

Vol. I.

Part II.

PROCEEDINGS
OF THE
ISLE OF WIGHT
NATURAL HISTORY SOCIETY
FOR 1921.

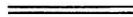
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THE COUNTY PRESS, NEWPORT.
1069-6-22.

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CONTENTS.

LIST OF OFFICERS	...	...	...	...	...	51
NEW MEMBERS	...	...	...	...	...	52
EDITORIAL	...	...	...	...	...	53
MEETINGS, EXHIBITIONS, AND EXCURSIONS				...	...	54
COLEOPTERA, NEW RECORDS	...		...	...	...	70
LEPIDOPTERA, NEW RECORDS, &C.		...	...	...	...	81
METEOROLOGICAL OBSERVATIONS AT ST. LAWRENCE				...	...	84
"	"	WOOTTON BRIDGE	...	...	...	85
"	"	CHALE	...	...	...	85
"	"	TOTLAND BAY	...	...	...	86
"	"	VENTNOR	...	...	...	86
"	"	RYDE	...	...	...	87
"	"	NEWPORT	...	...	...	88
"	"	SANDOWN	...	...	...	88
"	"	SHANKLIN	...	...	...	89
"	"	EAST COWES	...	...	...	89
"	"	COWES	...	...	...	90
"	"	BRIGHTSTONE	...	...	...	91
"	"	BEMBRIDGE	...	...	...	92
SUMMARY OF RAINFALL	...	...	...	...	...	92
NATURAL HISTORY NOTES	...	...	...	...	...	93

LIST OF OFFICERS.

President :

GEORGE W. COLNUTT, F.G.S.,
Hanway Lodge, Belvedere St., Ryde.

Vice-Presidents :

JOHN DOVER, M.A., Totland Bay.
REGINALD H. FOX, Shanklin.
J. M. GOODALL, M.B.O.U., Bembridge.
JAMES GROVES, F.L.S., Yarmouth.
W. H. SHRUBSOLE, F.G.S., Bonchurch.

Secretary and Editor of Proceedings :

FRANK MOREY, F.L.S.,
Wolverton, The Mall, Newport.

Assistant Secretary :

HUBERT F. POOLE, Carisbrooke.

Treasurer :

FRANK E. SNOW,
Ingleside, Mount Pleasant Road, Newport.

NEW MEMBERS.

The following list gives the names and addresses of all candidates elected to the Society during 1921. The list of members to the end of 1920 is already in the hands of all who have joined the Society.

Bird, J. F., Hawkstone, St. Boniface Cliff, Shanklin.
Buller, Miss L., 17 Cross St., Sandown.
Carr, Miss T., Carrickdhu, Totland Bay.
Causton, Mrs., The Cedars, Wootton Bridge.
Cooper, E. A., Belcroft, Queen's Road, Shanklin.
Coverdale, Rev. T. E., M.A., Chelsea House, Winchester Pk. Rd., Sandown.
Coverdale, Mrs. T. E., Chelsea House, Winchester Park Road, Sandown.
Davies, Miss E. G., B.Sc., Sotheron, Avondale Rd., Newport.
Dyer, Miss B., Prospect Villa, South Mall, Newport.
Edwards, Miss L. E. Spencer, The Priory, Nettlestone, Ryde.
Gabbett, Miss Sydney, Cottage-on-the-Cliff, Sandown.
Gilchrist, C. E., The Free Library, Sandown.
Gurney, Miss C. E., Belle Vue, Arthur's Hill, Shanklin.
Hughes, Miss K. S. D., Palissy House, Carisbrooke.
Hunt, Miss K. E. Treen, Sunnyside, Victoria Avenue, Shanklin.
Ibbotson, Mrs. E., 121 Lower St. James' St., Newport.
Ibbotson, Miss D. A., 121 Lower St. James' St., Newport.
Ireland, Miss E., 2 Solent View, Thorley Road, Yarmouth.
Johnson, Miss C. E., 1 Millbrooke Terrace, Carisbrooke Rd., Newport.
Johnson, Miss E. R., 1 Millbrooke Terrace, Carisbrooke Rd., Newport.
King, Mrs. E. E., Foquet House, Quay St., Newport.
King, Miss D. W., Foquet House, Quay St., Newport.
Marriott, Miss E. E., L.R.A.M., A.R.C.M., Anneslee, Hope Rd., Shanklin.
Moody, Miss L. M., Whitehouse, Brading.
Newnham, Miss D. A., 5 St. John's Place, Newport.
Norman, G., St. Erme, Priory Road, Carisbrooke.
Pelling, E. W., Osborne Private Hotel, Ryde.
Quinton, G. F., Fairford, St. John's Road, Newport.
Reeves, Mrs. L. Mannsell, The Hermitage, St. Helens.
Sharpe, Miss E., Sunnyside, Victoria Avenue, Shanklin.
Smith, S. J., 8 Pier St., Ryde.
Steward, Mrs. A., High St., Shanklin.
Stiles, F. A., Warrawei, Oakfield Road, E. Cowes.
Walford, Mrs. E. D., Warden Lodge, Totland Bay.
White, W. S., 16 Camp Hill, Parkhurst.
Whitehouse, J. H., Bembridge School, Whitecliff Bay, Bembridge.
Woodroffe, Mrs. M. P., Granville, Weston Road, Cowes.
Wyles, Miss N., Osborne Private Hotel, Ryde.

EDITORIAL.

In the preface to Part I of our Proceedings I expressed the hope that future parts would be issued not later than the early summer of each year, but I regret to say that an exceptionally busy season, not altogether dissociated with the activities of our Society, has made it practically impossible for me to fulfil these good intentions.

The book should, however, be in the hands of members some three months earlier than was the case with part one.

Nearly three years have passed, as I write, since our Society was founded, and we are able to look back and in the light of our past experiences can and should review our present position.

In common with other local societies we are a "mixed lot." There are specialists among us who have a deep knowledge of their own particular subjects, but take little interest in other branches of Natural History. On the other hand we have a considerable number of members who take an all-round interest in things, but whose knowledge of particular subjects must necessarily be limited. These, perhaps, get the most out of life, as their outlook is wide and their knowledge of Nature is ever increasing. Then there is the ardent beginner, who knows but little, but longs to know more, and such are most welcome; and least satisfactory of all there is the luke-warm type of member, whose enthusiasm can never be roused, who forgets the dates of the meetings, and omits to pay his annual subscriptions. But even for these there may be some hope.

I trust that members will not resent the publication in these Proceedings of what may appear most uninteresting lists of fungi, beetles, moths, and the like, which will from time to time appear. All such lists are of intense interest to some one, and it is only by such publications as ours that much of the knowledge of the distribution of animals and plants throughout the country is obtained. It should be a matter of gratification to us as a Society that in this way we are helping to build up Science.

In this part of our Proceedings a good many pages are devoted to our local Meteorology, especially to the rainfall, which during the year under review was so abnormally deficient. This part should therefore be of special interest to our meteorological friends.

It is hoped to make a permanent feature of the Natural History Notes, and I shall be grateful to members if they will send me short notes of any occurrences which they may think worth putting on record.

FRANK MOREY.

Newport, Isle of Wight,
September, 1922.

GENERAL MEETINGS, EXHIBITIONS, AND EXCURSIONS.

Annual General Meeting held in the Lecture Hall of the Literary Society, Newport (Head-quarters) at 3.15 p.m., on Saturday, 8th Jan., 1921.

The President, Mr. G. W. Colenutt, F.G.S., presided.

About 60 members were present.

The Secretary read a report of the Society's work from its inauguration on the 8th Nov., 1919, until the 31st Dec., 1920.

A summary of the general meetings, excursions, and exhibitions held was given. It was stated that 12 indoor meetings, 11 excursions, and 6 exhibitions had been carried out, and that the average attendance at the general meetings was 35, at the excursions 20, and at the exhibitions 130.

The Secretary stated that our Society had offered the committee of the Free Library at Sandown to take over the maintenance of the extensive collection of Island fossils that were housed there, and that one of our members, the Rev. J. C. Hughes, had undertaken to continue the work of rearrangement that had been commenced by Mr. Poole before the outbreak of the War.

The Treasurer stated that subscriptions and donations received up to the 31st Dec., 1920 amounted to £24 14s. 6d., and subscriptions in advance for 1921 to £1 0s. 0d., making a total of £25 14s. 6d.

The expenditure for printing and stationery was £11 4s. 7½d., for postage stamps £5 5s. 0d., donation to the Literary Society for the use of the Hall £6 0s. 0d., oxygen for lantern lectures 7s. 3d., affiliation fee to the S.E.U.S.S. 5s. 0d., saucers, &c., for fungus exhibition 7s. 0d., leaving a balance in hand of £2 5s. 7½d.

The Treasurer remarked that at the end of the year, 16 members' subscriptions were still unpaid, but that some had come in since.

It was proposed by Mr. Blank, and seconded by Mr. Orchard, that the reports of the Secretary and Treasurer should be adopted.

On the proposition of Miss Hearn, seconded by Comdr. Damant, the five Vice-Presidents: Messrs. Dover, Fox, Goodall, Groves, and Shrubsole were re-elected.

On the proposition of the President, seconded by Mr. Groves, the Secretary, Mr. F. Morey, was re-elected.

The post of Assistant Secretary having become vacant, through the departure of Mr. Brown, Mr. H. F. Poole, being proposed by Mr. Snow, and seconded by Mr. F. King, was elected to the office.

Mr. Snow was re-elected as Treasurer on the proposition of Mr. Jordan, seconded by Mr. Dover.

Miss Dale, of Whitwell, having resigned from the Council, Mr. R. Opie was elected to take her place, on the proposition of Mr. F. L. Watkins.

Miss Hearn was elected to the vacancy caused by the departure of Mr. Hall, on the proposition of Mrs. Kemp.

The Rev. J. C. Hughes was elected to the Council to represent Shanklin district, on the proposition of Mr. Poole.

The Auditors, Messrs. Jordan and Mitchell, were re-elected on the proposition of Mr. Chandler.

Miss C. E. Johnson, of Newport, was elected to the Society.

The President then proceeded to give his address, entitled "Some Notes on Neolithic Man in the I. of W." A number of flint celts, scrapers, arrow points, and other objects of the period, were shown in illustration. The most remarkable specimen was the unique tri-brachial worked flint found at Ventnor some 80 years ago, and at one time in the possession of Dr. Barrow, of Ryde.

Several members brought worked flints, locally found, and Mr. C. Orchard exhibited an interesting fragment of ancient pottery and other objects found in Brading Harbour.

General Meeting held at Headquarters, at 7.30 p.m., on Friday, 21st Jan., 1921.

Mr. J. Groves, F.L.S., presided.

The following candidates were elected to the Society: Miss E. E. Marriott, and Messrs. J. F. Bird and W. S. White.

A lecture was given by Comdr. Damant, entitled "Ciliary Action in Aquatic and other Organisms."

In illustration of the lecturer's remarks, a number of living objects were shown under the microscopes brought by members. They included several species of Infusoria, and sections of the gill of a Mussel, which latter illustrated the "Action" in a marvellous manner.

General Meeting held at Headquarters, at 3.15 p.m., on Saturday, 5th Feb., 1921.

Mr. J. Groves, F.L.S., presided.

A lecture was given by Mr. John Dover, M.A., entitled "General Principles of Meteorology, with special reference to Observations taken in the I. of W."

The lecturer dealt mainly with humidity, wind, and temperature; leaving sunshine, rainfall, and other aspects of the science to a future occasion.

A discussion followed, in which Messrs. J. L. Mitchell, F. L. Watkins, J. W. Long, Mrs. Kemp, the Chairman, and the Secretary took part.

General Meeting held at Headquarters, at 7.30 p.m., on Friday, 18th Feb., 1921.

Mr. J. Groves, F.L.S., presided.

A lecture was given by the Hon. Secretary, Mr. F. Morey, F.L.S., entitled "Animal Teeth: Past and Present."

In addition to a considerable number of skulls and loose teeth, fossil and recent, brought by the Secretary in elucidation of his paper, numerous specimens were shown by Miss Hearn, and Messrs. Jeffery and Gunyon, making in all a very varied and representative series.

The members present showed much interest in examining the examples on view, and speculated as to the action, when in use, of some of the more abnormal types of teeth.

The species shown included elephant, horse, ox, sheep, wild boar, antelope, rhinoceros, hippopotamus, walrus, tiger, wolf, fox, dog, cat, hare, mouse, rat, vole, mole, shrew, sperm whale, dolphin, and crocodile; and, amongst fishes, several species of shark, fossil and recent, *Ptychodus*, snapper, saw-fish, and a few unnamed examples.

General Meeting held at Headquarters, at 3.15 p.m., on Saturday, 5th March, 1921.

The President, Mr. G. W. Colenutt, F.G.S., presided.

About 60 members and friends were present.

The following candidates were elected to the Society: Mesdames Mannsell Reeves and Alice Steward, and Messrs. G. F. Quinton and F. A. Stiles.

A lecture was given by Comdr. G. C. C. Damant, R.N., entitled "A Diver's Notes on some Submarine Phenomena."

It was illustrated by a number of lantern slides and apparatus.

The lecturer described, in a graphic manner, the biological conditions at the sea bottom, at such depths as divers are able to penetrate, and in addition to his valuable Natural History observations, told some thrilling stories of the work of submarines.

Mr. H. G. Jeffery exhibited a strikingly aberrant primrose. The corolla was almost completely absent, but in its place was a symmetrical rosette of small leaves, forming a kind of calyx.

Mrs. Saxby showed several flowers of what appeared to be an intermediate form, or hybrid, between the common primrose and cowslip. They were smaller than the ordinary primrose, and of a deeper colour, approaching that of the cowslip.

General Meeting held at Headquarters, at 7.30 p.m., on Friday, 18th March, 1921.

Mr. J. Groves, F.L.S., presided.

The following candidates were elected to the Society : Miss Barbara Dyer and Miss Elizabeth Ireland.

The Secretary read a letter from Mr. W. C. Worsdell in reference to the aberrant primrose shown at the last meeting.

Also a report, by Mr. J. F. Rayner, on the Fungus Exhibition held on Oct. 2nd last. Mr. Rayner stated that out of 180 species then collected and exhibited, 41 were new to the Island list.

A paper was then read by Mr. H. F. Poole on the Land and Fresh-water Shells of the I. of W., on the conclusion of which the members were invited to inspect the large number of specimens that were on view. These included shells of *Hygromia fusca*, a species only recently discovered in the Island.

A particularly fine series of varieties was shown of the three larger *Helices* : *aspersa*, *nemoralis*, and *hortensis*.

A considerable number of land shells were also shown by Mr. Gunyon, Miss Hearn and the Secretary. Amongst Mr. Gunyon's specimens was a remarkably fine variety of *H. aspersa* with broad dark bands.

Mrs. Saxby sent some abnormal primroses, one of which appeared to be double in all its parts.

General Meeting held at Headquarters, at 3.15 p.m., on Saturday, 2nd April, 1921.

Mr. J. Groves, F.L.S., presided.

The following candidates were elected to the Society : Mrs. E. Ibbotson, Miss Doris A. Ibbotson, Miss Sydney Gabbett, Miss N. Wyles, and Mr. E. W. Pelling.

Mr. Jeffery sent, for exhibition, another lot of aberrant primroses, of which he found at least 8 specimens on the same plant. The flowers had green leafy involucre, and the corollas were quite rudimentary.

Mr. J. Groves delivered an address, entitled "Suggestions for a Botanical Survey of the Island." He advocated the preparation of material for a new "Flora of the Island," members of the Society being invited to supply data as to the occurrence of the various species of plants throughout our area, giving particulars of locality, habitat, association of species, degree of rarity, and any other items of interest. Records to begin as from the 1st Jan., 1920, so as to show the present condition of our Flora, for comparison with the account given of it by Dr. Bromfield some 70 or 80 years ago, and for the information of botanists of future years. The Secretary followed with a few remarks, emphasising the great interest and scientific value of such an investigation.

Excursion to Whitcombe, Thursday, 14th April, 1921.

Director : The Hon. Secretary.

At 2.30 p.m., 27 members assembled at the Carisbrooke end of Castle Road and proceeded up Cemetery Hill to Dark Lane, passing the pit in Middle Chalk, near the Convent, and noticing the good exposure of Upper Greensand by the roadside at Little Whitcombe.

The Director remarked on the difference in colour between the fields on the Upper and the Lower Greensand, as seen towards the South.

Attention was drawn to one of the fields at Great Whitcombe, where several "balks" may be seen, indicative of the Medieval system of cultivation.

Flint flakes of Neolithic Age, and occasional implements, occur here, and the party succeeded in finding some typical examples, including an exceptionally good scraper.

The members then descended the hill past Vayres and Lake farms to the Whitcombe road, and thence to Newport, except those returning to Sandown, who walked to Blackwater Station.

The plants on the hedge-banks and elsewhere were duly noted throughout the excursion. A considerable number of red currant bushes in the hedges were especially noticed.

The weather, which had been threatening in the morning, kept fine throughout the ramble.

In the course of the afternoon Miss L. E. Spencer Edwards was elected a member.

Excursion to Ashey and Eaglehead Copse, Saturday, 30th April, 1921.

Director : The President, Mr. G. W. Colenutt, F.G.S.

At about 2 o'clock, members coming from Newport, and the President from Ryde, met at Ashey Station and proceeded on foot to the Ashey Waterworks. Here, and subsequently at other points, many others joined the Newport party, until fully 40 members had assembled.

At a sheltered spot, near the entrance to Eaglehead Copse, the President addressed the party, mentioning that they had just passed over the Lower Eocene Beds and were then standing upon the Chalk.

He stated that at the waterworks, close by, wells were sunk from which the original supply of water for Ryde was obtained, but that this source being insufficient, the Council, a good many years ago, had constructed further works at Knighton to supplement the supply obtained at Ashey, and they were now considering a further scheme for increasing the supply from the valley in which they then stood.

The party then entered Eaglehead Copse to inspect the site of what the President considered was a Neolithic settlement. Members were successful in finding many shells of edible molluscs on or near the surface of the ground amongst the herbage. These included winkles, limpets, and occasional oysters and cockles. Associated with the shells were numerous "pot boilers" and flint flakes, and a well-worked flint fabricator was also found.

Up to this point the weather had been delightful, but now a thunderstorm was brewing, and it was thought best to shorten the programme and make for Kern farm to obtain shelter. The weather continuing to be showery, the main party proceeded to Alverstone where tea was obtained, after which the members dispersed by train or on foot to their homes.

In the course of the afternoon the Rev. T. E. and Mrs. Coverdale and Miss Laura Buller were elected to the Society.

Excursion to Calbourne and Newbarn Down, Thursday, 12th May, 1921.

Directors : Mr. J. Groves, F.L.S., and Mr. H. F. Poole.

At 1.20 the main party from the Newport district proceeded by motor bus to Calbourne, where they were joined by various other members who had come by train, car, or cycle. On the downs others were met who had walked from Newport, increasing the number of the party to 28.

A large number of flowering plants were found, and many of these were submitted to Mr. Groves for identification. The most interesting,

perhaps, was the spring form, *praecox*, of the Autumn Gentian, *Gentiana Amarella*, which was found in some numbers growing in the close turf on the lower slope of one of the downs, above the village of Calbourne.

Whilst the party were seated on a large barrow on Newbarn Down, Mr. Poole gave a short address on the barrows of the Island, which he remarked were mainly of the Bronze Age.

The Secretary pointed out that the circular pits which occurred on various parts of the downs, and which were marked on the ordnance maps as the sites of British villages, were now thought to be natural.

Having noticed and discussed the chief objects of interest in the immediate neighbourhood, most of the members proceeded to walk to Newport, following the ancient road over the downs for a good part of the way.

In the course of the afternoon, Mrs. Ellen Dobrée Walford and Miss Edith Rebecca Johnson were elected to the Society.

Exhibition of Wild Flowers held at Headquarters on Saturday, 28th May, 1921. From 2.30 till dusk.

A very successful exhibition was held this day, the number of species shown slightly exceeding 250. Practically the whole of these were named and labelled. Grasses, Sedges, Rushes, Ferns and their allies were not shown, but were reserved for a separate exhibition.

Mr. J. Groves, F.L.S., was responsible for the identification of specimens, and in this work he was ably assisted by Mr. J. F. Rayner, F.R.H.S., of Southampton, who had come over to the Island to assist in the collecting and other preparatory work.

Many of the members took an active part in collecting specimens from all parts of the Island, and in the less agreeable but necessary work of clearing up after the show.

At the request of some of the teachers, the Exhibition was re-opened on Monday the 30th, for the benefit of the school children attending the Secondary and Elementary Schools, who were brought in detachments throughout the day to the number of well over 300, and it was gratifying to notice the keen interest shown by these young people.

The number of visitors attending the show during the two days is estimated at 525.

One of the visitors attending on the first day was Mr. James Britten, F.L.S., who was staying in the Island. All ages and conditions were attracted to the Show, from a little boy of four to a veteran of 92.

Some species of special interest shown were the Man Orchis, *Aceras anthropophora*, from Shanklin, sent by Mr. Steward, a fine lot of the Bog Bean, *Menyanthes trifoliata*, from the Wilderness, brought in by Mr. Wakely, the Water Soldier, *Stratiotes Aloides*, from Sandown, by Mr. Marriott, the Purple Broomrape, *Orobanche purpurea*, and some flower spikes of the Narrow-leaved Plantain, *Plantago lanceolata*, galled and distorted by the larvae of *Tortrix palaeana*, found at Sandown by the Secretary. Specimens of the Sundew, *Drosera rotundifolia*, also attracted much attention.

Excursion to Arreton Down, Knighton, and Newchurch, Saturday, 4th June, 1921.

Directors : The Hon. Secretary and others.

At 2.15 p.m., several members assembled at Shide Station and proceeded, via Burnt House Lane, to the great chalk pit on Arreton Down, where they were joined by others from Sandown, Shanklin, and Ryde, increasing the party to 25. Here, in the pit, Miss Hearn gave an account of the tragic end of Michael Morey, who in the 18th cent., is reputed to have been hanged on the barrow close by. The cave which bears his name is believed to be of more recent date. Miss Hearn also remarked on the history of the old manor house at Knighton.

Amongst the rough grass and other vegetation in the pit were a number of the Adder's-tongue Fern, *Ophioglossum vulgatum*. Specimens of a local plant, Bastard Toadflax, *Thesium humifusum*, were also found, and on the down examples of the Bee, Spotted, and Pyramidal Orchids. Growing on the bare chalk in the pit were several plants of Base Rocket, *Reseda lutea*.

Having rested for a short time, the party walked on to Mersley Down, enjoying the magnificent views and speculating on the geological forces that had carved out the features of the land as we now see them.

Passing Knighton waterworks, the site of the historic house, the party proceeded by road and field paths to the village of Newchurch, where tea was obtained, after which a visit was paid to the Church close by, which ended the day's proceedings.

In the course of the afternoon the following candidates were elected to the Society : Miss C. E. Gurney, Miss Lilian Moody, Mrs. E. E. King, and Miss D. W. King.

Exhibition of Wild Flowers at Yarmouth, held on Wednesday, 15th June, 1921, from 3 till 8 p.m.

The Exhibition was held, by kind permission of Mr. Dashwood, in St. James's Hall, and was open free to the public.

A large number of species had been brought together through the exertions of Mr. J. Groves and a few local friends, and these, as far as time permitted, were named and labelled.

The chief element of interest, however, in the exhibition was the contribution made by the school children, who competed for prizes offered for the best collection brought in in their several classes.

The senior prize was awarded to Reg. C. Doe, whose exhibit consisted of 90 species. There were 40 separate exhibits by the children.

In the course of the afternoon Mr. Groves addressed the young people and others present on the nature of flowers and the interesting problems involved in their study.

The number of visitors to the exhibition was about 100.

Excursion to St. Helens : Geological and Botanical. Saturday, 18th June, 1921.

Directors : Mr. G. W. Colenutt, F.G.S., and Mr. J. Groves, F.L.S.

Several members travelling from Newport by the 1.5 train, which was late, found on arriving at Sandown that the train for Brading had gone, which necessitated having a conveyance and driving to St. Helens, where the rest of the party had assembled. Previous to the arrival of the Newport party, Mr. Colenutt had addressed the members respecting the geological features of the locality and the changes that had recently been brought about, both by Nature and the hand of man.

The company, which now numbered 31, then proceeded in the direction of Priory Bay, where Mr. Colenutt gave a further address relative to the position and fossil contents of the Bembridge Limestone and Marls.

He remarked on the great interest of the bed of gravel which rested on the Marls, and speculated as to the direction from which this gravel had been brought. He also spoke of the palaeoliths that had been found in the immediate neighbourhood.

Mr. Groves drew attention to many interesting plants that were growing about the sand dunes and on the beach. Notable among these were specimens of Bastard Toadflax, *Thesium humifusum*, some of which were attacked by the fungus, *Puccinia Thesii*. It is surprising to find this plant in such a situation, as it is more frequently found on the Chalk.

Miss Hearn was fortunate in finding the rare Broomrape, *Orobanchë amethystea*, parasitic on Sea Holly.

Many of the plants were suffering from the prolonged drought, but *Convolvulus Soldanella* was plentiful and in fine condition. It is satisfactory to find that *Oenothera odorata* is so thoroughly established and naturalized on the sand dunes that there is not much fear of its being exterminated. The Sea Buckthorn, *Hippophae Rhamnoides*, too, is spreading both on the sand dunes and on the cliffs.

Excursion to King's Quay. Saturday, 2nd July, 1921.

Directors: Mr. J. Groves and the Hon. Secretary.

Members from the Newport district assembled at Newport Station and proceeded to Whippingham by the 1.45 train, and from thence on foot, through the woods of the Osborne Estate, to the Creek at King's Quay. Several members from Shanklin and Cowes joined the party at different points, increasing the number to 23.

There was much to interest the botanist in spite of the drought. At the bottom of Woodhouse lane were numerous plants of Elecampane, *Inula Helenium*, and in the marshy ground about the Creek many Marsh Mallows, *Althaea officinalis*. Associated with Townsend's Cord-grass, *Spartina Townsendii* were a good many specimens of Remote-flowered Sea Lavender, *Limonium humile*, as well as the commoner species. On the gravelly beach, just beyond the reach of ordinary tides, were several patches of Sea Heath, *Frankenia laevis*, in bloom, and in less stony places much Sea Milkwort, *Glauz maritima*.

On the mud flats at the mouth of the Creek a picturesque group of herons was seen, some 15 in number.

On the beach, among the numerous shells thrown up by the tide, was a specimen of *Crepidula fornicata*, an alien species only recently noticed in the Island.

Some attention was paid to the galls on the oak, hazel, hawthorn, and aspen.

At about five o'clock tea was partaken of at Woodhouse farm, after which the party walked back to Whippingham Station, having enjoyed an unusually successful excursion.

In the course of the afternoon, Miss Katherine S. D. Hughes and Mr. Edward A. Cooper were elected to the Society.

Excursion to Staplers: Botanical and Geological. Thursday, 14th July, 1921.

Directors: The Hon. Secretary and others.

At 2.15 several members met at Ford Bridge, Newport, and presently were joined by others, raising the number to nine.

In the pond at Ford Mill a fair quantity of Water Thyme, *Elodea canadensis*, was noticed, and on the strip of land near the bridge, formerly a withy bed, a few plants of Monkshood, *Aconitum Napellus*, were seen, though the majority of them have been destroyed, owing to the land having been converted into a garden.

Members proceeded through Great Pan and Little Pan Farms, noticing a clover field in which were some thousands of Lesser Broomrape, *Orobanche minor*.

From thence through Mornhill and Durton farms, where a notable feature was the dried up condition of some bogs owing to the extraordinary drought.

On some rough pasturage at Durton a large number of Marsh Ragwort, *Senecio aquaticus*, attracted attention, and Mr. Groves remarked on the difference between this species and *S. Jacobaea*.

The Secretary spoke of the interest of the route geologically, as the party were walking over the whole series of upturned Tertiary Beds which run through the Island.

On reaching Staplers Plantation the members inspected a fine sandpit which appears to belong to the Hamstead series.

Miss Hearn added to the interest of the excursion by her local knowledge of place names, etc.

Excursion to Shanklin and Luccombe: Geological. Saturday, 23rd July, 1921.

Director: Mr. G. W. Colenutt, F.G.S.

Members, numbering 28, coming from various parts of the Island, assembled outside Shanklin Station shortly before 2 o'clock and proceeded to the Chine.

Here, the chief features of interest were examined, and the Director gave a short account of the origin of the Chine of the Island. Returning to the top of the Chine the party walked on in the direction of Luccombe, and a halt was made at a point which commanded a view of a mass of material which a few years ago had slid down to the beach, and this called forth some further remarks from the Director as to the manner in which the coast of the Island was being eaten into by the sea.

Continuing the walk into the Landslip the party had tea, and then returned to Luccombe and descended the steps to the beach, along which the walk was continued until Shanklin was reached, the geological features being pointed out en route.

Apart from the Geology, the most interesting objects seen were a pair of Peregrines, which had recently nested, and apparently reared their young, in an inaccessible part of the cliffs between Luccombe and Shanklin. Here they are committing great havoc among the pigeons, especially carriers, which they attack as they come in from the sea.

In the Landslip some plants of the Broad-leaved Helleborine, *Epipactis latifolia*, were seen.

Excursion to Hamstead and Yarmouth : Geological and Botanical.
Saturday, 20th Aug., 1921.

Directors : Messrs. G. W. Colenutt, F.G.S., and J. Groves, F.L.S.

Seventeen members and friends took part in this excursion. The greater number travelled from Newport to Ningwood by the 1.15 train, and proceeded on foot by way of Newbarn and Hamstead farms to the shore, meeting other members en route.

At the Duvver the President gave a short address, remarking that here only in Britain had we the opportunity of studying the Hamstead Beds, the latest of the Oligocene series.

An explanation was also given regarding the tides at this part of the coast, which are influenced by the fact that the rising tide first enters at the Western end of the Island, and later at the Eastern end, and in due course the waters meet, the result being two high tides at about two hours interval.

Members spent some time about the Duvver, under the guidance of Mr. Groves, noting the more interesting of the maritime plants.

The Yellow-horned Poppy, *Glaucium luteum*, was abundant on the shingle, and there were numerous plants of the Prickly Saltwort, *Salsola Kali*. The Henbane, *Hyoscyamus niger*, was less noticeable than is usual at this spot.

Proceeding along the beach towards the west, numerous turtle plates belonging to *Trionyx* and *Emys* were picked up ; also fragments of crocodile plates or scutes, and bones and teeth of *Hyopotamus*.

The members were greatly impressed by the rapid erosion of the coast that is going on here, the clayey nature of the beds tending to an almost constant slipping towards the beach.

The party reached Yarmouth about 6.30, where tea was obtained prior to the return journey from Yarmouth station at 7.40.

Excursion to Newchurch Marshes: Botanical. Thursday, 8th Sept., 1921.

Directors: Mr. J. Groves, F.L.S., and the Secretary.

Members from the Newport district travelled by the 1.5 train to Newchurch, where they were joined by others from Ryde and elsewhere, raising the number of the party to 15. All then proceeded by farm road and footpath to the Marshes, which were easily traversed owing to the unexampled drought. The drainage ditches and the banks of the main stream were examined, and a very large number of marsh-loving plants were noticed. Among them were many of the Common Comfrey, *Symphytum officinale*, by the Yar; in the ditches, a great quantity of Water Pepper, *Polygonum Hydropiper*, Nodding Bur Marigold, *Bidens cernua*, and Meadow-Sweet, *Spiraea Ulmaria* in seed, a fair quantity of Great Water Forget-me-not, *Myosotis palustris*, and numerous plants of Beeby's Bur-Reed, *Sparganium neglectum*. On the marshy grounds were plants of Bog-bean, *Menyanthes trifoliata* and Marsh Cinquefoil, *Potentilla palustris* in small quantities, and Marsh Thistle, *Cnicus palustris* and Marsh Ragwort, *Senecio aquaticus* in large numbers.

The Secretary pointed out some interesting galls on the oak and other plants.

The party having walked on to Alverstone obtained tea there, after which the Newport members and others returned home by the 6.9 train.

Fungus Foray in Parkhurst Forest. Friday, 23rd Sept., 1921.

Director: Mr. J. F. Rayner, Mem.Brit.Myc.Soc.

At 2.30, ten members met at the gate by the Lodge on the Yarmouth Road and proceeded to search in all likely places along the grass roads and paths of the Forest for specimens, but with extremely poor results. Owing to the unprecedented drought the ground species were almost completely absent, the few species found being mostly on tree stumps, decayed wood, and leaves.

Three other members searched their own localities independently, each bringing in a few species.

Exhibition of Fungi at Headquarters. Saturday, 24th Sept., 1921, from 2 till 7 p.m.

A special effort had been made by Mr. J. F. Rayner, the Secretary and several other members, to assemble in the exhibition room as many species as was possible under the extraordinary weather conditions that have recently prevailed. There was a complete absence of many

familiar ground species, those shown being largely obtained from trees, stumps, and decaying twigs, and species parasitic on leaves. Some of those exhibited, too, were stunted, or abnormal, as a result of the drought.

Notwithstanding the difficulties, however, some 85 species were brought together.

In the course of the afternoon an admirable demonstration was given by Mr. Rayner on the group, prominence being rendered to the economic value, or hurtfulness, of many of the species displayed.

About 65 members and friends visited the exhibition.

Several volumes treating of Fungi were laid on the table for the use of visitors ; and a specimen of the Deadly Nightshade, in fruit, was exhibited by Miss Hughes, who stated that some plants were growing, apparently spontaneously, in her garden at Carisbrooke, which is on the Chalk.

Exhibition of "Common Objects of the Seashore." held at Headquarters on Saturday, 15th Oct., 1921, from 2.30 till 7 p.m.

An extensive exhibition was held in illustration of the interesting objects to be found along our seashores, including a few exotic exhibits by way of comparison.

The specimens shown included a number of freshly-gathered plants from Norton Spit, some *Fuci*, and numerous herbarium sheets of maritime plants, by Mr. Groves ; about 20 mounted species of marine Algae, by Mr. Millidge ; a turtle and several fishes, by Messrs. Wadham ; some shells and fossils from Thorness, by Mrs. Saxby ; selenite and some shells, by Miss Hearn ; polished pebbles, by Miss Neal ; *Sertularia*, Foramenifera, etc., by Mr. Gunyon ; prawns and an unidentified Crustacean, by Mr. Jeffery ; shells, by Mr. Jordan ; shells and minerals, by Mr. Mordan ; scale of a Tarpon, by Mr. Stiles ; flexible sandstone, by Mr. Williamson ; and shells, fossils, pebbles, corals, sponges, hydroids, polyzoa, worm cases, egg cases of skate and dog fish, eggs of molluscs, sea urchins and starfishes, by the Hon. Secretary, who also laid upon the tables several illustrated works dealing with marine life.

Mr. Groves exhibited a number of coloured diagrams of anemones and other sea creatures.

About 80 members and friends visited the exhibition during the day.

General Meeting held at Headquarters, at 7.30 p.m., on Friday, 28th Oct., 1921.

Miss Hearn presided.

The following candidates were elected to the Society : Mrs. Woodroffe, Misses T. Carr, E. G. Davies, and D. A. Newnham.

The Secretary referred to the recent visit to the Island of Dr. Rennie, of Aberdeen University, who has been making an intensive study of the so-called "I. of W. Bee Disease," with a view to discovering its cause and finding a remedy. He invites the co-operation of the members of our Society.

Mr. H. F. Poole delivered a brief address, entitled "Some new records of Island Lepidoptera," illustrated by specimens.

Mr. H. G. Jeffery followed with a similar address on new Island Coleoptera, in the course of which he referred to the extraordinary and specialized habits of some of the species, dwelling particularly on the numerous beetles that are found only in ants' nests, or in the nests of birds. Specimens of these newly found beetles were shown in illustration, and a number of other Island species were exhibited by the Secretary, as well as a collection of British Butterflies.

Mr. F. E. Snow showed a large case of insects from Ceylon, and Mr. W. S. White a few tropical butterflies.

Mr. T. E. B. Gunyon brought some freshly gathered dog roses, the abnormal season having induced a second flowering.

Various books dealing with the subjects discussed were laid on the table by the Secretary.

Mr. S. W. Pring, who has recently returned from the Belgian Congo, showed a number of native-made arrows of varied type, adapted for the killing of different kinds of animals and birds.

General Meeting held at Headquarters, at 3.15 p.m., on Saturday, 12th Nov., 1921.

Mr. F. L. Watkins, F.G.S., presided.

Mr. G. Norman was elected to the Society.

Mr. John Dover, M.A., then delivered his lecture, entitled *Meteorological Observations, Instruments, and Statistics*.

He spoke of the scientific interest, and often practical value, of such observations, giving as an instance the change in the treatment of consumption, now it is known that a dry atmosphere is of far greater importance than a warm one.

He remarked that his station at Totland, owing to its proximity to the sea, had a far more equable climate than places inland. Totland, too, had an excellent record for sunshine.

The lecture was illustrated by diagrams.

A number of books dealing with Meteorology were laid on the table by the Secretary.

General Meeting held at Headquarters, at 7.30 p.m., on Friday, 25th Nov., 1921.

Mr. J. Groves, F.L.S., presided.

Messrs. C. E. Gilchrist and Sidney J. Smith were elected to the Society.

Mr. F. Stroh read a paper on Echinoderms: Fossil and Recent.

Having described the organization of the group, as illustrated in the recent species, he remarked that among fossil specimens it was most difficult to separate the different species that had been described, as they seemed to grade one into the other. Diagrams and a large number of specimens were shown in illustration, many of these being contributed by Miss Hearn, Mr. T. E. B. Gunyon, and the Secretary.

The Secretary, Mr. F. Morey, followed with some remarks on Pebbles of the Seashore, exhibiting a number of representative specimens from various districts, and commenting on the interest of working out the origin and distribution of the various types.

Mr. Gunyon showed a number of examples drawn from various parts of the country, many of these having been polished by himself. Among them were several from the Wealden, believed to be digestive stones swallowed by the reptiles of the period, and being of non-local types were presumably brought by these animals from a distance.

Mr. Groves showed specimens of a plant, *Tillaca aquatica*, L. (*Buliarda aquatica*, DC.), only just added to the British flora.

Mrs. Woodroffe exhibited a flint knife, of Neolithic age, recently found by her at Thorness.

General Meeting held at Headquarters, at 3.15 p.m., on Saturday, 10th Dec., 1921.

Mr. J. Groves, F.L.S., presided.

About 40 members and friends were present.

Mr. Groves delivered a lecture on Mosses and Hepatics, illustrating his discourse by a large number of lantern slides, some very beautiful diagrams prepared by Miss Groves, and numerous herbarium specimens to show the great variety of types prevailing in the group.

The lecturer described in detail the life history of some of the species, and spoke of the varied habits observed among them: some living only in bogs, others on mountains, or on trees, and a few restricting themselves to carrion, or to the spot where an animal had died.

Various books dealing with the subject were laid on the table for the inspection of members.

COLEOPTERA.

CORRIGENDA: AND A SUPPLEMENTARY LIST TO THE COLEOPTERA
RECORDED IN "A GUIDE TO THE NATURAL HISTORY OF THE ISLE OF
WIGHT," MOREY, 1909.

By H. G. JEFFERY.

Since the publication of the Natural History Guide in 1909, a very great deal of work has been done at the Coleoptera of the British Isles, and incidentally many of our best workers have, previous to the fateful year 1914, spent a lot of time in the Island, and to these the following list bears excellent testimony.

In 1913, Canon W. W. Fowler and Mr. H. St. J. K. Donisthorpe brought out Vol. VI (Supplement) of "The Coleoptera of the British Isles," therein giving a lot of new information as to our local beetle fauna.

In addition, Messrs. Donisthorpe and the late John Taylor, of Sandown, have kept a careful record of all additional species found in the Isle of Wight, and my best thanks are due to Mr. H. F. Poole for the loan of Mr. Taylor's annotated list, and to Mr. Donisthorpe for going over the list I compiled, comparing and correcting by his own, and also for verifying the more critical species added to the list from my own collection.

As to nomenclature, the last British list by Messrs. Beare and Donisthorpe was published in March, 1904. A new authoritative list, with all additions to date, and with *aberrations* distinguished from *varieties*, and *varieties* from *species*, as far as is possible, would be a great boon to working coleopterists, and would necessitate a few more changes in the names published in the first lists in the "Guide."

CORRECTIONS.

Page 329 line 33, delete "Near Sandown (Taylor)."

„ 347 „ 27, for "*pubescens*, *Mann.*" read "*fontinalis*, *Kies.*"
The *pubescens*, *Mann.* has not been identified from the Isle of Wight.

„ 347 „ 29, for "*L. sicula* of Fowler and Brit. colls. *nec Er. (Heeri, Fawv.)*" read "*L. heeri*, *Fawv. (punctata, Duv. and early Brit. cats.)*." The *L. sicula* of *Erichson* is apparently confined to Sicily.

- Page 355 line 6 from bottom, for "**Melanophalma**" read "**Melanophthalma**."
- " 363 " 11, for "**Opilio mollis**, *L.*" read "**Opilo mollis**, *L.*"
- " 367 " 12, for "**Phytodecta**" read "**Phyllodecta**," and delete "*(Phyllodecta vulgatissima, L.)*."
- " 374 " 8, for "**Bytiscus betuleti**, *F.*" read "**Bytiscus betuleti**, *F.*"
- " 374 " 10, delete whole line. As Mr. H. F. Poole beat off hazel a specimen of *Bytiscus betuleti*, *F.* on May 9th, 1909, at Bordwood Copse, Guyon's record is probably quite correct.
- " 378 " 26, for "**Polydrosus**" read "**Polydrusus**."
- " 378 " 7 from bottom, for "**Phyllopedon**" read "**Phyllopedon**."

ADDITIONAL SPECIES.

CARABIDAE.

- Elaphrus uliginosus**, *F.* River Yar, near Freshwater (Dr. Joy).
- Badister unipustulatus**, *Bon.* Sandown, in ditch, Aug. (Beare).
- Oodes helopioides**, *F.* Sandown (G. C. Champion).
- Stenolophus vespertinus**, *Panz.* Sandown (Donisthorpe and J. Taylor).
- Acupalpus consputus**, *Duft.* Sandown brickfields, May (J. Taylor); gravel pits, Wootton (H. G. Jeffery).
- Ophonus rupicoloides**, *Sharp.* Bembridge (Fowler, B. C., Vol. VI. addenda).
- Pterostichus dimidiatus**, *Ol.* One on path, Sandown (Taylor); a short series, St. George's Down (Jeffery).
- Amara continua**, *Th.* Sandown, flood refuse (Taylor).
- Laemostenus complanatus**, *Dej.* Calbourne (C. J. C. Pool); one specimen from Newport Literary Soc's premises (Jeffery).
- Anchomenus livens**, *Gyll.* Whitefield Woods, beating carrion (Dollman and Donisthorpe).
- Bembidium clarki**, *Daws.* Sandown, one only (E. A. Newbery).
- Patrobus excavatus**, *Pk.* Sandown (G. C. Champion).
- Lebia chlorocephala**, *Hoff.* Blacklands Copse (Jeffery).
- Metabletus truncatellus**, *L.* Sedge tufts, Alverstone (Beare).
- M. obscuro-guttatus**, *Duft.* ab. *atratus*, *Dej.* Sandown (Bedwell).

DYTISCIDAE.

- Bidessus geminus**, *F.* Sandown (H. G. Champion).
- Deronectes depressus**, *F.* Sandown, Oct. (Taylor).
- Agabus chalconotus**, *Pz.* Sandown (G. C. Champion).
- Ilybius fuliginosus**, *F.* Sandown, in ditch (Donisthorpe).
- I. ater**, *De G.* Sandown, in pool on cliff (Donisthorpe).
- I. obscurus**, *Marsh.* Sandown (Donisthorpe).

HYDROPHILIDAE.

Laccobius oblongus, *Gorham*. Sandown and Luccombe Chine (Bedwell).

Berosus affinis, *Brul.* Sandown, Oct. (Taylor).

Helophorus porculus, *Bedel.* St. Helens, Aug. (Dollman and Donisthorpe).

Ochthebius legolisi, *Muls. et Rey.* St. Helens and Seaview, Aug. (Donisthorpe).

Cyclonotum orbiculare, *F.* Sandown (G. C. Champion).

Cercyon quisquilius, *L.* Sandown (Taylor).

STAPHYLINIDAE.

Aleochara spadicea, *Er.* Sandown, in mole's nest (Taylor).

Oxypoda vittata, *Märk.* Ninham, with *Lasius fuliginosus* (Taylor).

O. umbrata, *Gyll.* Whitefield Woods (Donisthorpe).

O. longiuscula, *Gr.* Alverstone, in moss (Taylor).

O. brachyptera, *Steph.* Fishbourne, under seaweed, Aug. (Donisthorpe).

Thiasophila angulata, *Er.* Parkhurst Forest, with *Formica rufa*, *L.* var. *rufo-pratensis*, Aug. (Donisthorpe).

T. inquilina, *Märk.* Apse Heath, with *Lasius fuliginosus*, July (Donisthorpe).

Ischnoglossa prolixa, *Gr.* Whitefield Woods (Donisthorpe).

Ocalea castanea, *Er.* Sandown (Taylor).

Ilyobates forticornis, *Lac.* Sandown (Nicholson).

Calodera rufescens, *Kraatz.* Sandown, June (G. C. Champion).

C. aethiops, *Gr.* Sandown, in brickfield (Bedwell).

C. umbrosa, *Er.* King's Quay, in sandpit, Aug. (Donisthorpe).

Dinarda markeli, *Kies.* Parkhurst Forest, in nests of *Formica rufa*, April (Donisthorpe).

D. hagensi, *Wasm.* Parkhurst Forest, in nests of *Formica exsecta*, April and Aug. (Donisthorpe).

Myrmedonia funesta, *Gr.* Ninham, with *Lasius fuliginosus*, Aug. (Donisthorpe).

Thamiaraea hospita, *Märk.* Ryde (Donisthorpe).

Notothecta flavipes, *Gr.* Parkhurst Forest, in nests of *Formica rufa*, April (Donisthorpe).

N. confusa, *Märk.* Ninham, with *Lasius fuliginosus*, Aug. (Donisthorpe).

Atheta (Homalota) gyllenhalii, *Th.* Sandown, in ditches (Donisthorpe).

A. " **vicina**, *Steph.* Sandown, on wall (Taylor).

A. " **graminicola**, *Gr.* Sandown, (G. C. Champion).

A. " **debilis**, *Er.* Sandown, brickfields (Bedwell).

A. " **caesula**, *Er.* St. Helens, sandhills, in moss (Beare).

A. " **vilis**, *Er.* Sandown, in ditch (Donisthorpe).

- Atheta (Homalota) aeneicollis**, *Shp.* Near Sandown, sweeping, Sept. (Taylor).
- A.** " **nigricornis**, *Th.* Whitefield Woods, in carrion (Donisthorpe).
- A.** " **germana**, *Shp.* Whitefield Woods and at Quarr, in carrion (Donisthorpe).
- A.** " **sordidula**, *Er.* Sandown, stack refuse (Taylor).
- A.** " **intermedia**, *Th.* Whitefield Woods, in carrion (Donisthorpe).
- A.** " **aterrima**, *Gr.* Quarr, in carrion (Donisthorpe).
- A.** " **testudinea**, *Er.* Sandown, haystack (Taylor).
- A.** " **clientula**, *Er.* Whitefield Woods, by sweeping (Donisthorpe).
- Tachyusa umbratica**, *Er.* Sandown (Blenkharn).
- T. atra**, *Gr.* Sandown, on wall (Beare).
- Myrmecopora brevipes**, *Butler.* Ventnor (Bedwell); Isle of Wight (Donisthorpe).
- Encephalus compicans**, *West.* Alverstone (Beare); Blacklands, in grass tuft; Blackwater, in flood refuse (Jeffery).
- Gyrophæna affinis**, *Man.* Whitefield Woods, by evening sweeping (Donisthorpe).
- G. nana**, *Pk.* Alverstone, sedge refuse (Taylor).
- Sipalia ruficollis**, *Er.* Greatwoods, Shanklin (Beare).
- Oligota pusillima**, *Gr.* Ryde, in cut grass (Donisthorpe).
- Hypocyrtus laeviusculus**, *Man.* St. Helens, sweeping (Donisthorpe).
- H. apicalis**, *Bris.* Ryde, on the wing (Donisthorpe).
- Tachinus pallipes**, *Grav.* Niton (Mitford).
- T. bipustulatus**, *F.* Ryde, at a "Cossus tree" (Donisthorpe).
- T. marginellus**, *F.* Sandown (Taylor).
- Bolitobius lunulatus**, *L.* Whitefield Woods and Parkhurst (Denish); Horse Down (Jeffery).
- B. exoletus**, *Er.* Sandown (Taylor); St. George's Down, Staplers, Woodside, and Parkhurst Forest (Jeffery).
- Mycetoporus angularis**, *Rey.* Sandown (Taylor).
- Heterothops prævia**, *Er.* var. *nigra*, *Kr.* Sandown, in moles' nests (Taylor).
- Quedius longicornis**, *Kr.* Sandown, in moles' nests (Taylor).
- Q. talparum**, *Deville.* (Introduced to the British list as *vezans*, *Eppl.* by Dr. Joy). Sandown, in moles' nests (Taylor).
- Q. molochinus**, *Gr.* var. *hispanicus*, *Bernh.* Bembridge (Donisthorpe); St. Helens, in salt marsh (Holland).
- Q. boops**, *Gr.* Sandown, Nov. (Taylor).
- Philonthus carbonarius**, *Gyll.* Sandown (Taylor).
- P. varius**, *Gyll.* ab. *bimaculatus*, *Gr.* Sandown (Taylor).
- P. longicornis**, *Steph.* Sandown (Taylor).
- P. quisquiliarius**, *Gyll.* Sandown, bank of pond (Newbery).

- P. quisquiliarius*, ab. *dimidiatus*, *Er.* Sandown, in ditch, Aug. (Taylor).
- Gabrius stipes*, *Sharp.* Whitefield Woods (Donisthorpe); Sandown (Taylor).
- G. pennatus*, *Sharp.* Sandown (Taylor).
- Actobius cinerascens*, *Gr.* Sandown brickfield (Bedwell and Taylor).
- Leptacinus batychrus*, *Gyll.* Sandown (Donisthorpe).
- Lathrobium fovulum*, *Steph.* Alverstone (Taylor and Beare).
- L. quadratum*, *Pk.* Blackpan, in stack (Beare).
- Achenium humile*, *Nic.* Yaverland (Bedwell).
- Cryptobium glaberrimum*, *Hbst.* Alverstone (Beare).
- Stilicus fragilis*, *Gr.* Sandown brickfields (Taylor).
- S. orbiculatus*, *Pk.* Burnt House (Taylor).
- Medon castaneus*, *Gr.* Sandown, in moles' nests (Taylor).
- M. obsoletus*, *Nor.* Sandown brickfields (Taylor).
- Stenus juno*, *F.* Burnt House (Taylor); frequent around Newport (Jeffery).
- S. pusillus*, *Er.* Sandown (Beare).
- S. declaratus*, *Er.* Sandown (G. C. Champion); Horse Down, in *Sphagnum* (Jeffery).
- S. fuscicornis*, *Er.* Whitefield Woods, sweeping (Donisthorpe).
- S. pallipes*, *Gr.* Sandown, at roots of reeds (Beare).
- S. canescens*, *Rosen.* Sandown (G. C. Champion).
- Platystethus alutaceus*, *Th.* Sandown, in damp ditch (Taylor).
- P. capito*, *Heer.* Sandown (G. C. Champion).
- Trogophloeus rivularis*, *Mots.* Sandown (Bedwell).
- T. fuliginosus*, *Gr.* Sandown, on wall (Beare).
- T. pusillus*, *Gr.* Sandown (G. C. Champion); under seaweed, Fishbourne (Donisthorpe).
- T. subtilis*, *Er.* Sandown (Bedwell).
- Lesteva punctata*, *Er.* (*muscorum*, *Duv.*). Luccombe Chine and Ventnor (Donisthorpe).
- Olophrum piceum*, *Gyll.* Alverstone (Taylor); Staplers and Blackwater (Jeffery).
- Homalium punctipenne*, *Th.* Ryde, under bark (Taylor).
- H. vile*, *Er.* Sandown (Bedwell).
- H. concinnum*, *Marsh.* Sandown, in currants (Taylor).
- H. striatum*, *Gr.* Sandown, on wall (Beare).
- Megarthus denticollis*, *Beck.* Alverstone (Taylor).
- M. affinis*, *Müll.* Sandown (Beare); Watergate, Newport, in fowl's nest, March (Jeffery).

LEPTINIDAE.

Leptinus testaceus, *Müll.* On *Mus sylvaticus*, Carisbrooke, and in nest of *Mus sylvaticus*, Arretton Down (Jeffery).

SILPHIDAE.

Anisotoma (*Liodes*) **humeralis**, *Kug.* Parkhurst Forest, on fungus (Jeffery).

Liodes (*Anisotoma*) **flavicornis**, *Ch. Bris.* Whitefield Woods, evening sweeping (Donisthorpe).

L. (*Anisotoma*) **calcarata**, *Er.* ab. **nigrescens**, *Fleischer.* Specimens swept in Parkhurst Forest, Aug., 1910, and named by Dr. Fleischer (Donisthorpe).

Silpha **quadripunctata**, *L.* Bordwood Copse (Taylor).

Catops (*Choleva*) **spadicea**, *Stm.* Niton (C. J. C. Pool).

C. (*Choleva*) **fuliginosa**, *Er.* Alverstone, Sandown, and Burnt House (Taylor).

C. (*Choleva*) **morio**, *F.* Alverstone (Taylor).

SCYDMAENIDAE.

Neuraphes **angulatus**, *Müll.* Alverstone (Beare).

Scydmaenus **collaris**, *Müll.* Alverstone (Beare).

TRICHOPTERYGIDAE.

Trichopteryx **montandonii**, *All.* Parkhurst Forest, in nests of *Formica rufa*, April (Donisthorpe). Named by Herr Erichson.

Actidium **coarctatum**, *Hal.* Fishbourne, under seaweed (Donisthorpe).

COCCINELLIDAE.

Hippodamia **variegata**, *Goez.* Chale, off ragwort, *Senecio Jacobaea* (Jeffery).

Anisostieta **19-punctata**, *L.* Brickfield, Sandown (Taylor); St. Helens (Donisthorpe).

Pullus (= *Scymnus*) **testaceus**, *Mots.*, ab. **scutellaris**, *Muls.* Stack, Newchurch (Taylor).

P. (= *Scymnus*) **ater**, *Kug.* Whitefield Woods (Donisthorpe).

Chilocorus **similis**, *Ross.* Whitefield Woods (Donisthorpe).

Exochomus **quadripustulatus**, *L.* Down End, April (Jeffery).

ENDOMYCHIDAE.

Mycetaea **hirta**, *Marsh.* One on damp wall, and in numbers on old ram's horns, Newport (Jeffery).

HISTERIDAE.

Hister **marginatus**, *Er.* In moles' nests, Sandown (Taylor).

Carcinops **14-striata**, *Steph.* Sandown, haystack refuse (Beare).

Kissister **minima**, *Aub.* Sandown (Donisthorpe).

Hetaerius **ferrugineus**, *Ol.* Luccombe Chine, in ants' nest (Stott).

Onthophilus **globulosus**, *Ol.* Sandown, in moles' nests (Taylor).

MICROPEPLIDAE.

Micropeplus porcatus, *Pk.* Sandown (G. C. Champion).

M. margaritæ, *Duv.* Newchurch, stack refuse (Taylor); frequent in stack refuse, Shide and Blackwater (Jeffery).

NITIDULIDAE.

Carpophilus hemipterus, *L.* Newport, on path in garden (Jeffery).

C. ligneus, *Murray.* A species quite recently introduced into Britain. Parkhurst Forest, at sap of oak; Newport, on loaf of bread, in box of chocolates, in cheese, and on dates (Jeffery).

Epuræa pusilla, *Ill.* Parkhurst Forest, in numbers flying to sap of pine stump; Woodside, at tree stump (Jeffery).

Soronia grisea, *L.* Parkhurst Forest, at sap of oak (Jeffery).

Pocadius ferrugineus, *F.* Whitefield Woods, sweeping (Donisthorpe); Horse Down, on gills of fungus, and St. George's Down, in *Lycoperdon* (Jeffery).

Cychramus fungicola, *Heer.* Woodside, in fungi, Sept. (Jeffery).

Pityophagus ferrugineus, *F.* Parkhurst Forest, under bark of pine stump (Jeffery).

LATHRIDIIDAE.

Melanophthalma distinguenda, *Com.* Parkhurst Forest (Donisthorpe and Nicholson).

CUCUJIDAE.

Laemophloeus ater, *Ol.* Shanklin, under tree bark (C. J. C. Pool).

Cryptamorpha desjardinsi, *Guer.* A commerce carried species. Sandown, on bananas (Taylor).

CRYPTOPHAGIDAE.

Cryptophagus subfumatus, *Kr.* Sandown, in muscatels (Taylor).

C. pilosus, *Gyll.* Sandown, in currants (Taylor).

C. punctipennis, *Bris.* Parkhurst Forest (Donisthorpe).

C. saginatus, *Stm.* Sandown, in muscatels (Taylor).

Atomaria gutta, *Steph.* Sandown, Burnt House (Beare).

SCARABAEIDAE.

Aphodius scybalarius, *F.* Totland (H. G. Champion).

Oxyomus porcatus, *F.* Blackgang, May (Taylor).

DASCILLIDAE.

Helodes marginata, *F.* Blacklands, May (Jeffery).

Microcara livida, *F.* Sandown (Taylor).

Scirtes orbicularis, *Pz.* Sandown (G. C. Champion).

TELEPHORIDAE.

Rhagonycha limbata, *Th.* Bordwood Copse (Taylor).

Malthodes atomus, *Th.* Luccombe Chine, sweeping, Aug. (Dollman).

CLERIDAE.

Necrobia ruficollis, *F.* Newport (Donisthorpe and Jeffery).

N. rufipes, *De G.* Sandown, on cheese (Taylor).

ANOBIIDAE.

Anobium paniceum, *L.* Sandown, in henbane seeds in chemist's shop (Taylor); Newport, on wall of outhouse (Jeffery).

Xestobium tessellatum, *F.* Not infrequent in old houses, Newport, Shide, and Sandown (Jeffery).

Ptilinus costatus, *L.* Sandown, from wooden stand of pair of scales which had been in use many years (Taylor).

CISSIDAE.

Cis dentatus, *Mellié* (*Cis alni*, ab. *mitfordi*, *Donisthorpe*). A single female taken at Sandown, July, 1907, by R. S. Mitford. The only specimen yet recorded for Britain.

C. pygmaeus, *Marsh.* Norton (Taylor); Woodside (Jeffery).

C. festivus, *Pz.* St. George's Down, in fungus on oak (Jeffery).

CERAMBYCIDAE.

Asemum striatum, *L.* Parkhurst Forest, in numbers at pine stumps (Jeffery). Down to the year 1890 this insect was recorded only from Scotland for the British Isles, but now occurs more or less freely in many English counties.

A. striatum, ab. *agreste*, *F.* Several at pine stumps, Parkhurst (Jeffery).

LARIIDAE.

Laria (Bruchus) atomarius, *L.* Sandown (G. C. Champion).

CHRYSOMELIDAE.

Donacia sericea, *L.* Near Blackwater (Jeffery); Blackpan (H. F. Poole).

Chrysomela brunsvicensis, *Grav. (didymata, Scrib.)*. Luccombe Chine (Taylor).

C. hyperici, *Forst.* Sandown (Taylor).

Lochmaea capreae, *L.* On willow, near Blackwater (Jeffery).

L. suturalis, *Th.* On *Erica*, Parkhurst Forest, Aug. (Taylor); Shanklin Down (H. F. Poole).

Galerucella viburni, *Pk.* Whitefield Woods, abundant on guelder rose, Aug. (Donisthorpe); Woodside, as late as Oct. 2nd in 1921 (Jeffery).

G. calabriensis, *L.* Alverstone (Blenkarn).

Longitarsus brunneus, *Duft.* (*castaneus*, *Duft.*). "W. Blatch records it from the Isle of Wight." (Col. Br. Is. vol. IV).

L. ballotae, *Marsh.* Yarbridge, on *Ballota nigra* (Taylor).

L. flavicornis, *Steph.* Bordwood, on *Calystegia sepium* (Taylor).

L. jacobaeae, *Wat.* ab. *rufescens*, *Fow.* I. of W. (Bedwell); Redcliff, Sandown (Jeffery).

Haltica pusilla, *Duft.* Whitefield Woods, Aug. (Donisthorpe); Ventnor (Ellis).

Phyllotreta exclamationis, *Thunb.* Brading, 1907 (Beare).

Apteropeda orbiculata, *Marsh.* Whitefield Woods (Taylor); St. George's Down (Jeffery).

Chaetocnema arida, *Foud.* Introduced as British by Mr. Donisthorpe on specimens swept in Whitefield Woods, Aug., 1909.

Psylliodes chrysocephala, *L.* Ryde (Dollman); ab. *anglica*, *F.* Ryde (Donisthorpe).

Cassida nobilis, *L.* var. *dollmani*, *Donis.* St. Helens, at roots of *Chenopodium* (Donisthorpe and Dollman).

TENEBRIONIDAE.

Helops pallidus, *Curt.* St. Helens, at roots of marram grass, Aug. (Donisthorpe).

PYTHIDAE.

Salpingus castaneus, *Pz.* Parkhurst Forest (Nicholson); swept at Parkhurst, June, 1893 (Jeffery).

Rhinosimus ruficollis, *L.* Marvel Copse, under decayed birch bark (Jeffery).

MORDELLIDAE.

Mordellistena neuwaldeggiana, *Pz.* Norton (Donisthorpe).

Anaspis rufilabris, *Gyll.* Greatwoods, Shanklin (H. F. Poole).

MELOIDAE.

Meloe brevicollis, *Pz.* Limpet Run, Sandown (C. L. Goldthwait); St. George's Down, and Redcliff, Sandown (Jeffery).

CURCULIONIDAE.

Rhynchites aeneovirens, *Marsh.* Alverstone (Taylor); Parkhurst Forest (Jeffery).

- R. uncinatus**, *Th.* Sandown (G. C. Champion).
Polydrusus pterygomalis, *Sch.* Whitefield Woods and King's Quay (Donisthorpe); Sandown (Taylor); Froglands, Carisbrooke (Jeffery).
P. flavipes, *De G.* Whitefield Woods, not uncommon, and at St. Helens in Aug. (Donisthorpe).
Phyllobius calcaratus, *F.* Alverstone, May (Taylor).
Hypera nigrirostris, *F.* var. **ononinis**, *Fow.* Luccombe Chine (Donisthorpe).
Orchestes fagi, *L.* Newbarn Down, under beech trees in great numbers, 1921 (Jeffery).
Thryogenes scirrhosus, *Gyll.* Sandown, Pits (Donisthorpe); near Blackwater (Jeffery).
Smicronyx reichei, *Gyll.*, and the var. **championis**, *Fow.* Parkhurst Forest, on *Cuscuta Epithymum* (Donisthorpe and Nicholson).
Tychius haematopus, *Gyll.* Sandown and Luccombe (Donisthorpe).
Gymnetron beccabungae, *L.* Sandown (Taylor).
Anthonomus ulmi, *De G.* Marvel Copse (Jeffery).
Cionus hortulanus, *Marsh.* Whitefield Woods, on *Scrophularia* (Donisthorpe).
Nanophyes lythri, *F.* Blackwater on *Lythrum Salicaria* (Jeffery).
Acalles turbatus, *Bott.* Gatcombe and Luccombe (Jeffery).
Rhinoncus castor, *F.* Lake (Newbery); Redcliff, and frequent by grubbing, St. George's Down (Jeffery).
Limnobaris pilistriata, *Steph.* Whitefield Woods (Donisthorpe).
Balaninus nucum, *L.* Briddlesford, beaten off oak (Jeffery).
Rhyncolus lignarius, *Marsh.* Sandown, Street End (Taylor).
Calandra oryzae, *L.* In rice, Sandown (Taylor); Newport, in groceries (Jeffery).
Magdalis pruni, *L.* Sandown (Taylor); Sullens (Jeffery).

SCOLYTIDAE.

- Hylastes ater**, *Pk.* Parkhurst Forest, in numbers under bark of pine stumps, 1921 (Jeffery).
H. opacus, *Er.* Parkhurst Forest, in great numbers in pine stumps (Jeffery).
Cissophagus hederæ, *Schm.* Bordwood (Taylor).
Phloeophthorus rhododactylus, *Marsh.* Sandown, by sweeping, Aug. (Donisthorpe).
Tomicus laricis, *F.* At pine stump, Parkhurst Forest (Jeffery).
Pityogenes bidentatus, *Hbst.* Newport, flying in printer's workshop; and in numbers under bark of recently felled pine, Parkhurst Forest (Jeffery).
Trypodendron domesticum, *L.* Parkhurst Forest, in the hard wood of diseased oak tree (Jeffery).

Xyleborus saxesini, *Ratz.* Parkhurst Forest, in great numbers in the hard wood of dying oaks (Jeffery).

The members of the genus *Xyleborus* are peculiar in having winged females and wingless males; also in the great disparity in the numbers of the sexes. The males are sedentary and rare. I examined over 100 specimens to find the first two males; later finds brought the average to about 40 females to 1 male.

The 222 species of beetles enumerated by Mr. Jeffery in the foregoing list, added to the 1434 recorded in the "Guide," make a grand total of 1656 species found thus far in the I. of W.

EDITOR.

ADDITIONS TO THE LIST OF ISLE OF WIGHT LEPIDOPTERA.

By HUBERT F. POOLE.

To the list of Lepidoptera recorded in Mr. Frank Morey's "A Guide to the Natural History of the Isle of Wight," 1909, I now have the pleasure of making 24 additions, bringing our Island list to a total of 996 species.

To the many friends who have kept me informed as to their captures, I am indebted for the bulk of these records, and in particular to Mr. Louis B. Prout, F.E.S., to whose generous kindness my note books and cabinets both testify.

By the death of Mr. John Taylor, of Sandown, the Island has lost one of its most able and enthusiastic entomologists. I was indebted to him for much of the matter in my previous list, and am able to make use of some of his later notes in these additions.

The period has not been favourable for entomology, or the new records, I feel sure, would have been more numerous.

The nomenclature is that of South's "The Entomologist" list, as before.

RHOPALOCERA (Butterflies).

Hesperia actaeon (Lulworth Skipper). A pair, male and female, taken by Mr. G. W. Boass at Sandown in August, 1910. The specimens were brought to the late Mr. J. Taylor for identification whilst still fresh, and proving of special interest were given to him; Mr. L. B. Prout saw them at the same time. They are now in my cabinet.

HETEROCERA (Moths).

BOMBYCES.

Nudaria senex. Taken in some numbers by Mr. H. G. Jeffery in reed-beds at Carisbrooke.

Nemeophila plantaginis. Mr. H. G. Jeffery took a single male at Combley, 12-6-1921.

NOCTUAE.

Demas coryli. One, at light, Shanklin, 22-5-1909 (H. F. Poole).

Nonagria sparganii. First discovered, for the Isle of Wight, in marsh land near Brading by Mr. Louis B. Prout; the first, a male, taken on August 12th, 1909, at light. Since then a fair number have been taken by various collectors. My own dates show August, from as early as the 2nd of the month, as the time for its emergence.

Calamia phragmitidis. "With the beautiful extreme form of ab. *rufescens*—between Sandown and Shanklin" (L. B. Prout in Ent. Rec., **xxi**, p. 247). It has also been taken between cliffs at Lucombe by the late Mr. J. Taylor. This species was known to occur before the publication of the "Guide," but was unaccountably overlooked.

GEOMETRAE.

Tephrosia luridata. America Woods, near Shanklin, resting on tree-trunks during the day (H. F. Poole); Parkhurst Forest (H. G. Jeffery).

Eupithecia pulchellata. Bordwood and St. Boniface Down (L. B. Prout); Sandown (J. Taylor); Shanklin, at light, 19-7-1910 (H. F. Poole).

E. trisignata. Swainston and Rowridge, larvae on *Pastinaca sativa*, 1909 (L. B. Prout).

E. sobrinata. Shanklin, several at light in 1909 and 1910 (H. F. Poole).

PYRALIDES.

Pyralis glaucinalis. Between Sandown and Shanklin, 1909 (L. B. Prout).

Scoparia basistrigalis. America Woods, near Shanklin, and Steyn Wood, near Bembridge, 1909 (L. B. Prout).

CRAMBI.

Crambus alpinellus. St. Helens Spit, 1909, quite commonly in one restricted spot (L. B. Prout).

C. contaminellus. St. Helens Spit, 1909 (L. B. Prout). This species was given as doubtful in the appendix to my original list: its rediscovery by Mr. Prout now places the record beyond question.

Ephistia kuchniella. Common in bakehouses at Shanklin (H. F. Poole).

Rhodophaea formosa. Near Brading, one at light, 1909 (L. B. Prout).

TORTRICES.

Tortrix heparana. Shanklin, one at light, 1910 (H. F. Poole).

Peronea boscana. Brading Down, 1909 (L. B. Prout).

Paedisca solandriana. Lynbottom Copse, near Haven Street, 1909 (L. B. Prout).

Carpocapsa splendana. Sandown and district (L. B. Prout).

Trycheris aurana. Sandown, 1909 (L. B. Prout).

TINEAE.

Adela degeerella. Numerous in Parkhurst Forest, 1909 (H. F. Poole).

Orthotelia sparganella. Brading Marshes, 20th July, 1909 (L. B. Prout); Brading Marshes, 10th and 15th August, 1910 (H. F. Poole).

Ceratophora rufescens. Sandown, 1909 (L. B. Prout).

LEPIDOPTERA (*fresh localities*).

The following notes concern fresh records and additional information on species, which, though already recorded, are of special interest, or for which localities could not previously be given.

Vanessa antiopa (Camberwell Beauty). One in the Vicarage garden at Brading, in 1911 (J. Taylor).

Melitaea cinxia (Glanville Fritillary). This, our special Isle of Wight butterfly, has increased considerably since the publication of my original notes. Many new localities have been formed and old ones re-established by taking larvae from the Undercliff and liberating them elsewhere. Probably also favourable seasons have helped it to increase naturally, and the War period, being unfavourable for the entomologist, gave the species a chance to recover lost ground.

Deilephila livornica. A rather worn specimen of this rare Hawk Moth was taken by Mrs. W. Morris at Shanklin in May, 1920.

Drepana lacertinaria. One at Shanklin, 1909 (H. F. Poole).

Stilbia anomala. St. George's Down (H. G. Jeffery).

Acosmetia caliginosa. A most important record is the re-discovery of this species in the Island by Mr. Reginald H. Fox, in 1909, when he captured about 20 specimens.

Agrotis vestigialis. Commonly at St. Helens Spit in 1909 (L. B. Prout).

Selidosema ericetaria. Commonly at St. Helens Spit in 1909 (L. B. Prout).

Eupithecia rectangulata. Shanklin (H. F. Poole).

Cidaria suffumata. Landslip (H. F. Poole).

Scoparia pallida. Marshes near Sandown, 1909 (L. B. Prout).

Scopula lutealis. Chillerton Down, 1909 (L. B. Prout).

Ephestia elutella. St. Helens Spit, 1909 (L. B. Prout).

Nephopteryx genistella. Sandown and St. Helens Spit, 1909 (L. B. Prout).

METEOROLOGICAL OBSERVATIONS MADE AT THE ROYAL NATIONAL HOSPITAL, ST. LAWRENCE, DURING 1921.

By MISS M. GIBSON, M.P.S.

<i>Month.</i>		<i>Rainfall inches.</i>	<i>Sunshine hours.</i>	<i>Max. Temp.</i>	<i>Min. Temp.</i>	<i>Mean Temp.</i>
January	...	3.55	40.7	53	33	46.7
February	...	.35	86.2	57	34	43.5
March	...	1.18	145.2	58	34	46.9
April	...	1.25	243.2	70	32	52.3
May	...	1.17	242.0	74	37	54.9
June	...	.18	264.2	74	45	60.7
July	...	.29	271.6	86	51	66.3
August	...	2.70	185.6	79	50	62.5
September	...	.55	185.9	75	45	62.2
October	...	1.62	165.4	74	36	59.2
November	...	2.30	77.4	62	30	46.8
December	...	2.26	38.7	56	33	46.0
Total	...	17.40	1946.1			

The year 1921 was chiefly remarkable for its extreme dryness, the total rainfall being rather less than two-thirds of the usual amount. The distribution was also unusual, the fall in January and August being over the average for those months. The wettest day was October 23rd, when 1.15 inch fell.

The mean temperature, 54°F., was high, being nearly 3° above the average. The maximum of 70° in April was also unusual for that month, and was the more remarkable in connection with the minimum of 32°, which gave an extreme range of 38° in the month.

RAINFALL AND TEMPERATURE TABLES FOR 1921.

OBSERVATIONS MADE AT FERNHILL, WOOTTON-BRIDGE.

(Above Sea Level 118 feet.)

By MAJOR C. G. BRODIE, F.R.C.S., & MISS BRODIE.

		<i>Max. Temp. reached.</i>	<i>Min. Temp. reached.</i>	<i>Mean Max.</i>	<i>Mean Min.</i>	<i>Mean Temp. for month.</i>	<i>Rainfall inches.</i>	<i>Rain days.</i>
January	...	55	28	50·5	40·7	45·6	3·92	19
February	...	58	27	49·2	35·1	42·2	·48	4
March	...	61	28	54	34·2	44·1	1·17	11
April	...	70	28	58·4	38·6	48·5	·92	6
May	...	76	34	63·2	44·3	53·7	1·74	10
June	...	79	43	70·4	50·1	60·2	·04	3
July	...	91	44	76·4	55·3	65·8	·29	6
August	...	79	43	69·5	52·6	61	2·07	11
September	...	81	40	68·7	49·9	59·3	·56	5
October	...	78	33	67	47·6	57·4	1·14	7
November	...	61	24	51	38·1	44·5	2·28	11
December	...	56	27	52·8	38	45·4	1·85	17
Means for Year		70·4	34·7	60·9	43·7	52·4	*16·36	110

*The average rainfall registered at Fernhill during 31 years—1890-1920, amounts to 32·25 inches.

RAINFALL, IN 1921, AT CHALE.

(Above Sea Level 300 feet.)

Recorded by JAMES GIBB.

<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>
Jan. ...	2·52	May ...	1·33	Sept. ...	·38
Feb. ...	·23	June ...	·15	Oct. ...	1·44
Mar. ...	·97	July ...	·18	Nov. ...	1·97
Apr. ...	1·01	Aug. ...	2·46	Dec. ...	1·41

Total 14·05

Heaviest fall in 24 hours, ·72 inch on Aug. 16.

TOTLAND BAY METEOROLOGY, 1921.

By JOHN DOVER, M.A.

The corrected barometrical pressure for the year averaged 30.111 inches.

The breeziest month was January, with 7700 miles of wind. Gales occurred on 8 days only in the year, and 69 days were calm.

Average humidity for the year was 77.9 per cent., the driest day being July 19, with relative humidity 37 per cent.

Snow fell on 3 days ; hail on 6 days.

On only 5 days was there frost in the screen, but the grass thermometer registered slight frost on 42 mornings.

Thunder was heard on 10 days.

The year, as a whole, was the warmest on record here. No less than 6 days in July were above 80° in the shade, the hottest day being July 19th, with max. temp. 84.5F.

The night of July 20th was the warmest at Totland for 35 years, as the temperature did not go below 65.1F. The lowest temperature in the screen was 26.9, and exposed on the grass 19.7.

The temperature of the sea rose to 60 by the middle of June, and did not fall below this until the end of October.

Bright sunshine amounted to 1987 hours.

Rain fell on 119 days only, and measured but 15.89 inches, making it by far the driest year on record.

RAINFALL, IN 1921, AT FLINT COTTAGE, VENTNOR.

(Above Sea Level 99 feet.)

Recorded by J. S. INESON.

<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>
Jan. ...	3.42	May ...	1.16	Sept. ...	.46
Feb. ...	.24	June ...	.10	Oct. ...	1.08
Mar. ...	1.06	July ...	.25	Nov. ...	2.18
Apr. ...	1.04	Aug. ...	2.36	Dec. ...	2.19

Total 15.54

Number of rain-days in the year, 120.

RAINFALL RECORDED AT PERIVALE, RYDE.

(Above Sea Level 193 feet.)

By **MAJOR E. C. MURRAY.**

<i>Year.</i>	<i>Rainfall.</i>	<i>Rain days.</i>	<i>Year.</i>	<i>Rainfall.</i>	<i>Rain days.</i>
1910 ...	38·55	172	1915 ...	42·74	152
1911 ...	35·60	147	1916 ...	37·84	180
1912 ...	39·57	158	1917 ...	29·15	152
1913 ...	33·11	164	1918 ...	30·55	166
1914 ...	41·09	174	1919 ...	33·77	139

Average fall during 10 years, 1910-1919, 36·19 inches.

Average number of rain days, same period, 160.

RAINFALL AT PERIVALE IN 1921.

<i>Month.</i>	<i>Inches.</i>	<i>Rain days.</i>	<i>Month</i>	<i>Inches.</i>	<i>Rain days.</i>
January ...	4·13	21	July ...	·40	7
February ...	·27	3	August ...	2·38	13
March ...	1·16	15	September ...	·53	3
April ...	·94	7	October ...	1·47	7
May ...	1·81	8	November ...	2·10	12
June ...	·02	1	December ...	1·83	19
Total ...				17·04	116

RAINFALL, IN 1921, AT ESPLANADE GARDENS, RYDE.

(Above Sea Level 6 feet.)

Recorded by **B. F. HOLNESS, C.E., Borough Surveyor.**

<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>
Jan. ...	4·23	May ...	1·44	Sept. ...	·69
Feb. ...	·24	June ...	·00	Oct. ...	1·53
Mar. ...	1·32	July ...	·58	Nov. ...	2·49
Apr. ...	1·05	Aug. ...	2·14	Dec. ...	2·08
Total				17·79	

RAINFALL, IN 1921, AT WOLVERTON, NEWPORT.

(Above Sea Level 48 feet.)

Recorded by **FRANK MOREY, F.L.S.**

<i>Month.</i>	<i>Inches.</i>	<i>Greatest fall in 24 hours.</i>		<i>Number of days with</i>	
		<i>Inches.</i>	<i>Date.</i>	<i>·01 in. or more.</i>	<i>·04 in. or more.</i>
January ...	5·01	·73	1	21	17
February ...	·30	·19	1	3	3
March ...	1·73	·35	28	16	10
April ...	1·36	·62	16	8	7
May ...	1·78	·47	7	10	7
June ...	·20	·14	25	4	1
July ...	·24	·07	28	7	3
August ...	3·07	1·19	16	14	11
September ...	·68	·46	11	5	5
October ...	1·05	·37	23	7	5
November ...	2·32	·61	16	12	11
December ...	2·54	·47	14	19	13
Total ...	20·28			126	93

SANDOWN METEOROLOGICAL NOTES FOR 1921.

By **C. E. GILCHRIST, Official Meteorological Recorder.**

Rainfall for the year, 18·75 inches.

Rain fell on 147 days, but on 53 of these days the fall was less than ·04 inch.

January was the wettest month with 3·98 inches.

June, the driest, with ·08 of an inch.

The relative humidity for 1921 was 78 per cent.

The highest point reached by the thermometer was 87° in July, and the lowest 27° in November.

The mean temperature for July was 66°·2.

That of February, the coldest month, 43°.

For the whole year, 53°·6.

Bright sunshine amounted to 1995 hours.

RAINFALL, IN 1921, AT POMONA ROAD, SHANKLIN.

(Above Sea Level 184 feet.)

Recorded by **ERNEST C. COOPER, C.E.,** District Engineer.

<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>
Jan. ...	3·80	May ...	1·42	Sept. ...	·92
Feb. ...	·26	June ...	·04	Oct. ...	2·24
Mar. ...	1·22	July ...	·08	Nov. ...	2·55
Apr. ...	1·18	Aug. ...	3·09	Dec. ...	2·62
				Total	19·42
Days with ·01 inch or more, 92.					
,,	,,	·04	,,	,,	81.

RAINFALL, IN 1921, AT SPRING HILL, EAST COWES.

(Above Sea Level 121 feet.)

Recorded by **GEORGE SHEDDEN, D.L., J.P.**

<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>
Jan. ...	4·27	May ...	1·51	Sept. ...	·79
Feb. ...	·34	June ...	·04	Oct. ...	1·25
Mar. ...	1·02	July ...	·26	Nov. ...	2·40
Apr. ...	1·01	Aug. ...	2·32	Dec. ...	1·58
				Total	16·79

Days with ·01 inch or more, 121.

,, ,, ·04 ,, ,, 78.

Heaviest fall in 24 hours, 1·14 inch on Aug. 16.

RAINFALL, IN 1921, AT WATERWORKS PUMPING STATION, COWES.

(Above Sea Level 161 feet.)

Recorded by **JOHN W. WEBSTER, C.E.,** Water Engineer.

<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>
Jan. ...	4·66	May ...	1·53	Sept. ...	·78
Feb. ...	·20	June ...	·11	Oct. ...	1·49
Mar. ...	1·14	July ...	·33	Nov. ...	2·28
Apr. ...	1·00	Aug. ...	2·31	Dec. ...	1·70
					Total 17·53

Average for 44 years, 1877-1920, 29·82 inches.

RAINFALL, IN 1921, AT UPPER MOOR GREEN, COWES.

(Above Sea Level 160 feet.)

Recorded by **JAMES G. K. DAY.**

<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>
Jan. ...	4·57	May ...	1·55	Sept. ...	·82
Feb. ...	·22	June ...	·14	Oct. ...	1·51
Mar. ...	·96	July ...	·32	Nov. ...	2·33
Apr. ...	·96	Aug. ...	2·34	Dec. ...	1·88
					Total 17·60

Number of rain-days in the year, 113.

Heaviest fall in 24 hours, 1·06 inch on Aug. 16.

RAINFALL, IN 1921, AT BRIGHSTONE RECTORY.

(Above Sea Level 120 feet.)

Recorded by the **REV. E. W. SILVER, M.A.**

<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>
Jan. ...	3·87	May ...	1·43	Sept. ...	·57
Feb. ...	·18	June ...	·19	Oct. ...	1·52
Mar. ...	1·47	July ...	·45	Nov. ...	1·98
Apr. ...	1·02	Aug. ...	2·70	Dec. ...	1·98
					Total
					17·36

Number of Rain-days in the year, 82.

Heaviest fall in 24 hours, 1·12 inch on Aug. 16.

RAINFALL, IN 1921, AT PITT PLACE, BRIGHSTONE.

(Above Sea Level 200 feet.)

Recorded by **AUBREY A. H. WYKEHAM, J.P.**

<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>
Jan. ...	4·89	May ...	1·15	Sept. ...	·59
Feb. ...	·18	June ...	·20	Oct. ...	1·07
Mar. ...	1·87	July ...	·45	Nov. ...	3·25
Apr. ...	1·55	Aug. ...	3·15	Dec. ...	2·16
					Total
					20·51

Number of Rain-days in the year, 88.

RAINFALL, IN 1921, AT THE GRANGE, BEMBRIDGE.

(Above Sea Level 100 feet.)

Recorded by MAJOR F. A. EDWARDS.

<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>	<i>Month.</i>	<i>Inches.</i>
Jan. ...	4·19	May ...	1·14	Sept. ...	·66
Feb. ...	·34	June ...	·03	Oct. ...	1·11
Mar. ...	1·10	July ...	·37	Nov. ...	2·01
Apr. ...	1·20	Aug. ...	1·79	Dec. ...	2·40
Total					16·34

SUMMARY OF RAINFALL, DURING 1921, AT THE VARIOUS ISLAND STATIONS.

	<i>Inches.</i>
Brighstone, Pitt Place	20·51
Newport, Wolverton	20·28
Shanklin, Pomona Road	19·42
Sandown, Esplanade	18·75
Ryde, Esplanade Gardens	17·79
Cowes, Upper Moor Green	17·60
Cowes, Waterworks Pumping Station	17·53
St. Lawrence, Royal National Hospital	17·40
Brighstone, Rectory	17·36
Ryde, Perivale	17·04
East Cowes, Spring Hill	16·79
Wootton-Bridge, Fernhill	16·36
Bembridge, The Grange	16·34
Totland Bay, Aston House	15·89
Ventnor, Flint Cottage	15·54
Chale, South View	14·05

NATURAL HISTORY NOTES.

UNSEASONABLE OCCURRENCE OF MUSHROOMS.—In 1921, probably as a result of the drought, *Agaricus campestris* continued to occur much later than usual, in fact all through November and December; and I gathered some specimens as late as the 8th January, 1922, by the roadside at Rock, Brighstone.

Thos. E. B. Gunyon.

FOSSIL STARFISH.—It is curious how varied a collection of fossil organisms one may get in chalk flints. Recently on breaking open a flint nodule at Shalfeet gravel pit, the impression of a portion of a brittle-star was exposed, making a very attractive specimen. Through the kindness of Mr. Dibley it was identified at the Natural History Museum as *Ophiura serrata*, F. A. Roemer.

Editor.

THE HOODED CROW.—I saw a Hooded Crow here on Feb. 3rd. It was sitting on an elder tree between my house and the shore. I see in your Natural History Guide that this bird is uncommon in the Island, so I thought you might like to have the record. It was perched quite still, and near me, so that I could feel no doubt about it.

Niton Undercliff,
22nd Feb., 1921.

(Miss) Rose Jackson.

THE LITTLE OWL.—I am sending you a Little Owl which was found this morning in a room of a house now under repair, and unoccupied, having evidently fallen down the chimney last night. The species is on the increase in Brighstone district, and I have only noticed it within about the last six years or so. I understand they are becoming very destructive in some places, owing to increasing numbers.

14th Nov., 1919.

A. F. Warne.

ABNORMAL LOBSTERS.—I recently had brought to me, alive, a naturally brick-red lobster, and am having it preserved by Mr. Jeffery of Newport; and, curiously enough, I personally caught on the 2nd inst. another lobster, just over half a pound weight, with both claws exactly alike; both were cutting claws. In the Natural History Museum, South Kensington, there is a similar example, but in this case both are crushing claws.

12th Sept., 1921.

J. M. Goodall.

THE LITTLE OWL, *Athene noctua*, IN THE ISLAND.—I have heard them constantly throughout my stay at Brook, near Compton Farm ; also near St. Catherine's Lighthouse, and at Niton. I am familiar with this bird both in Cambridgeshire and Surrey, having made a special study of its habits and food.

I shall be interested to know if it has been on the increase in the Island during the last 8 or 10 years.

30th Sept., 1921.

(Miss) Clemence M. Acland.

I. OF W. PEBBLES NOT OF LOCAL ORIGIN.—Among the shingle on the shore between Compton and Atherfield are to be found rolled fragments of rocks not occurring in the Island. Some of these, presumed to be "digestive stones," are certainly derived from the Wealden, but it seems desirable to place on record that three vessels carrying granite are said to have been wrecked on this coast during the last fifty years or so. The granite pebbles frequently found are therefore doubtless derived from that source, rather than from the Wealden.

Thos. E. B. Gunyon.

"PORTUGUESE MAN-OF-WAR," *Physalia pelagica*.—Our President, Mr. G. W. Colenutt, writing me on the 30th March, 1912, says : "When at Hamstead to-day I found many dead specimens of *Physalia pelagica* cast up and lying at, or near, high-water mark. I send you three of them, as you may like to make a note of the occurrence. I noticed quite 30 examples lying on the beach between Bouldnor and the "White Band." One was quite fresh, and the bladder was pale pink with the tentacles a brilliant peacock blue.

Editor.

NATURE STUDY IN THE SCHOOL.—Mr. E. B. Bassett, of Shanklin, writes me : "For some years I have been trying to train my schoolboys to be nature students. I persuade every boy in the upper part of the school to study one subject in animal life and one in plant life for a season's work, endeavouring to study a complete cycle as far as possible. Some of the results are very interesting. I am enclosing one boy's book, a summer's study, for you to see what I mean."

The result in this case was indeed *most interesting*, and Mr. Bassett's experiment might very well be tried by other teachers who have not already adopted some such plan.

Editor.

POLYDORA CILIATA.—This marine worm must be extremely abundant along our shores, judging by the great number of pebbles one finds thrown up on the beach which have been bored into by them. Mr. W. H. Shrubsole recently attracted my attention to the fact that they will bore not only into limestone and indurated clay, but into a hard siliceous rock such as chert.

He writes: "I have often kept them in captivity and have been much amused by their operations. Above each entrance to their abode they construct tubes of mud and fine sand, and if these are entirely removed by scrubbing the stone under a tap, they soon set to work to build others, either from fine particles in the water, or from the dried and powdered mud or fine sand that may be supplied to them. They are very fond of biscuit powder, and every crumb that they capture they pass to the mouth along a ciliated groove in the tentacle."

Editor.

FOSSIL CYCAD FROM THE WEALDEN.—In the spring of 1921 there was removed from Brighstone beach an interesting example of a fossil cycad. It was a roughly ovate mass of lignite about two feet in length by some eighteen inches in diameter, having the exterior covered with leaf scars. I first observed it slightly projecting from sand and shingle after a succession of easterly gales, and communicated my discovery to Mr. R. W. Hooley, F.G.S., of Winchester. He considered that, although considerably shifted in position, it was the same specimen he had discovered some years earlier, and had been unable to have removed owing to scarcity of labour during the war. It is now in his collection.

J. E. Gunyon.

THE SLIPPER LIMPET IN OSBORNE BAY.—The American Slipper Limpet, *Crepidula fornicata*, now occurs in enormous numbers on the oyster grounds in Osborne Bay. I first noticed it in 1920, though I gather it has been known on the Essex coast for 20 or 30 years, having been imported with American oysters. The oysters here are dying off, but whether this is really a result of the *Crepidula* invasion I do not know.

In case you have not a record of it, I send this information, together with some specimens, showing its curious habit of making chains of individuals. There is some evidence cited in the "Journal of Marine Biology," June, 1912, that the number of individuals in a chain indicates the age in years of its oldest member. Hence these chains would show that *Crepidula* has been in these waters 4 years. Fishermen say they first noticed it here 2 years ago.

28th Nov., 1921.

(Commander) G. C. C. Damant.

HERONS AT KING'S QUAY.—In July quite a little company of Herons were seen on the mud flats just off King's Quay. They were standing about, resting or feeding, or occasionally taking a short flight. There must have been about 15 of them, and as Mr. Gregson informs me that in 1916 several Herons built nests and reared their young, some 30 in number, in trees in Osborne Wood, it would seem probable that these were some of the locally reared birds.

Editor.

THE BLISTER BEETLE OR SPANISH FLY, *Lytta vesicatoria*.—On July 11, 1920, I brought home three live pairs of *L. vesicatoria* from Alverstone, hoping that I might in due course see the curious larvæ described by continental authors. The beetles, when found, were feeding on ash leaves.

Placed in a glass bowl with earth and fresh ash leaves, they at once commenced to feed voraciously. They were eating vigorously at 11 p.m. on the first night, and again when first seen early the next morning, and by the appearance of the food leaves they would appear to have been feeding all the night. I found they always fed in this way until egg laying was over.

By the early morning of July 16 one beetle had burrowed beneath the earth, leaving just the front of the head exposed at the surface, and remained there with little movement until the next day. Surmising that oviposition had taken place, I looked beneath the bowl and saw eggs in great numbers packed together on end in a mass. They were elongate in shape and of a pale cream colour.

Eggs were laid in this way at intervals over a period of some weeks, the beetles sometimes burrowing completely beneath the earth.

The first eggs began to hatch on Aug. 16. The weather was cool and cloudy for a day or two, and the larvæ remained beneath the earth. On the first sunny day I placed the bowl in the sunshine, and they quickly became active and sought the light by running up the sides of the bowl. Their reaction to light was remarkable. Of some thousands of larvæ all sought a bright light and remained on the ground when the light was poor. Placed in a room they crowded to the window side of the bowl, and after sundown would respond to a light placed near them in the same manner.

A few of the last hatchings were still alive and ready to seek the sunshine at the end of October.

Ability to live for some time without food, and an instinctive desire to run upwards into the sunshine, would both be necessary to enable them to reach their desired feeding places, stated to be nests of bees of the genera *Andrena* and *Halictus*, through the medium of a female bee on to which they jump.

The last beetle died on September 10, and as they had evidently been out a week, or more, before July 11, judging by the amount of leaves eaten, their life probably extends to 9 or 10 weeks in this climate.

The odour of these beetles is notorious, and I could scarcely distinguish it from that of the house-mouse. My cat thought so, too, as he repeatedly sought their bowl until experience taught him wisdom.

Continental writers have referred to the danger of handling these beetles, but I found no ill effects whatever from doing so.

H. G. Jeffery.

