Gymnosporangium clavariiforme* (Pers.) DC. on Hawthorn, *Crataegus monogyna*
0, I on Hawthorn. 6-9.
III on Juniper, *Juniperus communis.* 4-5.
O, I cause orange swellings up to 2cm long, conical or cylindrical, curved and arising from thickened yellow spots on the undersides of leaves, on stems, on calyx and fruit.
III induce orange tongue-like growths emerging from long raised swellings on branches.
1995. Two records only, both from Hawthorn, the first from Lower Hamstead 10.6.95, confirmed by Tom Preece. No records from Juniper.

5. *Gymnosporangium cornutum* F. Kern. on Rowan, *Sorbus aucuparia*
0,I on Rowan. 7-9.
III on Juniper. 4-6.
I results in cylindrical or horn shaped galls up to 5mm long, arising from thickened orange spots on the undersides of the leaves of Rowan.
III results in fusiform swellings of the smaller branches of Juniper.
1986. One record only, from Bonchurch 11.8.1986 on Rowan.

6. *Gymnosporangium sabinae* G.Winter on Pears, *Pyrus spp.*
0,I on *Pyrus spp.* 7-9.
III on *Juniperus sabina* cult. 4-5.
This is the European Pear Rust.
I forms galls on leaves, petioles and fruits. These are orange horn-shaped objects up to 2.5mm high, which arise from thickened blood-red spots.
III occurs as a gelatinous yellowish-brown spore-mass in Juniper branches.
2002. Two records only, the first from the Botanic Gardens, 16.10.2002;
The second from Gurnard, 12.8.2004.

7. *Kuehneola uredinis (*Link) Arthur. on Bramble, *Rubus fruticosus*
0, I: II, III. No alternate host. 1 –12.
Although all four spore-stages are found on Bramble it is only the uredospores (II), which are galling, and then only weakly. They are found on the undersides of the leaves (hypophyllous), on the petioles and on the stems, golden-yellow in colour; in linear streaks on the stems and on slightly thickened yellowish spots on the leaves.
2003. Many records but no galling seen.

8. *Melampsora caprearum* Thűm. on Willows, *Salix spp.*
0,I on Larches, *Larix decidua* and *L. kaempferi.* 4-5.
II,III on Willows, *Salix aurita, caprea, cinerea* and hybrids. 6-12.
II (uredospores) develop below the leaves of Willows, especially on the veins where they induce distortion and thickening. The upper leaf surface reveals a corresponding yellow spot. The petioles may be curved.
Swanton 1934. Many recent records but none from *Larix.*

9. *Melampsora epitea* Thűm. on Spindle, *Euonymus europaeus*
0,I on Spindle. 4-6.
II,III on Willows, *Salix spp*. and hybrids. . 5-12 and 9-12 respectively.
Bright orange aecia (I) hypophyllous in elongated clusters on thickened orange-yellow spots up to 1cm in diameter. Leaf veins locally swollen and affected petioles curved.
Uredinia (II) and telia (III) on Willow leaves and ovaries but not galling.
Swanton 1934.

10. *Melampsora euphorbiae* (C.Schub.) Castagne. on Spurges, E*uphorbia spp.*
0, I: II, III. No alternate host.
Often only II present. O, I doubtfully in Britain.
II orange 1-12. III orange-brown 9-12 forming a sub-epidermal crust. Stems and leaves affected. Galling not common and really visible only with a hand lens when some thickened spots can be seen. Most records are of the rust fungus itself. On *Euphorbia exigua, helioscopa* and *peplus* only so far. Now frequent and widespread.
Swanton 1934.

11. *Melampsora larici-populina* Kleb. on Poplars, *Populus spp.*
[0, I] on Larches, *Larix spp.* Elsewhere in Europe but not in Britain.
II, III on *Populus x canadensis,Populus x canescens, Populus nigra, P.n.* var.*italica.* 9-12.
II hypophyllous but causing yellow spots on upper leaf surface. Telia (III) epiphyllous (on upper leaf surface) red-brown, eventually black and galling buds and petioles.
Swanton 1934. One recent record only 8.9.2005 Gatcombe on *Populus nigra* hybrid,
Sue Blackwell: No galling.

12. *Melampsora lini* (Ehrenb.) Desm. on Fairy Flax, *Linum catharticum.*
0,I absent.
II, III only. 5-10. No alternate host.
Uredina (II) amphigenous (on both leaf surfaces) and on stems, orange.
Telia (III) in same sites, reddish-brown initially then shining black.
Buhr (1964) mentions galling caused by this species but no other text does.
Swanton 1934. Culver Cliff. This is the only local record.
A variety of this rust has been a serious disease of cultivated Flax in the past.

13. *Melampsora populnea (* Pers.) P. Karst. on Dog's Mercury, *Mercurialis perennis.*
0, I, on *Mercurialis perennis* and since 1999 also on *M.annua. 3 –6.*
II, III on *Populus alba* and *P. tremula. 6-10.*

The aecia (I) induce conspicuous galling of leaves, petioles and stems. They are bright orange in clusters (often circinate) on pale yellow spots up to 3cm. across. They are hypophyllous but the spots are also obvious on the upper surfaces. When on stems and petioles there can be thickening and twisting. Rather oddly, one or two plants only amongst a patch of many hundreds will be affected. Another oddity is that if the lamina of the leaf is infected it will not be galled but if a vein is attacked galling occurs.
II, III cause slight swelling only of the petioles and veins on Poplars. Very common and widespread.
Swanton 1934.

14. Melampsorella caryophyllacearum J.Schröt. On Silver Fir, *Abies alba*
0,I on *Abies spp.* 6-9
II, III on *Cerastium, Stellaria.* 5- .
Aecia (I) produce huge witches' brooms on Fir Trees. The infected shoots are paler than usual, shorter and thicker than uninfected shoots, grow vertically upwards, are branched and bear short thickened needles which are arranged in spirals. The aecia (I) are found on the lower surface of the needles in two longitudinal rows. The leaves are not evergreen and fall in August. In time the tree develops cankers.
Buhr (1964) and Dauphin and Aniotsbehere report galling on *Moehringia* by the uredinial (II) and telial (III) spore stages.
Swanton 1934 on *Cerastium.*
One recent record only, from Osborne. A large witches' broom 10 foot in diameter which fell in a gale.

15. *Melampsoridium betulinum* (Pers.)Kleb. on Birches, *Betula spp.*
O,I on Larches, *Larix spp*. 4-6.
II, III on Birches, *Betula pendula* and *Betula pubescens.* 6-12.
II hypophyllous, yellow with corresponding yellow epiphyllous spots. III orange becoming brownish. Very common on the Island especially on saplings where every leaf may be infected but galling limited to affected petioles becoming bent.
1998. First record 26.8.1998, Bouldnor Forest.

16. *Miyagia pseudosphaeria* (Mont.) Jørst. on Sow-thistles, *Sonchus spp.*
O,I : II, III. No alternate host. 5-12.
I yellowish, amphigenous. II yellowish, hypophyllous. III reddish-brown hypophyllous or caulicolous (on the stems). On *Sonchus arvensis, Sonchus asper* and *Sonchus oleraceus.* It is the aecia and uredinia which induce galling resulting in thickened oblong patches on yellowish spots.
Swanton 1934. The only recent record was made by Derek Reid, America Woods, 4.10.2002.

17. *Naohidemyces vacciniorum* (J. Schröt.) Spooner on Bilberry, *Vaccinium myrtillus*
[O, I] on Hemlock-spruces, *Tsuga spp.* but not in Britain.
II, [III] on *Vaccinium spp.* [III very rare]. 5-10.
II hypophyllous and caulicolous, yellowish-red fading to pale yellow, pustular, on thickened orange spots. They can induce lengthening of the stem and swellings on the stem and branches.
2005. At one site only, Luccombe Down. First recorded 31.8.2005. No galling present.

18. *Ochropsora ariae* (Fuckel) Ramsb. on Wood Anemone, *Anemone nemorosa*
0,I on Wood Anemone. 4-6.
II, III on Rowan, *Sorbus aucuparia.*
Leaves of Wood Anemone affected by aecia (I) have extremely long petioles, lifting the leaves above the adjacent unaffected plants. The leaves are paler, longer, and narrower and have fewer segments. The white aecia are hypophyllous. This rust is reported to be rare and has been put on a proposed list of Red Data Book fungi.
2003. First record Lock's copse 29.4.2003, confirmed by Tom Preece.
Still only two known sites, the second being Staplehurst Grange, 26.4.2006.

19. *Phragmidium fragariae* (DC.) Rabenh. on Barren Strawberry, *Potentilla sterilis*
0, I :II, III. No alternate host. 1-11.
I hypophyllous, orange. II hypophyllous, yellowish-orange. III, blackish-brown. It is the uredinia (II), which are galling, causing thickening and twisting of the veins and petioles.
Swanton 1934. Only two recent records, and no galling. Newtown and Fattingpark Copse.

20. *Phragmidium mucronatum (*Pers.) Schltdl. on Roses, *Rosa spp.*
especially Dog Rose *Rosa canina.*
0, I: II, III. No alternate host. 4 –12.
The orange swollen aecia (I) are hypophyllous and caulicolous, the uredia (II) pale orange and the telia (III) black. This is a very common rust. Small swellings can be induced on almost any part of the plant. Widespread.
Swanton 1934.

21. Phragmidium rosae-pimpinellifoliae Dietel. on Burnet Rose, *Rosa pimpinellifolia*
0,I: II ,III. No alternate host. 4-11.
I yellowish-orange on branches, petioles, veins and fruit, confluent, in large pustules up to 10cm long. II minute, orange. III brown.
1991. First record Rowridge Valley 27.5.1991, confirmed by Tom Preece. Also found at Bouldnor and Ningwood Common.

22. *Phragmidium sanguisorbae.* (DC.) Schröt on Salad Burnet, *Sanguisorba minor*
0, I: II, III. No alternate host. 4-8.
Spermogonia (0) amphigenous, honey-coloured on purple spots. Orange aecia (I) amphigenous, and on petioles producing elongated swellings which distort the leaves. The stems are twisted and swollen too. Frequent.
Swanton 1934

23. *Phragmidium violaceum. (*.Schultz.) G.Winter On Bramble, *Rubus fruticosus*
0, I: II, III. No alternate host. 1-12.
A very common rust but only occasionally galling, and then only slightly.
O epiphyllous in the lighter centre of a conspicuous violet leaf spot in May.
I hypophyllous or on the stems on reddish spots with violet margins, up to 1cm long when on the nerves and stems, and sometimes galling the nerves, orange-yellow. May.
II hypophyllous, on similar spots, orange-yellow. June – Sept. Telia (III) hypophyllous, pulvi-

nate, violet black, July-Spring. These teliospores are found in star-shaped groupings, the individual spores easily visible to the naked eye looking like elongated violet crystals.
Swanton 1934. Now very common.

24. *Puccinia adoxae* R. Hedw. on Moschatel, *Adoxa moschatellina*
III only. No alternate host. 3-5.
Here it is the telial stage which galls the plant. The other stages are unknown. The rust affects all parts of the plant, rhizomes, petioles, leaves, peduncles and flowers. The affected plant has an overall whitish appearance. The very dark brown telia form elongate, pulverulent swollen patches on the petioles and stems, and swollen discoloured spots on the leaves. Rather frequent.
Swanton 1934.

25. *Puccinia aegopodii* Rőhl. on Ground elder, *Aegopodium podagraria*
III only. No alternate host. 3-6.
Only the telia (III) exist in this rust. They are amphigenous, black and shining, in dense clusters and develop on thickened yellowish spots, mostly on the nerves but also on the petioles.
Swanton 1934 but no records since.

26. *Puccinia albescens* Plowr. on Moschatel, *Adoxa moschatellina*
0, I : II, III. No alternate host.
The spermogonia (0) and aecia (I) appear on distorted leaves 3-5, pale yellow on large pallid spots. Sometimes the plants are stunted. The telia (III) appear 5-6. This rust is reported to be nationally scarce.
Swanton 1934 and only two records since, from New Copse, Wootton 2004 and Firestone Copse 2005.

27. *Puccinia annularis* (F.Strauss) Röhl. on Wood sage, *Teucrium scorodonia*
III only. No alternate host. 6-9.
Very obvious when present the telia of this fungus are found on the undersides of the leaves where they form large purplish brown lumps situated on pale yellowish or brown spots. The upper surface often shews convex swellings. On the stems the telia form calluses and cause bending.
1997. First record from Bonchurch Down 23.8.1997, confirmed by Tom Preece.

28. *Puccinia arenariae* (Schumach.) Winter on Caryophyllaceae
III only. No alternate host. 1-12.
This rust is reported to be common on Sweet William, *Dianthus barbatus* but the only Island records so far are from Red Campion, *Silene dioica* (fourteen) and from three-nerved Sandwort, *Moehringia trinervia* (one) and no galling has been noted. The telia are hypophyllous and caulicolous, greyish-brown on pale yellow spots which can be obvious on the upper side of the leaf. In France this fungus causes small witches' brooms on *Moehringia.*
Swanton 1934.

29. *Puccinia betonicae* (Alb. & Schwein.) DC. on Betony, *Stachys officinalis*
III only. No alternate host. 5-9.

Another rust fungus which is on the proposed Red Data List.
III hypophyllous, fox red on pallid irregular spots, causing thickening of veins and altering the growth of the lower leaves so that they are paler, narrower and more elongate than normal. The petioles become lengthened so that affected leaves are also more erect.
Swanton 1934. The only recent site is Freshwater Cliffs.

30. *Puccinia circaeae* Pers. on Enchanter's Nightshade, *Circaea lutetiana*
III only. No alternate host. 6-11.
Spermogonia (0) unknown. Aecia (I) and uredinia (II) absent. Telia hypophyllous, on veins and stems on raised purple or yellow spots, cinnamon brown or greyish. The swellings are oblong on veins and stems, and rounded on the leaf blades. There can be purplish marks with yellow halos on the upper leaf surface opposite the telia.
1997. First record, Shalcombe Down 29.6.1997.
Galling not always evident.

31. *Puccinia cnici-oleracei* Desm. on Asteraceae
III only. No alternate host. 6-11.
Telia amphigenous but usually hypophyllous, circinate, often confluent in large groups, pulvinate, dark brown, on pale yellow spots which are sometimes swollen and thickened.
Swanton 1934. All local records from Marsh Thistle, *Cirsium palustre.*

32. *Puccinia coronata* Corda on Buckthorns.
0, I on Buckthorns, *Frangula alnus* and *Rhamnus catharticus.* 5-7.
II, III on various grasses, Poaceae, 1-12.
Very striking orange aecia on the leaves and petioles, amphigenous but mostly hypophyllous on large yellow or yellowish purple thickened spots which are ulcer-like with a thickened rim, causing distortion when present on the petioles.
Swanton 1934.

33. *Puccinia distincta* McAlpine on Daisy, *Bellis perennis* and cultivars
0, I : III. No alternate host. 1-12.
Bright orange aecia (I) are found on the leaves, petioles, flower axis and flowers, producing thickening of the leaves, yellowing of the leaves and inducing the leaves to adopt a more upright stance than is usual. First appeared in England in 1972 on cultivated varieties in parks and gardens. First native daisy infected 1988 but since 1997 there has been a massive explosion in infections, first appearing on the Island in 1998. It probably spread from Europe, having first been described in Australia in 1906. Now common and widespread.
1998. St Catherine's Point, 5.4.1998, confirmed by Prof. J Webster.

34. *Puccinia glechomatis* DC. on Ground Ivy, *Glechoma hederacea*
III only. No alternate host. 1-4. and 6-12.
Telia hypophyllous or on the petioles or stems, in groups, often elongate up to 4mm across, yellowish then chestnut coloured then blackish, on swollen, raised brownish spots like tiny cushions.
Swanton. 1934.

35. *Puccinia hieracii* (Röhl.) H.Mart. on Asteraceae
0, I : II, III. No alternate host.
It is the aecidial stage (I) which is gall-inducing. The aecia are amphigenous, inducing slight swelling of the midribs and veins and on oval spots, reddish yellow and thickened on the leaf blade. The aecia themselves are cinnamon brown and are found 4-5. The uredina (III) are more commonly found but non-galling, 5-10 on stems and leaves. Telia are usually on the stems, 6-10.
Swanton 1934. Current records from *Hieracium, Leontodon* and *Serratula.*
Galling only on the last.

36. *Puccinia hysterium* (F. Strauss) Rőhl. on Goat's-beard, *Tragopogon pratensis*
0,I : III No alternate host. 4-9.
0 epiphyllous and caulicolous, honey-coloured. I hypophyllous and on all green parts of plant, inducing considerable distortion of the shoots which often are sterile and covered with the orange aecia.
Swanton 1934. The only records are by Swanton, from Bembridge and from near Shorwell. He did not mention any galling.

37. *Puccinia lagenophorae* Cooke on Ragworts, *Senecio spp.*
I : III. No alternate host. 1-12.
The aecia (I) are found in large conspicuous groups on swollen areas of leaves and stems, the stems often being considerably distorted. The aecia are a very distinctive bright orange and are found on both leaf surfaces. A native of Australia, this rust first appeared in England in 1962.
1984. First record was made by the British Mycological Society on a visit to Carisbrooke, 29.10.1984
Now common but not always galling.

38. *Puccinia lapsanae* Fuckel on Nipplewort, *Lapsana communis*
0, I : II, III. No alternate host. 1-12.
Although this rust is described in the literature as common there are only two records since Swanton's time, both made by Dr Derek Reid, from Mottistone in 1985 and from Parkhurst Forest in 1994; and no mention was made of galling. The aecia (I) are orange and situated on conspicuous purple thickened spots on either surface of the leaf, or on the petioles which become pale and swollen.
Swanton 1934.

39. *Puccinia magnusiana* Kőrn. on Buttercups, *Ranunculus spp.*
0,I on *Ranunculus spp.* 4-6.
II, III on Common Reed, *Phragmites australis*. 5-4.
Aecidia yellow, hypophyllous on swollen yellowish spots distorting the leaf blade or on the petioles in elongated groups, or caulicolous. The uredinia and telia are found on *Phragmites* where they are not galling.
Reported to be a scarce rust.
2003. First and only record 5.7.2003 from Scotchell's Brook on *Ranunculus repens,* confirmed by Tom Preece.

40. *Puccinia malvacearum* Mont. on Malvaceae
III only. No alternate host. 1-12.
This rust is extremely common attacking 40 host species in 10 genera of the family Malvaceae. Native to Chile, it arrived in England in 1873. The telia are a russet or purplish brown, hypophyllous on hard rounded swellings, situated on conspicuous yellow or orange spots with small yellowish spots on the upper leaf surface opposite. Also found on petioles and stems.
1934. There are local records from Marsh-mallow, *Althaea officinalis*, Dwarf Mallow, *Malva neglecta,* Musk-mallow, *M.moschata,* Common Mallow, *Malva sylvestris*, and cultivars. Hollyhock Rust. Common and widespread.

41. *Puccinia menthae* Pers. on Mints, *Mentha spp.* etc.
0, I : II, III. No alternate host. 3-11.
Pale yellow aecia (I) hypophyllous on orange or purplish spots, or on thickened petioles and stems in elongated patches, followed by cinnamon brown uredinia (II) and dark brown telia (III). Affected plants have elongated and swollen shoots.
1934. Local records from Garden Mint, Water Mint, one from Marjoram and one from Common Calamint. Locally frequent.

42. *Puccinia pelargonii-zonalis* Doidge on cultivated Geraniums, *Pelargonium spp.*
II (III rarely) No alternate host. 1-11.
The galling is very slight, involving thickening and twisting of the veins in the vicinity of the cinnamon brown uredinia (II) which occur in concentric rings on small slightly thickened pale spots on the leaves of *Pelargonium zonale* and its hybrids. A native of S.Africa it was first recorded in Britain in 1965.
2003. First Island record 2.6.2003 from Gurnard, confirmed by Tom Preece. Becoming widespread.

43. *Puccinia phragmitis* (Schumach.) Körn. on Docks, *Rumex spp.*
0, I on *Rumex spp.* 4-7.
II, III on Common Reed, *Phragmites australis.* 7-5.
Brilliant white aecia are very obvious on swollen purple spots on the leaves of many Dock species although only a few individual plants ever seem to be affected in any one area. Non-galling on Reed. Now common and widespread.
Swanton 1934.

44. *Puccinia poarum* Nielsen on Colt's-foot, *Tussilago farfara*
0, I 5-9, and 10-12. (This species has two aecidial generations in one year).
II, III on *Poa annua, P. pratensis* and *P. trivialis* (Meadow grasses) 7-12.
Colt's foot bears blood red aecia (I) on the lower leaf surfaces on large rounded, thickened yellow or purplish red pad-like spots. The spermogonia (0) are epiphyllous, pale yellow and often very numerous. Now rather frequent.
Swanton 1934.

<u>45. *Puccinia primulae* Duby.</u> on Primrose, *Primula vulgaris*
I : II , III. No alternate host. 4-10.
Aecidia hypophyllous, orange on thickened yellowish spots. If situated on the veins these become contorted.
Swanton 1934. There are only two recent records, from Knighton Gorges 19.4.1999 (Beth Dollery) and from Wydcome the same year.

<u>46. *Puccinia pulverulenta* Grev.</u> on Willowherbs, *Epilobium spp.*
0, I : II, III. No alternate host. 4-11.
Orange aecia (I) frequently found on raised, yellowish areas on the underside of the leaves which become puckered, curled and reddened. Often the rust is very prevalent on a plant or on a collection of plants in one area and the infected plants are easily recognised by their paler and more yellow general appearance. The dark brown uredinia (II) and telia (III) are non-galling.
Swanton 1934. Common now but all recent records are only from *Epilobium hirsutum.*

<u>47. *Puccinia punctiformis* (F.Strauss) Röhl.</u> on Creeping Thistle, *Cirsium arvense*
0, I : II III. No alternate host. 4-11.
In recent summers effects on the host plant of systemic infection by this rust have been striking. Whole patches of Creeping Thistle appear a ghostly yellowish white and do not flower. Individual plants are spindly and sickly looking. Hypophyllous spermogonia (0) appear in early spring, honey-coloured and smelling distinctly of privet flowers. Rust coloured aecia follow, then brown uredinia on purplish brown swellings. Very common and widespread.
Swanton 1934.

<u>48. *Puccinia recondita* Desm.</u> on Meadow Buttercup, *Ranunculus acris*
and Bugloss, *Anchusa arvensis*
This is a species complex constituting the brown rusts or leaf rusts of grasses and within which are found several *formae speciales* involving different secondary hosts. Two have been found so far on the Island.

<u>*f. sp. recondita*</u>
0, I on *Anchusa officinale.* 8-9.
II, III on Rye, *Secale cereale.* 6-8.
The orange aecia are found on thickened spots on the leaves and petioles. The uredinia and telia on the Rye leaves are not galling. Not recorded by Swanton. First and only record from Champion Farm, Blackwater 15.8.2005, Sue Blackwell.

<u>*f.sp. perplexans*</u>
0, I on *Ranunculus acris*. 6.
II, III on Meadow foxtail, *Alopecurus pratensis.* 6-8.
The aecia here are yellow, hypophyllous in crowded groups on slightly raised spots. This is a scarce rust in England as a whole, confined to damp meadows. Not recorded in Swanton. Two records only, the first from Seaview Duver 14.6.1997, Toni Goodley. The second record was from Alverstone Mead.

49. *Puccinia saniculae* Grev. on Sanicle, *Sanicula europaea*
0, I : II, III. No alternate host.
Yellow aecia found on purplish brown raised spots on underside of leaves and producing elongated swellings on petioles and veins. The aecia are found 4-6 and the uredinia and telia 8-10. Not recorded in Swanton's published lists but a record was found in Swanton's manuscript notes of a specimen found at Shorwell 8.6.1936. No recent records.

50. *Puccinia sessilis* J.Schröt.
0, I on *Allium ursinum, Arum maculatum, Convallaria majalis, Gymnadenia, Listera.* 2-5.
II, III On Reed Canary-grass, *Phalaris arundinacea.* 6-6.
Yellowish aecidia, hypophyllous on large yellow spots, often clustered in a circinate pattern, sometimes with evident thickening of the leaf. No galling by uredinia or telia. Most records from *Arum* but galling only on Ramsons. Local but widespread.
Swanton 1934.

51. *Puccinia smyrnii* Biv. on Alexanders, *Smyrnium olusatrum*
0, I : II, III. No alternate host. 1-12.
The galls caused by this rust are very common on the Island and everyone will have seen them. The leaves and stems are twisted and distorted by yellowish orange blisters on which sit the yellow aecia in elongate groups on the stems and in clusters on the leaves. The non-galling telia which follow are a very dark brown.
Swanton 1934.

52. *Puccinia thesii* Duby on Bastard-toadflax, *Thesium humifusum*
0, I : II, III. No alternate host.
Spermogonia and aecidia amphigenous, orange 5-8. Uredosori amphigenous or caulicolous, brown 6. Teleutosori often elongate, on leaves and stems, brown 8-10. Only found in south-east England, from Suffolk to Wiltshire and Dorset. Rare. On draft Red Data list. The galling is only ever slight, resulting in deformity of the shoot.
Swanton 1934. Only one recent record, from Afton Down 2006, Paul Stanley.

53. *Puccinia umbilici* Duby on Navelwort, *Umbilicus rupestris*
III only. No alternate host. 10-12 and 1-6.
Telia amphigenous and caulicolous, dark reddish-brown on yellowish thickened spots which turn brown later.
1988. The only Island record is from Beacon Alley, Godshill 1/5/1988, Colin Pope. Still present in 2007.

54. *Puccinia urticata* Kern on Nettle, *Urtica dioica*
0, I on *Urtica dioica* and, rarely *Urtica urens.* 3-6.
II, III on many species of Sedge, *Carex spp.* 6-4.
One of the few gall-inducing fungi mentioned in Swanton's 1939 paper. The aecial stage of this rust causes one of the largest rust galls seen in Britain. Native peoples in the Himalayas used to

eat them as a rich source of starch. Whereas on the leaves the hypophyllous yellowish-orange aecia develop on thickened yellowish, reddish or purple spots, on the stems and petioles the swellings can be up to 5cm. long and can cause marked twisting and bending sometimes into a U-or V-shape. Mostly found in low wetland areas. Common and widespread.
Swanton 1934.

55. *Puccinia veronicae* J.Schröt on Wood Speedwell, *Veronica montana*
III only. No alternate host. 5-11.
Telia (III) dark brown, pulvinate, hypophyllous on thickened brown spots; sometimes caulicolous.
2002. First and only record so far, from America Woods 4.10.2002, Derek Reid.

56. *Puccinia vincae* Berk. on Greater Periwinkle, *Vinca major*
0, I : II, III. No alternate host. 2-10.
0 hypophyllous or epiphyllous, honey-coloured. I hypophyllous, brown. These both appear early from a systemic mycelium. II and III occur on the older leaves later in the season. This rust was first recorded in Britain in 1887. Affected plants are thinner, more upright, occasionally distorted, and fail to flower. Common but probably still under-recorded.
Swanton 1934.

57. *Puccinia violae* DC. on Violets, *Viola spp.*
0, I : II, III. No alternate host. 4-11.
Spermogonia (0) amphigenous, yellowish. Aecia (I) arise from a systemic mycelium and this is the gall-inducing stage. On the leaves swollen yellowish spots result and on the petioles and stems elongated swellings causing local expansions and bending. The aecia themselves are orange. II nongalling, amphigenous, cinnamon coloured. III hypophyllous, chocolate-brown.
4-6 and 8-11. Only six recent records.
Swanton 1934.

58. *Tranzschelia anemones* (Pers.) Nannf. on Wood Anemone*, Anemone nemorosa*
II, III only. No alternate host. 4-5.
The fungal mycelium is perennial in the rhizomes and the same plants are affected year after year. The galled plants are taller than usual and they bear paler, narrower leaves with fewer lobes. The chocolate brown telia are scattered over the under surfaces of the thickened leaves.
1996. The first record was from Town Copse, Newtown 20.4.1996, Colin Pope.

59. *Tranzschelia discolor* (Fuckel) Tranzschel & Litv.
0, I on *Anemone coronaria, A.* x *fulgens* and perhaps *A. blanda.*
II, III on *Prunus spp.*
The mycelium of the aecidial stage (I) is perennial in Anemones, resulting in effects similar to the preceding species. The aecia are hypophyllous and a pale yellowish brown (4-5.) II and III are found on Plums, Bullace, Peach, Nectarine and Apricot, 7 onwards and are not galling.
Swanton 1934. Only two recent records, both on Bullace, *Prunus domestica insititia,* from Gurnard 30.9.2000 and Norton, 22.10.2005

60. *Triphragium ulmariae* (DC.) Link. on Meadowsweet, *Filipendula ulmaria*
0, I : II, III. No alternate host.
Aecidia amphigenous, bright orange and conspicuous especially on veins and petioles, causing swelling and twisting so that the lower leaf surface often faces upwards, 4 -7. Uredinia lemon-yellow and telia brownish-black 4-12, non-galling.
Swanton 1934. Rather frequent

61. *Uromyces beticola* (Bellynck) Boerema, Loer & Hamers on Sea Beet, *Beta vulgaris ssp. maritima*
0, I : II, III. No alternate host. 4-10.
On leaves of several subspecies of *Beta vulgaris* but only on *spp maritima* so far on the Island. Spermogonia honey-coloured. Aecidia (I) yellowish, amphigenous on thickened, raised pads on yellowish, irregular spots. Uredosorsi yellowish, telia dark brown.
Swanton 1934. Only one recent record, from Bembridge 9.7.2004.

62. *Uromyces chenopodii (*Duby) J.Schröt. on Annual Sea-blite, *Suaeda maritima* and Shrubby Sea-blite, *S. vera.*
0, I : II, III. No alternate host. 6 – 11.
This is a Red Data Book fungus and considered to be rare. Originally from S Europe and N. Africa, it appeared in Norfolk in 1893 and most records have come from East Anglia. Fusiform swellings on leaves and stems bear large circinate aecia which are bright golden yellow, followed later by cinnamon brown uredinia and dark brown telia..
2002. First recorded locally from Thorness Bay 5.10.2002., confirmed by Tom Preece.
The second from Ventnor 17.1.2006.

63. *Uromyces dactylidis* G.H.Otth. on Buttercups, *Ranunculus spp.*
0, I on *Ranunculus spp.* 2 – 5.
II, III on various grasses, Poaceae. 5 -9.
Spermogonia and aecia on leaves and petioles, on thickened yellow spots on the former and elongated swellings on the latter causing swelling and distortion, yellow or honey-coloured.
Non-galling on various grasses.
Swanton 1934. All recent records have been from *Ranunculus ficaria* and *R.repens.*

64. *Uromyces dianthi* (Pers.) Niessl. on Carnations, *Dianthus spp.*
II, III only. No alternate host.
Uredinia non-galling, amphigenous and caulicolous, cinnamon brown. Telia clustered on the leaves and stems in rounded or elongated swollen patches, chestnut brown. This is Carnation Rust, which was introduced into England on imported plants c.1890.
Swanton 1934. No recent records.

65. *Uromyces ficariae* (Schumach.) Lév. on Lesser Celandine, *Ranunculus ficaria*
III only. No alternate host. 3-6.
It is the chocolate brown telial stage (III) which is the gall-inducing stage. The telia occur on the

leaf-blades on both sides on pale yellow spots producing swelling and distortion with blister-like swellings. They also occur on the petioles in elongate clusters causing considerable distortion. Swanton 1934. Probably under recorded.

66. *Uromyces geranii* (DC.) Fr on Crane's-bills, *Geranium spp.*

0, I : II, III. No alternate host. 6-2.

Only recorded so far on the Island on Herb-Robert, *G. robertianum.*

Although 0 is amphigenous and orange in colour, I, II and III are hypophyllous and respectively orange, cinnamon brown and blackish brown. It is the aecia (I) which are galling, producing swellings up to 2cm long, especially on the veins and petioles, causing distortion. The uredinia (II) appear on reddish spots.

2004. Although reported as common nationally, this rust was not recorded by Swanton and the first record was not made until 28.10.2004 by Bill Shepard and myself in Whitwell churchyard.

67. *Uromyces limonii* (DC.) Berk. on Common Sea-Lavender, *Limonium vulgare*

0, I : II, III. No alternate host. 5-12.

Yellowish aecidia on red or purple thickened spots, amphigenous in roundish clusters or elongated along the nerves and on the stems, followed by cinnamon brown uredinia and black telia, often circinate in pattern.

1992. First record Newtown 6.6.1992, Toni Goodley.Seven other recent records.

68. *Uromyces lineolatus* (Desm.) J.Schröt. on Apiaceae spp.

0, I on *Berula, Oenanthe* and *Sium.* 4-7.

II, III on Sea Club-rush, *Bolboschoenus maritimus.* 6-1.

Yellowish aecia (I) hypophyllous and on petioles, clustered on thickened yellow spots and particularly galling the veins.

II and III non-galling on Sea Club-rush.

2000. First record Dickson's Copse 24.5.2000 on Hemlock Water-dropwort, *Oenanthe crocata.*

69. *Uromyces muscari* (Duby) L.Graves on Bluebells, *Hyacinthoides spp.*

III only. No alternate host. 1-6.

On Bluebell, Spanish Bluebell and hybrids, *Hyacinthoides non-scripta, hispanica* and *non-scripta x hispanica.* Increasingly common. Telia amphigenous and on stems where they are very obvious. Initially brown and later black, the telia are arranged in concentric circles or elongated clusters on swollen pale yellow spots which are thickened and often distorted when on the stems. Swanton 1934.

70. *Uromyces salicorniae* de Bary on Glassworts, *Salicornia spp.*

0, I: II, III. No alternate host. 5-11.

Orange aecia on young leaves in May on pulvinate thickenings sometimes surrounded by a yellow halo. Cinnamon coloured uredinia follow July to October. Dark brown telia mostly on the stems on elongate swollen patches are found August to October.

This is a rare rust and is on the Red Data Book list.
2004. First record from St Helens Millpond, 28.9.2004. on Common Glasswort, *Salicornia europaea,* confirmed by Tom Preece. Also found at Newtown and the western Yar marshes.

71. *Uromyces scrophulariae* Fuckel. on Figworts, *Scrophularia spp.*
0, I : III. No alternate host. 7-10.
It is the telial phase which is galling. The telia are dark brown, occuring on the stems in large elongated groups just above ground level as well as on the leaves where they are found on pale, violet edged spots. Both stems and leaves can be considerably distorted.
Swanton 1934. Only one recent record, from Barton Wood 11.8.2001.

72. *Uromyces trifolii* (Hedw.)Fuckel on Clovers, *Trifolium spp.*
III only. No alternate host. 5-10.
Large confluent dark brown telia (III) on leaf-blades and particularly on nerves and petioles causing swelling and distortion. Found on White Clover, *T repens* and Strawberry Clover, *T. fragiferum* only.
2001. First and only record so far, Gurnard 29.8.2001, confirmed by Tom Preece.

73. *Uromyces valerianae* Fuckel on Valerians, *Valeriana spp.*
0, I : II, III. No alternate host. 4-11.
Spermogonia (0) epiphyllous, honey coloured turning black, at the same time as hypophyllous yellow aecia (I) and often on the nerves, petioles and stems producing distinct pale thickened spots. Later non-galling brown uredinia (II) on indefinite yellow spots and dark brown telia (III). Although nationally considered common there is so far only one Island record from Brett's Meadow, Alverstone, 8.7.2000, confirmed by Tom Preece, on Common Valerian, *Valeriana officinalis.*
2000.

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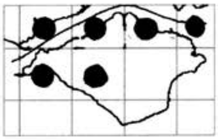
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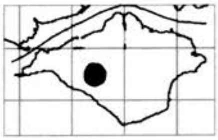
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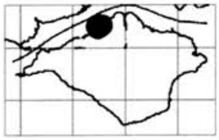
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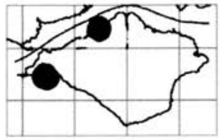
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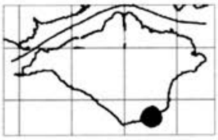
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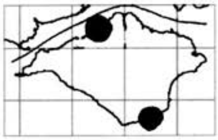
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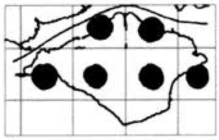
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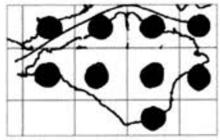
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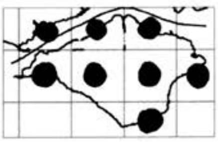
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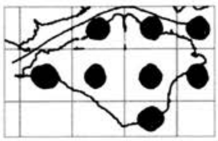
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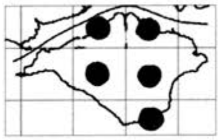
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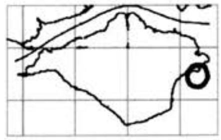
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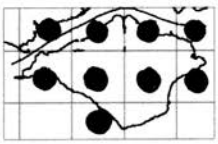
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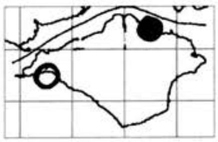
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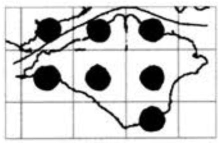
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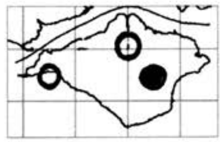
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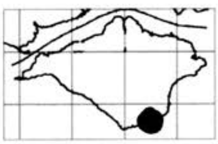
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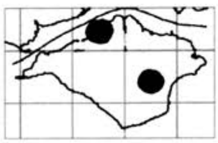
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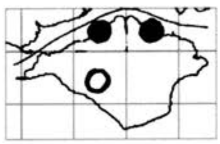
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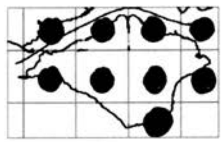
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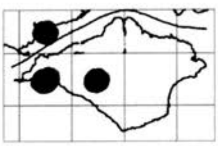
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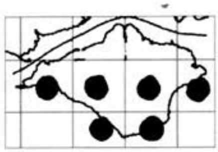
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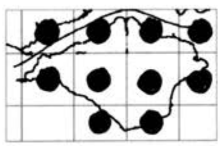
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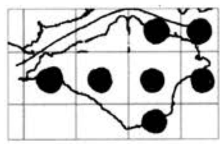
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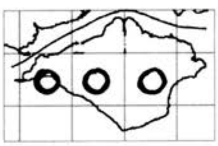
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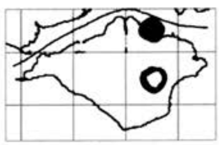
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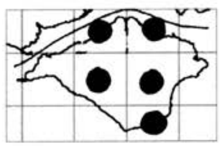
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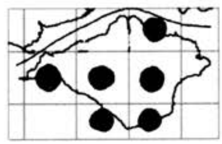
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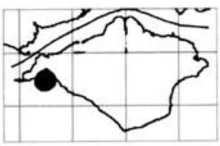
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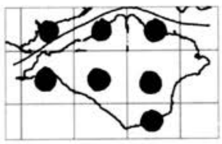
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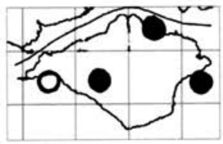
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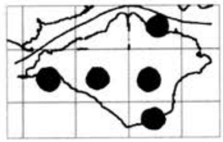
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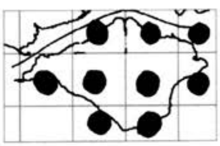
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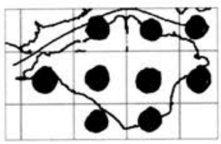
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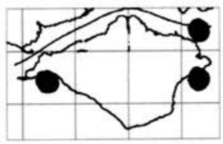
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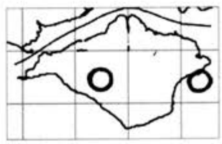
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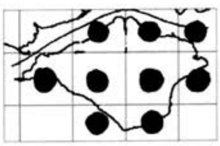
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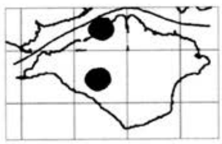
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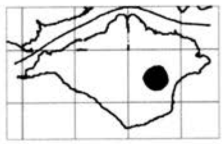
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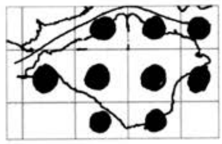
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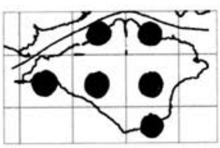
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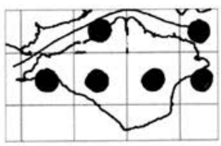
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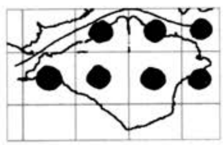
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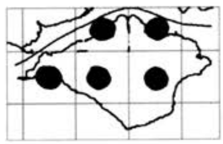
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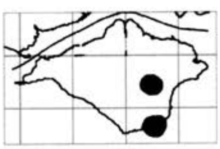
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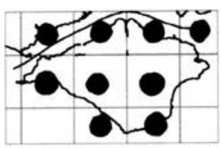
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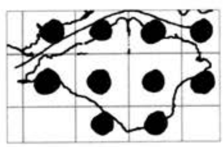
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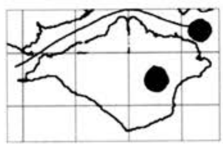
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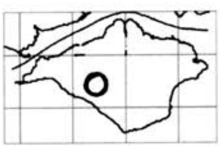
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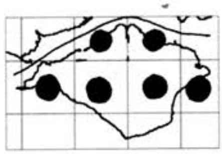
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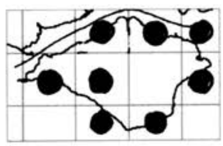
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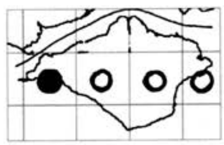
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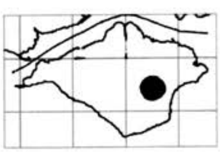
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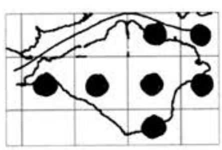
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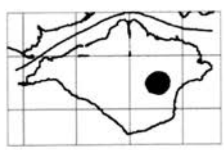
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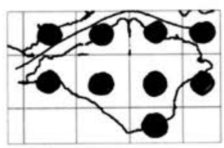
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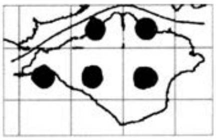
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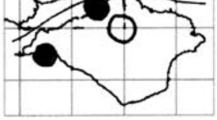
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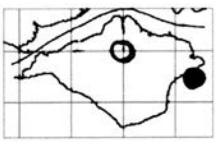
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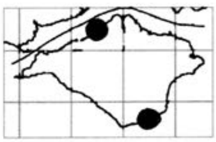
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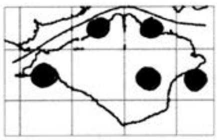
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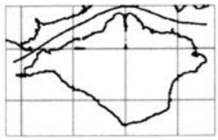
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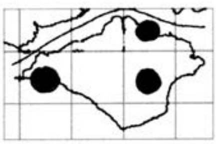
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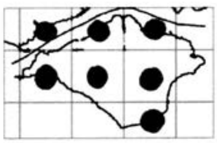
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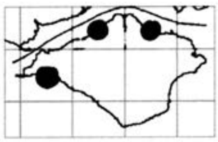
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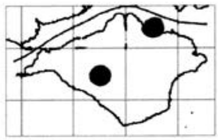
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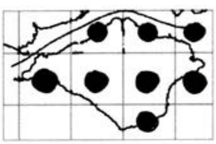
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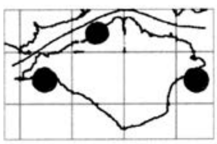
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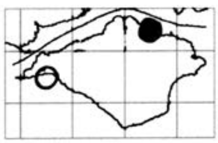
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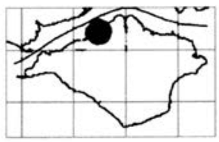
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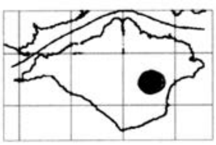
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FUNGI NEW TO THE ISLE OF WIGHT, 2007

Jackie Hart

Although we had a reasonably wet summer, by the time of the autumn season of fungus forays the weather was dry and remained so until late into November.

The following fungi have not previously been recorded on the Island:

Agarics and Boleti		
Amanita porphyria	Parkhurst Forest,	6th October, A.Outen
Coprinus hiascens	Briddlesford Copse,	7th October, A Outen
Inocybe phaeoleuca	Briddlesford Copse,	7th October, A. Outen
Inocybe praetervisa	Briddlesford Copse,	7th October, A. Outen
Inocybe pusio	Briddlesford Copse,	7th October, A. Outen
Psathyrella cotonea	Parkhurst Forest,	6th October, A. Outen

Ascomycetes		
Bisporella subpallida	Fattingpark Copse,	29th September, D.T. Biggs
Cercospora chenopodii	Limerstone,	27th August, D.T. Biggs
Cercospora mercurialis	Binstead,	12th January, D.T. Biggs
Christulariella depraedens	Parkhurst Forest,	6th October, A Outen & D.T. Biggs
Erysiphe pisi var. pisi	Newport,	21st August, D.T. Biggs
Erysiphe platani	Northwood Park,	13th September, D.T. Biggs
Gnomonia leptostyla	Northwood Park,	21stNovember, D.T. Biggs
Mycosphaerella macrospora	Ventnor Botanic Gdns	7th October, A Outen
Penicillium brevicompactum	Parkhurst Forest,	6th October, A Outen
Phoma minutula	Gurnard,	1st March, D.T. Biggs
Phoma samararum	Jersey Camp,	1st December, D.T. Biggs
Phomopsis rusci	Parkhurst Forest,	30th January, D.T. Biggs
Podosphaera tridactyla	Corf Camp,	13th October, D.T. Biggs
Pseudocercospora rubi	Parkhurst Forest,	6th October, D.T. Biggs
Pycnofusarium rusci	East Cowes,	26th January, D.T. Biggs
Pyrenochaeta ilicis	Lock's Copse,	3rd November, D.T. Biggs
Ramularia arvensis	Parkhurst Forest,	6th October, A Outen
Scutellinia umbrorum	Briddlesford Copse,	7th October, A Outen
Septogloeum carthusianum	Combley Farm Lane,	22nd July, D.T. Biggs

FUNGI NEW TO THE ISLE OF WIGHT, 2007

Oomycota		
Bremia lactucae	Bouldnor Forest,	19th June, D.T. Biggs
Teleomycetes		
Puccinia allii	Fairlee Cemetery	15th March, D.T. Biggs
Uromyces fallens	Newtown,	9th September, D.T. Biggs det. Dr N Stringer

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ADDITIONAL NEW FUNGI RECORDS TO THE ISLE OF WIGHT 2006

Jackie Hart

The following fungi have not previously been recorded on the Island and should be added to the list in the Proceedings Volume 22:

Ascomycetes			
Ascochyta vincae	Headon Warren,	16th May	DT. Biggs
Diaporthe nobilis	Northwood,	19th April,	D.T. Biggs
Elsinoë veneta	Chalkclose Copse	11th April	D.T. Biggs
Erysiphe penicillata	Freshwater,	20th October,	D.T. Biggs
Illosporiopsis christiansenii	Hurst Copse,	26th January,	D.T. Biggs Det - T.Preece
Periconia cookei	Dodnor,	2nd November,	D.T. Biggs
Ramularia filaris	Nansen Hill,	14th May,	D. Dana Det - D.T. Biggs
Ramularia primulae	Dodnor,	11th May,	D.T. Biggs
Venturia pirina	Gurnard,	8th September,	D.T. Biggs
Myxomycetes			
Ceratiomyxa fructiculosa	Firestone Copse,	14th October,	D.T. Biggs
Teleomycetes			
Cumminsiella mirabilissima	Carisbrooke,	18th April,	D.T. Biggs
Urocystis violae	Froglands,	27th April,	S. Blackwell Det - D.T.Biggs

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BATS (CHIROPTERA) - 2007

Colin R. Pope

A total of fourteen different bat species were recorded in 2007.
Nineteen house roosts were counted by bat group members and householders, the same number as in 2006. Members of the Bat Group took part in the Bat Conservation Trust 'Bats & Roadside Mammals Survey' for the third year running.

Graham and Donna Street's bat hospital was again kept busy throughout the year with a total of 187 bats, the highest count ever. They achieved a remarkable release rate of 77%.

Mist netting was again carried out by Ian Davidson-Watts, the final year of a survey carried out over a seven year period to sample a wide range of Island woods for their bat fauna, with particular reference to Bechstein's and Barbastelle bats. This year, a large number of woods (eighteen in total) were visited, a remarkable achievement in four weeks, considering the often poor summer weather. The sites netted were America Woods, Centurion's Copse (Bembridge), Dickson's Copse (Dodnor), Eaglehead Copse (Ashey), Firestone Copse, Fishbourne Copse (Quarr), Gatcombe Withy Bed, Kingston Copse, Peakyclose Copse (Nunwell), Barton Wood (Osborne), Rew Copse (Wroxall), Ruffins Copse (Northwood), Greatwood Copse (Shanklin), Apesdown (Swainston), Whitefield Wood, Woodhouse Copse (Whippingham), Mill Copse (Yarmouth) and Youngwoods Copse (Alverstone).

Since 2001, Ian Davidson-Watts has caught and radio-tagged bats by mist netting in a total of 43 different woods scattered across the Island. The results have started to build up a detailed picture of the Island's woodland bat populations. Table 1 provides a breakdown of the cumulative results and it can be seen that Bechstein's bat was the most frequently recorded woodland bat, present in 77% of the woods surveyed. Although this raw figure obscures interesting patterns of distribution and requirements of the species, it is nevertheless remarkably high. Surveys carried out by David Hill and Frank Greenaway in 2005 and 2006 in Hampshire, Surrey, Kent and East and West Sussex found a consistent but different pattern. Their commonest bat species, recorded in declining frequency, were Brown long-eared Bat, Natterer's, Whiskered and Bechstein's Bats.

Bat species	Number of woods recorded	% of total woods recorded	No. of individuals caught	Male:Female ratio
Bechstein's	33	77%	99	3:2
Brown Long-eared	20	47%	44	3:5
Barbastelle	19	44%	28	3:4
Natterer's	17	40%	29	1:2
Whiskered	14	33%	16	2:3
Common Pipistrelle	12	28%	30	2:3
Noctule	7	16%	8	-
Serotine	5	12%	12	1:6
Soprano Pipistrelle	3	7%	3	1:1
Brandt's	3	7%	4	0:1
Grey Long-eared	2	5%	2	0:1
Daubenton's	1	2%	1	1:0
Total			**276**	

Table 1 Bats captured by mist netting in Island woods 2001-2007

The following fourteen bat species were recorded throughout 2007:

Greater Horseshoe Bat (*Rhinolophus ferrumeqinum*)
A single individual was present in the Undercliff hibernaculum on 16 December (C&JP). No other records this year.

Daubenton's Bat (*Myotis daubentonii*)
One was recorded in the Shide Tunnel hibernaculum on 28 January and again on 13 February (C&JP).
Individuals were caught in harp traps set up at Sandown Levels, behind the zoo, a male on 11 August and a post-breeding female on 16 August (DB).
Five grounded individuals were treated by the Bat Hospital during the year. Individuals (males and juveniles) were found hanging on walls in the centre of Newport and Ryde and at Camphill Prison.

Whiskered/Brandt's Bat (*M. mystacinus/brandtii*)
The following records were of bats not determined to species level. A male was caught in a harp trap in Marshcombe Copse, Yaverland on 12 August (DB). A female was caught in a mist net in Centurion's Copse on 19 August (IDW).
The Bat Hospital received two individuals during the year, one from Blackgang Chine and one from Ryde.

Whiskered Bat (*M. mystacinus*)
A maximum of 21 were counted from a long-established house roost in Pallance Road, Northwood on 14 April (S&CC). They arrived early at the roost this year but had left by mid May.

Individuals caught in mist nets comprised a male on 16 June at Fishbourne Copse, Quarr; a non-breeding female on 18 June at Marshcombe Copse, Yaverland; a lactating female on 20 June in Youngwoods Copse, Alverstone; a male and a non-breeding female on 27 June in Mill Copse, Yarmouth; a female on 20 August in Peakyclose Copse, Nunwell; and a post-breeding female on 23 August in Dickson's Copse, Dodnor (all IDW/DB *et al.*).

Brandt's Bat (*M. brandtii*)
A pregnant female was caught in a mist net set up in Fishbourne Copse, Quarr on 16 June, indicating that there was a nursery roost close by (IDW, C&JP, C&JP).

Natterer's Bat (*M. nattereri*)
Two were recorded in the Shide Tunnel hibernaculum on 28 January and again on 13 February (C&JP).
Individuals caught in mist nets comprised two females (one lactating) in Fishbourne Copse, Quarr on 16 June; a male in Marshcombe Copse, Yaverland on 18 June; two females (one lactating) in Youngwoods Copse, Alverstone on 20 June; a male in Barton Wood, Osborne on 22 June; a lactating female in Firestone Copse on 23 June; 5 lactating females in Woodhouse Copse, Whippingham on 25 June; a female in Mill Copse, Yarmouth on 27 June; a male in Peakyclose Copse, Nunwell on 12 August; and one at Gatcombe Withy Beds on 20 August (IDW *et al.*). 2 males were caught in harp traps set up on Sandown Levels behind the zoo on 20 June (DB).
Four individuals were treated in the Bat Hospital, from Godshill (two individuals on different occasions), Wootton and on Tennyson Down.

Bechstein's Bat (*M. bechsteinii*)
Once again, mist netting and radio-tracking again led to the discovery of many further sites and maternity roosts for this species (all IDW *et al*).
Two males and three females were caught in mist nets set up in Fishbourne Copse, Quarr on 16 June; one pregnant female was radio-tagged and tracked back to a nursery roost in an ash tree in the wood. A pregnant female was caught in Woodhouse Copse, Whippingham on 25 June and radio-tracked to a roost in an ash tree in Brocks Copse where 10 bats emerged the following evening. A mite-infested adult female was caught in Whitefield Woods on 11 August. At Peakyclose Copse, Nunwell, four juvenile males and a lactating female were caught on 12 August; the female was radio-tracked to an ash tree in the wood where at least 15 emerged the following evening. America Wood yielded 6 bats, mostly female on 17 August. Gatcombe Withy Bed produced seven bats (males, females and juveniles) on 20 August; a tree roost was subsequently located in an oak tree in the grounds of Gatcombe House.
The most surprising results came from Kingston Copse, an isolated wood in the exposed south-west of the Island. On 13 August, a total of 16 females and juveniles of both sexes were caught in mist nets; clearly the nets had been set up close to a roost. By radio tracking, two tree roost sites were located in and near the wood and emergence counts yielded around 18 to 22 bats. These bats were believed to have bred earlier than roosts in America Wood on the eastern side of the Island.
In addition to these sites, single males were caught at Marshcombe Copse, Yaverland on 18 June; Barton Wood, Osborne on 22 June; Mill Copse, Yarmouth on 27 June; Round Copse, Swainston on 16 August; Centurion's Copse, Brading on 19 August; Rew Copse, Wroxall on 22 August; and Dickson's Copse, Dodnor on 23 August.
The Bat Hospital received two individuals, a female from Newport town centre and a juvenile male from Whippingham.

Noctule (*Nyctalus noctula*)
This species was recorded a few times by bat detector during the summer. Two were heard at Marshcombe Copse, Yaverland on 17 June; two were heard at Eaglehead Copse on 19 June; one was heard at Barton Wood, Osborne on 22 June; one was heard in Whitefield Woods on 11 August; several were heard at Nunwell, having probably emerged from the Hanger woodlands, on 20 August; and several were heard above Dickson's Copse, Dodnor on 23 August (all IDW).
The house roost at Havenstreet Station, regularly counted and believed to belong to Serotines, was further investigated this year (see last years report) and found to hold both a Noctule roost for most of the summer and a Serotine roost sporadically during the summer. The Noctules were particularly noisy and emerged early. A maximum of around 47 were counted on 12 June (C & JP). This is clearly a large roost of what is considered to be a scarce bat on the Island and must hold a significant proportion of the Island population of Noctules. Normally a tree dwelling bat, roosts in buildings are known, particularly in Eastern England and on the Continent. Mixed roosts with Serotines have been recorded elsewhere occasionally. Noctules were seen emerging from the Havenstreet roost as late in the season as 17 October (CC).

Serotine (*Eptesicus serotinus*)
A maximum count of 51 bats was recorded from the Meadow Cottage roost, Lower Adgestone, on 27 June (JR).
The house roost at Havenstreet Station, was proven to be a mixed Serotine / Noctule house roost (see above). On 2 August, a maximum of 46 Serotines were counted out (C&JP).
When the Grey Long-eared Bat roost at Niton was visited on 22 September, one Serotine bat was seen in the loft. This is the first time this species has been seen here but it was recorded in July 2004 during dawn swarming counts.
A dead female was killed on the road at Strawberry Lane, Brighstone on 23 April (RL).
The Bat Hospital received ten individuals including one hibernating with 3 Pipistrelle bats in the cavity wall of an inside chimney breast at Priory Hotel, Seaview.

Pipistrelle (*Pipistrellus pipistrellus* / *P. pygmaeus*)
Accumulating data continues to support the hypothesis that, of the two sibling species, the Soprano Pipistrelle, *Pipistrellus pygmaeus* is by far the scarcest species.
Of our few known large maternity roosts, a house roost at Hamstead had a maximum count of 125 on 8 June and a maximum count of 228 (lower than last year) was counted out from a house in Hamstead Road, Cranmore on 16 June.
For the first time in nineteen years, the known *Pipistrellus pygmaeus* colony did not return to their nursery roost in Quarr Road, Quarr.

Nathusius Pipistrelle (*P. nathusii*)
There were three records this year, all from the Bat Hospital and all during the summer months. They were from Gunville, Albany Prison and Sandown.

Brown Long-eared Bat (*Plecotus auritus*)
Brown Long-eared Bats were frequently recorded during mist netting sessions in many of the woods investigated. They were the only species caught in Ruffin's Copse on 24 August – a male and a juvenile female with a centipede in its mouth were caught together at 23.20 hours (IDW, DB, C&JP, S&CC).
The Bat hospital dealt with three individuals over the year.

Grey Long-eared Bat (*P. austriacus*)
A non-breeding female caught in a mist net in Youngwoods Copse, Alverstone on 20 June (IDW, J&DG). About 6 individuals were counted in the roofspace of the traditional summer roost site at Niton on 22 September (LF, C&JP).
The Bat Hospital received five individuals for treatment. These were from Wootton, Winford, Bembridge and Shorwell.

Barbastelle (*Barbastella barbastellus*)
Mist netting and radiotracking once more led to the discovery of further sites and maternity roosts for this rare woodland species. A male was caught in Barton Wood, Osborne on 22 June; two females were caught in Peakyclose Copse, Nunwell on 12 August; a male was caught at Gatcombe Withy Bed on 22 August (all IDW). One of the adult females caught in Peakyclose Copse was radio tagged on 12 August and tracked the following night to a veteran oak tree on the Nunwell Estate close to Nunwell House. A maternity roost remained in this or a nearby oak for at least a week (IDW). A maximum emergence count of 25 bats was made one evening (C&JP).
Barbastelles were also heard on time expansion bat detectors at Whitefield Woods on 11 August; America Woods on 17 August; and Rew Copse, Wroxall on 22 August (IDW).
One was recorded on a Tranquility bat detector during a 'Bats and Roads' Bat Conservation Trust survey from the middle of Godshill on 7 August (C&JP, call confirmed by Jules Agate).
The Bat Hospital received two individuals, an adult female at Southford, Whitwell in the late summer and an adult male at Rew Street, Gurnard in November.

Acknowledgements
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THE FRESHWATER FAUNA OF THE PAN STREAMS, NEWPORT, ISLE OF WIGHT

Rebecca C. Cooksley & Roger J.H. Herbert

Introduction

The macrofauna of the Island's freshwater streams is largely unrecorded, although extensive work has been carried out on the River Caul Bourne, Lukely Brook and Rodge Brook in the late 1980s (Herbert, 1991). Surveys have also been carried out on the River Medina (Herbert & Riley, 1998) and, more recently, the Wroxall Stream (Cooksley & Herbert, 2006). Monitoring is carried out by the Environment Agency on the Lukely Brook, Caul Bourne, River Medina and Eastern Yar as part of their river quality assessment programme. With the exception of Crosskey (1982) who carried out a qualitative search for blackfly larvae (Diptera: Simuliidae) in the early 1970s (stream near Barton 0.5 km E. of Newport) no known previous survey has been carried out on the Pan streams.

The Pan streams flow through fields of pasture and arable farmland, south-east of the Pan estate, Newport, Isle of Wight (Figure 1). The northern, central and southern tributaries converge just upstream of the Pan Lane road bridge, where the course continues through the housing estate to the River Medina.

For at least part of their course, all three streams flow across the Solent Group which is a mixture of impermeable clays and sands (Insole *et al*, 1998).The source of both the northern and central streams can be found in the clay and these tributaries are most likely to experience intermittent water flow during periods of low rainfall. The clear, continuously flowing southern stream is the primary tributary and has its source in the chalk near Little East Standen Farm (SZ 527 878).

Four surveys have been conducted over a period of five years to investigate the species richness and composition of these streams. The biological data were also used to assess the water quality.

Methods

Four surveys took place across seven sites between December 2004 and January 2008 on the following dates:

Survey 1: 1st and 2nd December 2004
Survey 2: 7th and 8th December 2005
Survey 3: 15th and 18th May 2006
Survey 4: 2nd and 7th January 2008

Sites 1 to 5 were sampled on every occasion, whereas Sites 6 and 7 were only surveyed in 2008.

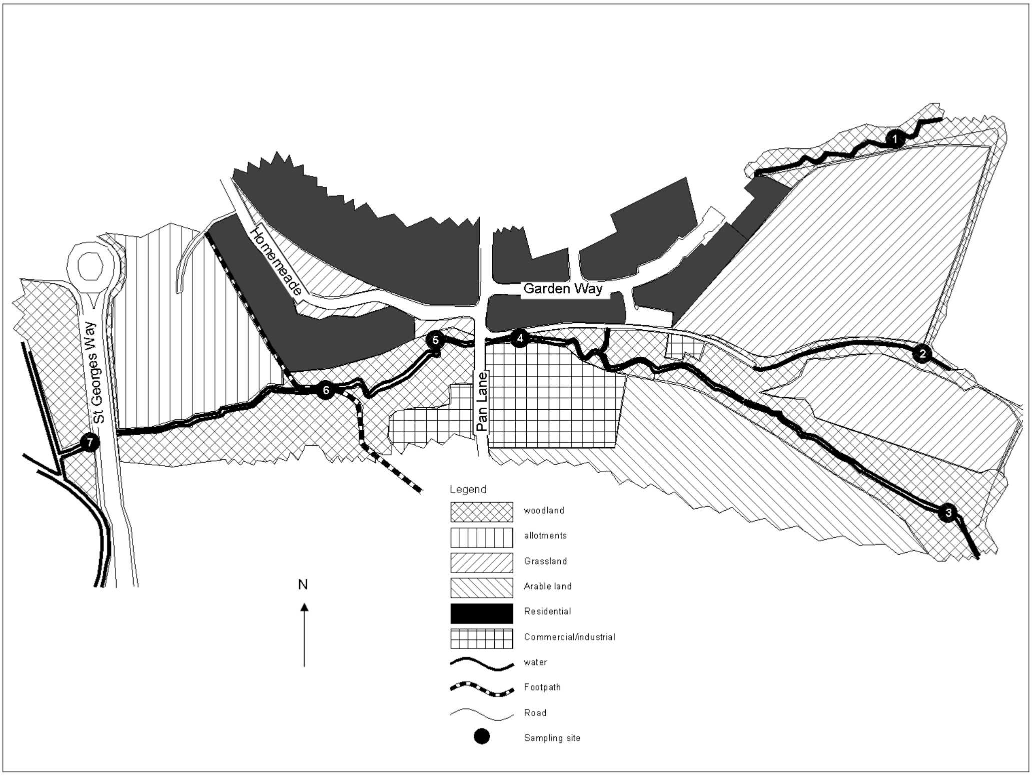

Figure 1. Locations of sampling sites in the Pan Stream catchment, Newport.

Site Descriptions

Site 1: SZ 51027 88887
The Northern stream. River banks are mainly wooded with Hazel, Oak and Holly. Bryophytes and Hart`s-tongue fern may also be found. Discarded refuse is often observed. Small dams, assumed made by children, impound water at various points along the stream The substrate is mostly composed of sub-angular gravel mixed with silt in areas of low flow.

Site 2: SZ 51050 88704
The Central stream. This stream was much narrower than Site 1 and the banks are lined with Ash, Hawthorn, Field Maple, Wild Rose, Ivy and Hart`s-tongue fern. It also has an intermittent flow. The substrate is mainly silt, with occasional fine gravel.

Site 3: SZ 51080 88558
The Southern stream. Hazel, Oak, Holly, Bryophytes, Hart`s-tongue fern are present on both banks, although at a greater density than the northern stream. Beech and conifers are also present on the northern bank. The substrate is largely composed of rounded and sub-angular gravel mixed with silt in areas of low flow.

Site 4: SZ 50712 88717
30m upstream of the bridge that crosses Pan Lane, by the garage. This site is comparatively open and has a mature Oak on the northern bank. Organic matter/sewage effluent discharge has been intermittently observed just downstream of the sampling point where there is a motor car garage. The substrate is largely composed of rounded and sub-angular gravel mixed with silt.

Site 5: SZ 50636 88716
50m downstream of the bridge. Oak, Alder, Willow, Ivy and Stinging Nettles are found along the banks at this site. Fool's Watercress, *Apium nodiflorum*, is also present at the edge of the channel. Discarded refuse, including bin bags, aerosol cans and metal, litters the banks and can obstruct water flow.

Site 6: SZ 5054 8867
At the location of a small footbridge approximately halfway between the road bridge that crosses Pan Lane and confluence with the River Medina. Alder, Willow and Ash are found at this site, along with Soft Shield and Hart's-tongue fern, Ivy, Stinging Nettles and Liverwort. Fool's Watercress, *Apium nodiflorum*, is found in the stream, and there are also small dams, assumed made by children. The substrate is largely comprised of rounded or sub-angular gravel mixed with silt. When surveyed there was some evidence of littering and a small campfire on one of the banks.

Site 7: SZ 5035 8862
Immediately downstream of St George's Way, just upstream of the confluence with the River Medina. Clean gravel bed but two drainage pipes carrying road run-off enters the stream at this location.

A 3 minute 'kick sample' was taken at each site using a standard 1 mm mesh pond net. The net was moved from one side of the stream to the other to ensure all habitats were sampled. In addition, a qualitative sample was taken, which involved a visual survey of the area as well as taking samples from different areas. The samples were taken back to the laboratory for identification, which was to species level where possible, with nomenclature according to Furse & Davy-Bowker (2007).

When measurable, the flow rate of each site was determined by timing a float over a known distance. The channel width, average width of the water within the channel and average water depth was also recorded. Temperature and oxygen concentration were measured using a YSI 550 Dissolved Oxygen & Temperature meter. A water sample was also obtained to determine electrical conductivity by using the pHOX-systems model 52E meter. In addition, the pH and nitrate concentration of the water sample was also determined during Survey 4.

Results

A total of 50 taxa were found across the series of surveys. The most abundant species/taxa were the gastropod snail *Potamopyrgus antipodarum*, oligochaete worms (Tubificidae spp.)., freshwater shrimp *Gammarus pulex* and midge larvae (Chironomidae spp.). The orders contributing the most species/taxa were Trichoptera and Diptera, both with 13 & 14 taxa respectively. The distribution of taxa amongst major groups is shown in Table 1.

Site 1 was dominated by the freshwater shrimp, *Gammarus pulex*, with a few other species much lower in number. It had a total species richness of 20 (Figure 2a) and a very low mean diversity (calculated using the Shannon-Weiner diversity index) of 0.42 as a result of the dominance of the one species (Figure 2b).

Site 2 was notably different to the other sites. The central stream on which it is situated is much narrower, shallower and has a slow flow rate compared to the other streams (Table 2). It had the lowest total species richness of 17 and was dominated by oligochaetes and chironomids resulting in a mean diversity index of 1.16. It had a number of species not found at the other sites, including the cased caddisfly larva (Trichoptera) *Stenophylax permistus*, the bivalve *Pisidium sp*. and the stonefly larva (Plecoptera) *Nemoura cinerea.*

Site 3 had very large numbers of *Gammarus pulex* and Tubificidae along with many individuals of several other species giving a mean diversity of 1.96. With the exception of the flatworm *Polycelis felina* and the fly larva (Tabanidae), every species found at Site 3 was also found further downstream at Sites 4 or 5.

Site 4 had the most species represented with a total species richness of 46 and the highest mean diversity index of 2.20 (disregarding Site 6 which was only surveyed once). The most abundant species/taxa were *Gammarus pulex,* Tubificidae and the freshwater snail *Potamopyrgus antipodarum.*

Site 5 the fauna was very similar to Site 4. Of the 41 species recorded at Site 5, 80% were also recorded at Site 4. The additional species/taxa were the flatworm *Dendrocoelum lacteum,* the crustacean Copepoda sp., the caddisfly larvae (Trichoptera) *Lype reducta, Hydropysche siltalai, Micropterna sequax,* and the fly larva (Diptera) *Tetanocera sp*. At 1.71, the mean diversity index was lower than Site 4. However, the diversity index for Survey 4 was much higher at 2.33.

Site 6 was only surveyed in 2008 and had a species richness of 27 of which 100% of the species found were also observed at either Site 4 or 5. Site 6 had a Shannon-Weiner diversity index of 2.21.

Site 7 was also first surveyed in 2008 and had a species richness of 16. Like Site 6, 100% of the species found were also recorded at the Sites immediately upstream. The fly larvae (Diptera : Chironomidae) was notably abundant in comparison to the other species resulting in a diversity of 1.09.

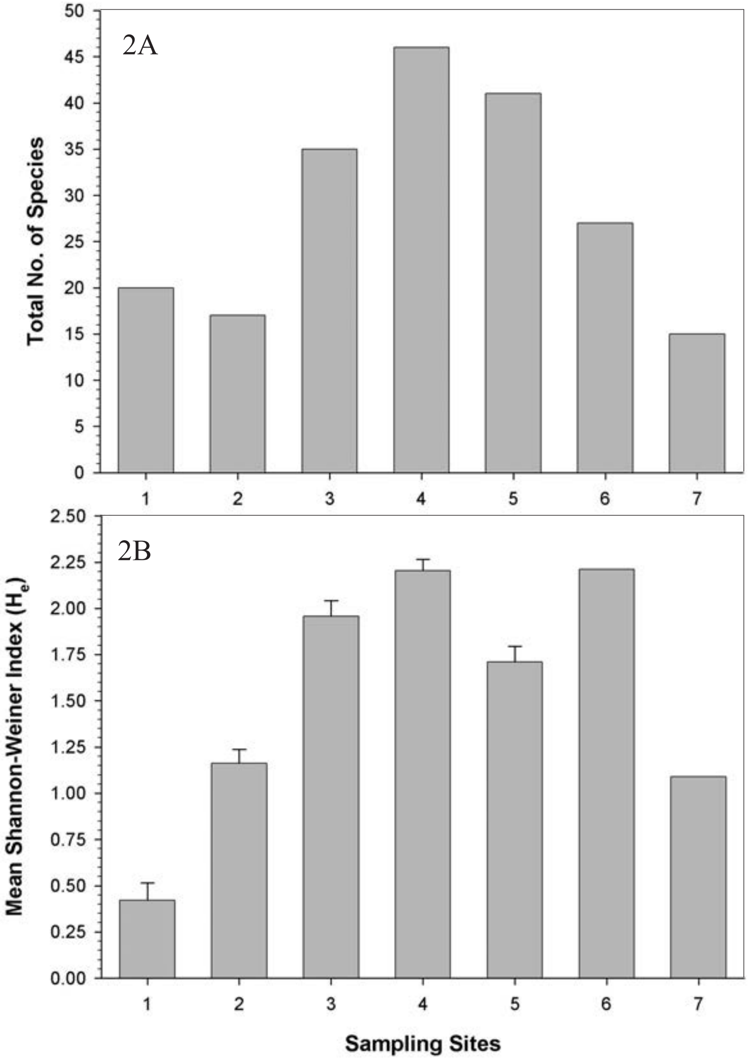

Figure 2. Total Species richness (A) and maximum Shannon-Weiner diversity index (B) recorded at each sampling site. Error bars show + SE (Standard Error).

To assess the water quality of each site, the biological condition was analysed in preference to using chemical data because populations of aquatic invertebrates are sensitive to intermittent pollution incidents. The Biological Monitoring Working Party (BMWP) score system (Hawkes 1997) is currently employed by the Environment Agency and was used to analyse the invertebrate communities of the Pan Streams. BMWP and associated ASPT (Average Score Per Taxon) scores for each survey are presented in Table 4. Generally, the greater the BMWP and ASPT scores the higher the water quality, Site 2 had the lowest mean BMWP and ASPT scores, of 20 and 3.6 respectively. Site 1 had the highest mean ASPT score, yet one of the lowest BMWP scores. Site 4 had the highest mean BMWP score of 94. The mean BMWP and ASPT scores for Site 5 (64 and 4.6 respectively) were notably lower than those for Site 4 (94 and 5.1). However, Site 5 values for the 2006 and 2008 surveys were considerably higher than those of 2004 and 2005 and comparable with Site 4.

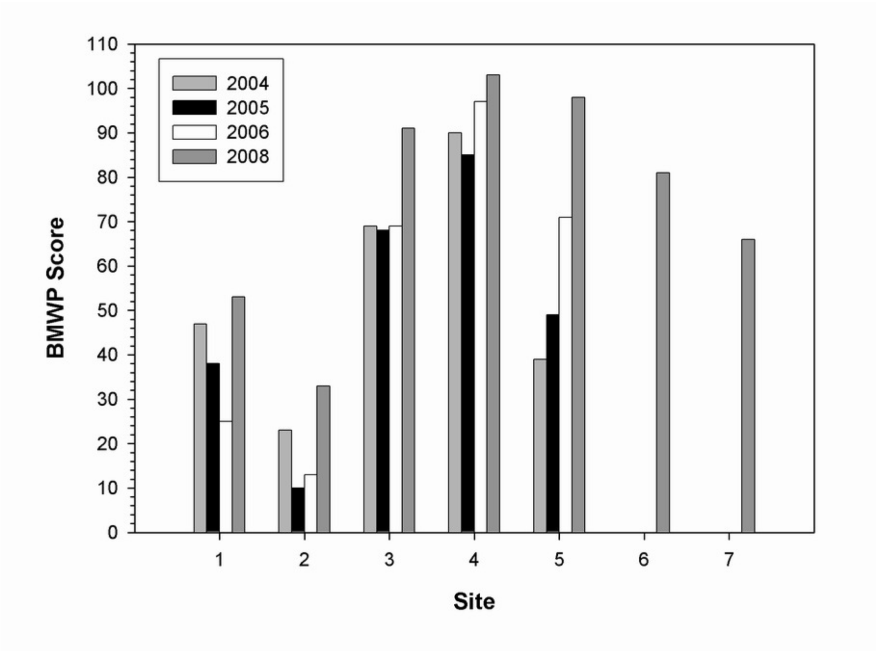

Figure 3. BMWP scores recorded at sampling site during each survey.

Discussion

The Pan Streams comprise of three tributaries which converge just upstream of Site 4. The northern stream and central streams, on which Sites 1 and 2 are situated, both have their source in clay. As a result these streams are likely to be subject to intermittent water flow. The ephemeral nature of these streams contributes to the low species richness and diversity of Sites 1 and 2. The central stream, which is shorter and is especially narrow and shallow with very little flow, is notably different in species composition and several species were only found at Site 2 during the entire survey period.

Despite being low in the number of different species, which affected the BMWP scores (Fig 3), Sites 1 and 2 contained some invertebrates which are known to be reasonably sensitive to pollutants and would not be found in streams of very low water quality, such as caddisfly larvae (Trichoptera) from the family Limnephilidae. Of particular note, the cased caddisfly larva *Stenophylax permistus*, which was found at Site 2, has not been recorded on the Island since Blair (1950). The blackfly larva *Simulium ornatum* not recorded in the Pan Streams by Crosskey (1982) was recorded at locations 3-7.

The southern tributary has its source in the chalk, resulting in a regular flow of clear water even in dry summer months. Consequently, Site 3 has a reasonably high species richness, biodiversity and BMWP and ASPT scores. Several species were recorded which have little tolerance of poor water quality, such as the cased caddisfly larva, *Sericostoma personatum* and the mayfly nymph, *Habrophlebia fusca*, which both score a maximum of 10 on the BMWP scale. Other caddisfly larvae such as the caseless species *Plectrocnemaia conspersa* and cased species from the family Limnephilidae also contribute to the stream's high score.

The convergence of the three tributaries above Site 4 may have contributed to the higher species richness and diversity recorded at this location. In the most part, the same species were found at Sites 4, 5, 6 and 7 as at Site 3 suggesting that the southern stream, with its regular flow of water, is the primary tributary. The benthic communities of Sites 3 to 5, dominated by *Potamopyrgus antipodarum* and *Gammarus pulex*, with leeches (Hirudinea), mayflies nymphs (Ephemeroptera), including *Serratella ignita* (formerly *Ephemerella ignita*) in the early spring, and up to 11 species of caddisfly larvae (Trichoptera), are very similar to those of the River Caul Bourne and Lukely Brook (Herbert, 1991) which are typical of clean chalk streams.

During the surveys that took place in December 2004 and 2005 there was an apparent reduction in species richness between Site 4 and Site 5 along with a decrease in BMWP and ASPT scores, which could be linked to a water pipe immediately downstream of Site 4 that was observed to discharge organic matter/sewage effluent. However, the two most recent surveys (May 2006 and January 2008) showed very little difference in the water quality of the two sites suggesting recovery. There may also be some indication that the water quality decreases further downstream, due to urban run-off, because of the increased proximity of the stream to the road and houses. This may be more apparent at Site 7.

The overall water quality of all the sites sampled is comparable to other streams on the Island, such as the Lukely Brook at Westminster Lane (Herbert & Ager, 2001; Medgett, pers. com.), the River Medina at Shide (Herbert & Riley, 1998; Medgett, pers. com.) and the River Caul Bourne at Winkle Street (Herbert, 1991).

None of the species were nationally scarce although the cased caddisfly *Limnephilus rhombicus* was recorded for the first time on the Island, and the cased caddisfly larva *Stenophylax permistus* has not been recorded since Blair (1950). The Bullhead fish, *Cottus gobio* was also found at several sites, which although is common on the Isle of Wight is listed on Annex II of the EC Habitats and Species Directive. The European Eel *Anguilla anguilla* is not listed on the EC Habitats and Species Directive, is found on the list of UK Priority Species of the UK Biodiversity Action Plan.

Acknowledgements

Island 2000 Trust commissioned the Medina Valley Centre to carry out these surveys. The authors would also like to thank John Blackburn from the Centre for Ecology and Hydrology for assisting in the identification of Trichoptera and Diptera specimens and Shirley Medgett from the Environment Agency for valuable data from the Lukely Brook and River Medina.

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Table 1. Maximum number of individuals of each species found at each of the seven sampling sites at Pan, Isle of Wight, between December 2004 and January 2008 (Fig 1). Abundance is recorded on a logarithmic scale, where 1=1-9 individuals, 2=10-99 individuals, 3=100-999 individuals etc. Species only found in qualitative samples are indicated by ● Nomenclature is according to Furse & Davy-Bowker (2007)

Site	1	2	3	4	5	6	7
Platyhelminthes							
TRICLADIDA							
Dendrocoelum lacteum					1		
Polycelis felina	1		1				
Mollusca							
GASTROPODA							
Ancylus fluviatilis	2		2	2	2	2	1
Galba truncatula		1					
Potamopyrgus antipodarum			2	3	3	2	2
Radix balthic		1	2	1	1		1
BIVALVIA							
Pisidium sp.		2					
Annelida							
OLIGOCHAETA							
Lumbriculus variegates		2	1	1	1	1	1
Oligochaeta indet.		2					
Stylaria lacustris	1		1	1	1	1	
Tubificidae indet.	1	3	3	3	3	2	1
HIRUDINEA							
Erpobdella octoculata				2	●	●	
Glossiphonia complanata	1		1	2	1	1	1
Helobdella stagnalis				1			
Arthropoda							
HYDRACARINA							
Hydracarina spp. Indet .	1		2	2	2	2	1
CRUSTACEA							
Asellus aquaticus				1	1	1	1
Copepoda indet.	1	2	1		1		
Gammarus pulex	3		3	3	2	2	1
Ostracoda indet.		1					
Prosellus meridianus				1	1	1	
INSECTA: EPHEMEROPTERA							
Baetis rhodani			2	1	2		1
Habrophlebia fusca	●		1	1	1	2	1
Serratella ignita				1	1		

Table 1 cont. Maximum number of individuals of each species found at each of the seven sampling sites at Pan, Isle of Wight, between December 2004 and January 2008. Abundance is recorded on a logarithmic scale, where 1=1-9 individuals, 2=10-99 individuals, 3=100-999 individuals etc. Species only ever found in the qualitative sample are indicated by ● Nomenclature is according to Furse & Davy-Bowker (2007).

Site	1	2	3	4	5	6	7
INSECTA: PLECOPTERA							
Nemoura cinerea		1					
INSECTA: HEMIPTERA							
Notonecta sp.			●	●	1		
Velia caprai				●	●		
INSECTA: COLEOPTERA							
Coleoptera indet.			1				
Dytiscidae indet.		1		1			
Elmis aenea	1		2	1	2	1	
Elmis aenea larvae				1	1	1	
Gyrinidae indet.					●		
Limnius volckmari			1	1		1	
Scirtidae indet. larvae	1		1	1			1
Stictotarsus duodecimpustulatus				1	●		
INSECTA: TRICHOPTERA							
Agapetus fucipes			1	1	2	1	
Chaetopteryx villosa			1	1	1		
Halesus radiatus			1	1	1	1	
Hydropsyche siltalai			2		1		
Limnephilidae indet.					1		
Limnephilus lunatus				1		●	
Limnephilus rhombicus			2	●	1		
Lype reducta					1		
Micropterna sequax	1		1		1	1	
Plectrocnemia conspersa	1		1	1			
Sericostoma personatum			2	2	2	2	1
Stenophylax permistus		2					
Tinodes waeneri				1			

Table 1 cont. Maximum number of individuals of each species found at each of the seven sampling sites at Pan, Isle of Wight, between December 2004 and January 2008. Abundance is recorded on a logarithmic scale, where 1=1-9 individuals, 2=10-99 individuals, 3=100-999 individuals etc. Species only ever found in the qualitative sample are indicated by ● Nomenclature is according to Furse & Davy-Bowker (2007).

Site	**1**	**2**	**3**	**4**	**5**	**6**	**7**
INSECTA: DIPTERA							
Chironomidae indet.	1	3	2	2	3	2	3
Chironomus sp.	1	3	1	●			
Dicranota sp.	1		2	1	1	1	1
Dixa sp.	1				●		
Dolichopodidae indet.		1					
Muscidae indet.				1	1		
Pedicia sp.		1	1	1			
Pilaria discicollis group		1					
Ptychopteridae indet.	1		1	1			
Simulium ornatum group larvae			2	1	2	2	1
Simulium ornatum group pupae						●	
Tabanidae indet.	1		●				
Tetanocera sp.					1		
Tipula sp.	●	1	1	1	1	●	
Tonnoiriella sp.				1			
Vertebrata							
PISCES							
Anguilla anguilla (Eel)				●			
Cottus gobio (Bullhead)				1	1	●	
Gasterosteus aculeatus (3-spined stickleback)				●			

Table 2 Abiotic data for each of the sampling sites at Pan, Isle of Wight, for the four surveys taken place between December 2004 and January 2008

	SAMPLING SITES AT PAN							SAMPLING SITES AT PAN						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	DECEMBER 2004							DECEMBER 2005						
Temperature (°C)	6.6	7.7	7.0	6.9	6.9	-	-	5.2	6.0	5.8	7.6	7.6	-	-
Oxygen % Sat.	78	74	78	78	75	-	-	90	21	88	86	86	-	-
Conductivity (µS)	400	560	370	390	400	-	-	370	560	520	360	360	-	-
pH	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Channel width (m)	-	-	-	-	-	-	-	1.05	0.58	1.53	2.30	2.33	-	-
Water width (m)	0.75	<0.5	0.65	1.8	1.75	-	-	0.82	0.33	1.37	1.88	2.02	-	-
Depth (cm)	5.0	3.0	5.0	5.5	5.0	-	-	4.3	3.0	24.7	9.3	8.3	-	-
Flow rate (m/s)		-	-	0.08	-	-	-	0.12	-	0.08	0.33	0.5	-	-
	MAY 2006							JANUARY 2008						
Temperature (°C)	12.5	11.9	12.1	12.8	13.0	-	-	6.8	7.2	7.2	7.6	7.5	7.5	-
Oxygen % Sat.	79	33	81	87	86	-	-	82	74	83	81	80	82	-
Conductivity (µS)	520	830	440	440	470	-	-	480	600	470	440	440	450	330
pH	-	-	-	-	-	-	-	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Nitrate (mg/l)	-	-	-	-	-	-	-	8.8	0.0	2.2	8.8	8.8	8.8	-
Channel width (m)	0.88	0.63	1.60	2.17	2.27	-	-	1.23	0.90	2.60	2.93	3.13	2.27	3.50
Water width (m)	0.63	0.38	1.50	1.75	1.82	-	-	0.68	0.52	1.60	2.00	2.30	1.90	2.80
Depth (cm)	4.7	5.3	10.7	9.3	8.3	-	-	5.3	8.7	10.3	10.0	10.0	15.0	10.0
Flow rate (m/s)	0.08	-	0.09	0.17	0.13	-	-	0.13	-	0.18	0.35	0.43	0.23	0.25

Table 3.Species Richness and Shannon-Weiner diversity index for each sampling site at Pan, Isle of Wight for each of the surveys taken place between December 2004 and January 2008

	1	2	3	4	5	6	7
Species Richness 2004	16	9	27	23	16	-	-
Species Richness 2005	8	5	18	24	15	-	-
Species Richness 2006	7	5	18	25	22	-	-
Species Richness 2008	12	10	24	32	27	27	16
Shannon-Weiner 2004	0.50	0.76	1.20	2.48	1.81	-	-
Shannon-Weiner 2005	0.54	1.41	2.17	1.66	1.57	-	-
Shannon-Weiner 2006	0.13	0.81	2.09	2.33	1.13	-	-
Shannon-Weiner 2008	0.51	1.67	2.36	2.34	2.33	2.21	1.09

Table 4. The Biological Monitoring Working Party (BMWP) scores and Average Score Per Taxon (ASPT) for each of the sampling sites at Pan, Isle of Wight, for the four surveys which took place between December 2004 and January 2008.

	SAMPLING SITES AT PAN							SAMPLING SITES AT PAN						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	DECEMBER 2004							DECEMBER 2005						
BMWP score	47	23	69	90	39	-	-	38	10	68	85	49	-	-
Total scoring taxa	10	6	14	17	10	-	-	7	3	14	18	12	-	-
ASPT	4.7	3.8	4.9	5.3	3.9	-	-	5.4	3.3	4.9	4.7	4.1	-	-
	MAY 2006							JANUARY 2008						
BMWP score	25	13	69	97	71	-	-	53	33	91	103	98	81	66
Total scoring taxa	5	4	13	18	14	-	-	9	8	17	21	19	16	14
ASPT	5.0	3.3	5.3	5.4	5.1	-	-	5.9	4.1	5.4	4.9	5.2	5.1	4.7

OBITUARY

In memory and appreciation of Lou Cox

'If a job's worth doing, it's worth doing well'

It's an old adage, often quoted among people of my generation - and beyond. Whether it is one which influenced Lou's approach to life, or - more likely - a perception natural to his disposition, it is an attitude which was manifest in everything he did as a professional teacher, or any activity he became involved in by choice or by chance.

I am not familiar with the details of his younger days—his early teenage or early adulthood - but I know that, among other things, he was a noteworthy athlete. This would account for his professional emergence in teaching as a Physical Training instructor. At a guess, I imagine his success as a runner, would be as much determined by his mental approach to attaining excellence in every activity in which he became involved, as by any natural talent he inherited for athletic pursuits.

He joined the staff at Cowes school as Head of 'P.E' in 1962, a few weeks before I left, with my wife and son, to take up an appointment in New Zealand. There was scarcely time for me to get to know him, or to expect he might be the person who would replace me by taking over the onus of maintaining the school's involvement in affairs at Newtown. I had some misgivings on that account, as I knew very little about my successor - to- be as Head of science.

But Lou had heard about the happenings at Newtown. Filled with curiosity about such an unusual extraneous school activity, he approached me to satisfy it. Have in mind that, at this stage, he had no experience of photographic processing, of field photography or - apparently - of organised natural historical research. He was so intrigued by the unusual nature of what we had been engaged in (the 'Battle' was now over) that he asked if there was any chance he could visit the scene of our four years of activity.

I still had a few weeks before leaving the school and, acting on impulse, I offered to take him (and his wife Mary) out there on the following week-end. They were both impressed by what they saw and expressed an interest in being involved. On the return trip (by dinghy) I mentioned my concern that my successor may not share my interest in continuing to promote the school's participation in future developments related to the area's new status as a Nature Reserve. To my delighted surprise, he - supported by Mary - replied ..... "Don't worry George, we'll look after it for you". Thus began a new and vital era in the history of Newtown' s development.

'No promise was ever better kept'

This is a quotation from the account of my first discovery of Newtown, written many years ago. It refers to Lou's comment - above - and underlines another facet of his approach to life. If he accepted a responsibility, he could be relied upon to honour it. I was amazed on my first home visit, to see the results of his caretaking of the Cowes contribution to continuing schools input in developing the new reserve. He had joined forces with the indefatigable Oliver Frazer to keep a large contingent of local schools enthusiasts active in appropriate field activities. The photographic contributions by the Cowes group was well up to earlier standards of genuine exhibition quality.

In achieving these results, he demonstrated for me that special skill revealed by some teachers - the ability to draw out of his charges more than he attempted to put into them. How otherwise could such results have been achieved under the direction of one who started with almost no experience of the skills involved.? I was at first amazed and then uplifted by the prospect that traditions laid down in the fifties were being maintained in the sixties with every prospect of a long future of continuing success. Subsequent revisits justified my confidence.

This attribute would have governed his general influence as a teacher and I regret that I did not have the pleasure of working alongside him as a colleague. I also think of the value he would have added to the Newtown Sub-Committee if he had been with us in the fifties.

Perhaps it is even more important that he was available at a time when someone of his calibre was needed to ensure continuity of the Cowes involvement at Newtown.

' What he achieved during those years is beyond all praise'

"Past, present and future are one'

There is a future for Lou not only in the minds and memories of those who knew him, but in those of countless others - receivers of legend and tradition as it is passed on throughout the years ahead.

George Lawrence

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