

ADDITIONS TO THE COLEOPTEROUS FAUNA OF LUNDY

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Although in the early part of this century Lundy attracted the attention of many entomologists, since the publication of the list by J. E. Campbell-Taylor in Palmer's "Ilfracombe Fauna and Flora" in 1946 the island appears to have been somewhat neglected. The only more recent additions to our knowledge of the island's beetle fauna was the inclusion of *Dascillus cervinus* (L.) and *Cantharis lituratus* Fall. (= *C. rufa* L.) in the 2nd Annual Report of the Lundy Field Society, both without any data.

Following visits to the island in July 1961 and May 1963 & 1967, 55 species were collected which do not appear to have been previously recorded from Lundy. This brings the total number of Coleoptera at present known from Lundy up to 527.

The status of a few of the species listed below requires some clarification. The *Sitona lineellus* Bonsd. of Campbell-Taylor's list was shown by Kevan (1962) to be *S. ambiguus* Gyll. whilst *S. decipiens* (Lind.) is a synonym of the true *S. lineellus* included in this list. Joy (1932) lists *A. hodierna* Sharp and *A. zosteræ* Thomas., as separate species with *A. nigra* (Kr.) as a synonym of the latter. Strand and Vik (1964) however, include *A. hodierna* as a synonym of *A. zosteræ* with *A. nigra* as a good species, and provide illustrations of the genitalia of both species. The present list includes *Cryptophagus pseudodentatus* Bruce, added to the British list by Coombs and Woodroffe (1955), and *Aleochara albovillosa* Bern. only recently recognized in this country (see Welch 1969). With the above exceptions the nomenclature follows that of Tottenham (1949) for the Staphylinidae, Kloet and Hincks (1945) and those parts of the Handbook for the identification of British Insects so far published by the Royal Entomological Society of London, for the remaining families. The family classification is that of Crowson (1955).

CARABIDAE

Trechus obtusus Er. 26.7.61, High Street, one under haystack refuse.

Amara tibialis (Pk.) 24 and 25.5.63, Castle Hill, crawling in grass, 9.5.67, near Benjamin's Chair, crawling in grass, and on *Lasius flavus* (F.) mound near south coast.

Agonum marginatum (L.) 20.7.61, Earthquake, one under stone.

HISTERIDAE

Hister unicolor L. 19.7.61, Punchbowl Valley, one in cow dung.

Margarinotus purpureus (Hbst.) 24.5.63, Castle Hill, one crawling in grass.

PTILIIDAE

Acrotrichis fascicularis (Hbst.) 11.5.67, Hotel garden, one sweeping lawn; Millcombe, one sweeping vegetation along small stream. 12.5.67, Millcombe House, one in cut grass.

Acrotrichis fratercula (Matth.) 11.5.67, near Old Light, one female in horse dung.

ANISOTOMIDAE

Catops fuliginosus Er. (25.5.63, Battery, carrion-baited pit-fall traps in rabbit burrows (see Welch, 1964).

Catops morio (F.) 25.5.63, Quarterwall and Sth. Quarry, pit-fall traps in rabbit burrows.

Catops chrysomeloides (Pz.) 25.5.63, Quarterwall and Battery, pit-fall traps in rabbit burrows.

Leiodes litura Steph. 11.5.67, Millcombe, one by general sweeping.

APIONIDAE

Apion curtirostre Germ. 20.7.61, Devil's Slide, on *Armeria*. 10.5.67, Millcombe House, sweeping grass by path.

A. frumentarium (Pk.) 20.7.61, Airfield, sweeping *Juncus*.

**A. atomarium* Kirby 9.5.67, South Coast, on old *Lasius flavus* mound.

A. carduorum Kirby 20.7.61, The Battery, sweeping thistles. 21 & 26.7.61, Millcombe House, sweeping grass. 12.5.67, Hotel garden, general sweeping.

A. dichroum Bedel (= *flavipes* Pk.) 12.5.67, Hotel garden, general sweeping.

CURCULIONIDAE

Otiorrhynchus singularis (L.) 24.7.61, Millcombe, on hydranger. 12.5.67, Millcombe, beating honeysuckle over path to beach.

Sciaphilus asperatus (Bons.) 12.5.67, Hotel garden, general sweeping.

**Strophosomus melanogrammus* Forst. 11.5.67, Millcombe, sweeping vegetation at side of path.

S. nebulosus Steph. (= *retusus* Marsh) 9.5.67, near Benjamin's Chair, crawling in grass; above Montague's steps crawling in grass; South Coast, on old *Lasius flavus* mound. 10.5.67, above Goat Island, under cow dung and crawling in grass.

*Philopeton plagiatu*s (Schal.) 24.5.63, Castle Hill, crawling in grass.

**Barynotus obscurus* (F.) 11.5.67, High Street, sweeping vegetation at side of track.

Sitona regensteinensis (Hbst.) 10.5.67, The Ugly, in gorse blossom. 11.5.67, Millcombe, sweeping vegetation at side of track.

**S. lineellus* Bonsd. (= *decepiens* Lind.) 9.5.67, Montague's Steps, and near Benjamin's Chair, crawling in grass.

S. hispidulus (F.), 24.5.63, Castle Hill, crawling in grass. 10.5.67, above Goat Island, crawling in grass.

Caulotrups aeneopiceus (Boh.) 8.5.67, East Coast, North of Millcombe, in dead elder and sycamore.

Sibinia primita (Hbst.) (= *signata* Gyll.) 20.7.61, The Battery, sweeping thistles. 24.5.63, Castle Hill, crawling in grass. 9.5.67, Halfway Wall (West Coast), crawling in grass; South Coast on old *Lasius flavus* mound.

Cidnorhinus quadrimaculatus (L.) 22.7.61, Millcombe, sweeping iris and thistles. 24.7.61, Millcombe, sweeping nettles. 9 & 11.5.67, High Street, sweeping vegetation at side of track. 12.5.67, Landing Beach, among vegetation at foot of cliff.

Centhorrhynchidius troglodytes (F.) 11.5.67, High Street, sweeping vegetation at side of track.

Centhorrhynchus pollinarius (Forst.), 23.7.61, Millcombe, sweeping thistles. 26.7.61, Chicken Field, sweeping nettles. 11.5.67, High Street, sweeping vegetation at side of track.

C. quadridens (Pz.) 9.5.67, South Coast, on old *Lasius flavus* mound. 10.5.67, Millcombe, sweeping nettles. 12.5.67, Hotel garden, general sweeping.

C. erysimi (F.) 26.7.61, Chicken Field, sweeping nettles. 9.5.67, High Street, sweeping vegetation at side of track.

C. contractus (Marsh.) 10.5.67, Millcombe, on *Rhyncosinapis wrightii* at side of path to beach.

C. contractus (Marsh.) var. *pallipes* Crotch 18.7.61, Middle Park, sweeping *Juncus* etc. 10.5.67, Millcombe, on *Rhyncosinapis wrightii* by path to beach.

*Mecinus pyra*ster (Hbst.) 11.5.67, Hotel garden, sweeping lawns.

SCOLYTIDAE

Hylastinus obscurus (Marsh.) 10 & 11.5.67, Millcombe, sweeping grass by path.

STAPHYLINIDAE

- Proteinus brachypterus* (F.) 6.5.67, Landing Beach, one in dead guillemot.
Megarthus hemipterus (Ill.) 11.5.67, Millcombe, one sweeping vegetation along path.
Oxytelus (Anotylus) sculpturatus Gr. 8.5.67, East coast North of Millcombe, two in sheep dung.
Lathrobium (Lobathium) multipunctum Gr. Landing Beach, one among vegetation at foot of cliff.
Philonthus (s. str. ochropus) (Gr.) 9.5.67, Montague's Steps, one in sheep dung.
Philonthus (Onychophilonthus) marginatus Strøm. 10.5.67, above Goat Island, one in cow dung. 11.5.67, near Old Light, two in horse dung.
Philonthus (Bisnius) pachycephalus Nord. 9.5.67, Montague's Steps, one male crawling at roots of grass.
Gabrius nigrutilus (Gr.) 26.7.61, High Street, one female under haystack refuse.
Cafius (s. str.) fucicola Curt. 8 and 12.5.67, Landing Beach, among rotting seaweed.
Ocypus (Alapsodus) compressus (Marsh.) 24.7.61, Millcombe, one under rotten log.
Creophilus maxillosus L. (10.5.67, above Goat Island, in sheep dung. 11.5.67, near Old Light, in dead guillemot.
Quedius (Arphirus) semiobscurus (Marsh.) 26.7.61, High Street, one under haystack refuse.
Mycetoporus (Schinomosa) lepidus (Gr.) 9.5.67, High Street, one sweeping vegetation at side of track.
Conosomus lividus (Er.) 10.5.67, Millcombe, sweeping grass by side of path. 12.5.67, Millcombe House, in cut grass.
Myrmecopora uvida Er. 24.5.63, 8 and 12.5.67, Landing Beach, in rotting seaweed.
Atheta (Halobrecta) flavipes (Thoms.) 6.5.67, Landing Beach, in dead guillemot. 8 and 13.5.67, in rotting seaweed.
Atheta (Traumoecia) angusticollis (Thoms.) 6.5.67, Landing Beach, one in dead guillemot.
Atheta (Dimetrotia) setigera (Sharp) 11.5.67, near Old Light, one in horse dung; High Street, one sweeping vegetation at side of track.
Atheta (Badura) cauta (Er.) 9.5.67, High Street, one sweeping vegetation at side of track; Montague's Steps, one in sheep dung. 11.5.67, near Old Light, one in horse dung.
Atheta (Badura) ischnocera Thoms. 11.5.67, near Old Light, in horse dung.
Atheta (Datomicra) nigra (Kr.) 10.5.67, above Goat Island, two in cow dung.
Atheta (Acrotona) fungi Gr. 9 and 11.5.67, High Street, sweeping vegetation at side of track. 11.5.67, Millcombe, sweeping vegetation along small stream and sweeping hotel lawn. 12.5.67, Millcombe, in cut grass and general sweeping in hotel garden.
Atheta (Amidobia) indubia (Sharp) 12.5.67, Hotel garden, one by general sweeping.
Tinotus morion Gr. 7.5.67, East Coast, south of Halfway Wall, in sheep dung. 9.5.67, Montague's Steps, in sheep dung. 9 and 11.5.67, High Street, sweeping vegetation at side of track. 10.5.67, above Goat Island, crawling in grass. 11.5.67, near Old Light, in horse dung.
Aleochara (Polychara) albovillosa Bern. 19 and 23.5.63, The Battery, in dead Soay sheep kid. 25.5.63, in pit-fall traps in rabbit burrows; particularly common at The Battery but also collected near Old Light, by the Quarter Wall and near the South Quarry.
Aleochara (Emplenota) algarum Fauv. 24, 25, and 26.5.63, Landing Beach, in rotting seaweed.

GEOTRUPIDAE

- Aphodius sphacelatus* (Pz.), 10.5.67, above Goat Island, two in sheep dung.

ELATERIDAE

Agriotes acuminatus Steph. 25.5.63, Castle Hill, one crawling in grass.

CANTHARIDAE

Rhagonycha fulva Scop. 22, 26 and 27.7.61, Millcombe, sweeping Iris and thistles.

Malthinus fasciatus Ol. 26.7.61, Millcombe, beating ash and sycamore.

ANOBIIDAE

Anobium punctatum (DeG.) 18.7.61, Hotel, in wardrobe. 24.7.61, Millcombe, sweeping under ash tree.

NITIDULIDAE

Brachypterus urticae F. 24.7.61, Millcombe, sweeping nettles. 26.7.61, High Street and Chicken Field, sweeping nettles.

Heterostomus pulicarius (L.) 18.7.61, Millcombe, sweeping grass along path to beach. 12.5.67, Hotel garden, sweeping grass.

CRYPTOPHAGIDAE

Cryptophagus pilosus Gyll. 11.5.67, High Street, one sweeping vegetation at side of track.

Cryptophagus pseudodentatus Bruce. 11.5.67, Hotel garden, sweeping lawns.

Ootypus globosus (Walt.). 26.7.61, High Street, under haystack refuse. 12.5.67, Hotel garden, in grass mowings. 19.5.67, High Street, in hay on floor of barn.

SALPHINGIDAE

Rhinosimus planirostris (F.). 12.5.67, Hotel garden, one by general sweeping.

CHRYSOMELIDAE

Longitarsus nigrofasciatus (Goez.) var. *distinguendus*, (Rye) 9.5.67, Montague's Steps, one at roots of grass.

Longitarsus pratensis (Pc.) 11.5.67, Hotel garden, one by sweeping lawn.

Cassida flaveola Thunb. 10.5.67, Millcombe, one by sweeping daffodils in garden.

APIONIDAE

Apion atomarium Kirby. 9.5.67, South coast, one in old *Lasius flavus* mound.

CURCULIONIDAE

Strophosmus melanogrammus (Forst.) 11.5.67, Millcombe, one, sweeping vegetation at side of path.

Barynotus obscurus (F.). 11.5.67, High Street, one, sweeping vegetation at side of track.

Sitona lineellus Bonsd. 9.5.67, Montague's Steps and near Benjamin's Chair, crawling in grass.

REFERENCES

- CAMPBELL-TAYLOR, J. E., 1946. Beetles of the Ilfracombe district. pp. 113-147 in Palmer, M. G., *The Fauna and Flora of the Ilfracombe District of North Devon*. Exeter, 266 pp.
- COOMBS, C. W. & WOODROFFE, G. E., 1955. A revision of the British species of *Cryptophagus* (Hbst.) (Coleoptera; Cryptophagidae). *Trans. R. ent. Soc. Lond.* 106 (Pt. 6), 237-282.
- Crowson, R. A., 1955. *The Natural Classification of the Families of Coleoptera*. London, 187 pp.
- Joy, N. H., 1932. *A Practical Handbook of British Beetles*. London, 2 Vols.

- KEVAN, D. K., 1962. *Sitona lineellus* auctt. and *S. decipiens* Lindberg (Col., Curculionidae): a change of nomenclature. *Entomologist's mon. Mag.*, **98**, 171.
- KLOET, G. S. & HINCKS, W. D. (1945). *A Checklist of British Insects*. Stockport, 483 pp.
- LUNDY FIELD SOCIETY, 1948, 2nd Annual Report. Miscellaneous notes on Terrestrial Invertebrates, pp. 38-41.
- STRAND, A. & VIK, A., 1964. Die Genitalorgane der nordischen Arten der Gattung *Atheta* Thoms. (Col., Staphylinidae). *Norsk. Ent. Tidsskr.*, **XII**, (5-8), 327-335, 21 Plates.
- TOTTENHAM, C. E., 1949. The Generic names of British Insects, Pt. 9, Staphylinidae. *R. ent. Soc. Lond. Committee on Generic Nomenclature*, pp. 345-466.
- WELCH, R. C., 1964. A simple method of collecting insects from rabbit burrows. *Entomologist's mon. Mag.*, **100**, 99-100.
- WELCH, R. C., 1969. Identification of the *Aleochara diversa* (J. Sahlberg) group (Col., Staphylinidae), including a species new to Britain. *Entomologist* **102**, (in press).

THE MARINE ALGAL VEGETATION OF LUNDY

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In spite of the excellent work of G. F. Tregelles (1935, 1937) and of Professor and Mrs L. A. Harvey (anon 1948) (Harvey 1950, 1952), the marine vegetation of Lundy is poorly known, particularly as regards the sublittoral. This is hardly surprising, considering the difficulties of access to the shores from the land, other than at a few restricted localities. However the relatively isolated position of Lundy makes its marine flora of particular interest for comparison with, for instance, the much better known floras of the Scillies and of the Isle of Man, and the neighbouring coasts of the Devon and Welsh mainland. It is also important that its present flora should be known in some detail, so that subsequent changes due to introductions or possibly to pollution factors may be noted.

Accordingly the authors of this account, accompanied by a team of 5 members of the Northern Polytechnic Sub-aqua Club, spent the week 2nd-9th August, 1969, in Lundy, sampling the algal vegetation. Intertidal collections were made at The Gates, and on the upper shore at Jenny's Cove and below Friars Garden, but most material was obtained by diving. The vegetation was completely removed from 1 sq. metre sample of areas of recorded depth and habitat conditions, and the material examined in detail ashore, the major species being measured for size, weight and numbers of individuals. In this way the vegetation of a transect 72 metres long was plotted north of Rat Island. Samples were also taken from near Brazen Ward (to a depth of 80 ft.), Gull Rock and Gannet's Rock, (a depth of 135 ft.). Material was also collected outside the sample areas at the above sites and also at Lametry Bay and off Goat Island. A heavy swell made conditions difficult along the south and west coasts, and hence no quantitative work could be done there during this survey.

FOOTNOTES

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