

| | | | |
|---------------------|----|--------------------|----|
| Swallow | 3 | Spotted Flycatcher | 28 |
| *Jackdaw | 1 | Pied Flycatcher | 5 |
| Blue Tit | 1 | Duncock | 2 |
| Wren | 2 | Meadow Pipit | 10 |
| Song Thrush | 7 | Pied Wagtail | 4 |
| Redwing | 4 | Woodchat Shrike | 1 |
| Blackbird | 60 | Red-backed Shrike | 1 |
| Stonechat | 2 | Starling | 15 |
| Redstart | 7 | Greenfinch | 5 |
| Black Redstart | 1 | Goldfinch | 1 |
| Robin | 19 | Linnet | 8 |
| Grasshopper Warbler | 2 | Chaffinch | 47 |
| Reed Warbler | 1 | House Sparrow | 16 |
| Sedge Warbler | 14 | | |

*Jackdaw is new to the Lundy ringing list.

RECOVERIES OF RINGED BIRDS

| | | | |
|-----------------------|----------------|-------------------|--|
| Guillemot GM 19384 | ringed 5.6.67 | adult found dead | Eastbourne 4.12.76. |
| Guillemot GP 95566 | ringed 29.6.73 | pullus found dead | Woolacombe, Devon 8.6.77 |
| Starling XA 92903 | ringed 20.8.76 | found dead | Werl, West Holtun, West Germany 7.10.77 |
| Willow Warbler 836473 | ringed 14.4.77 | controlled | Portland, Dorset 19.8.77 |
| Linnet KC09559 | ringed 20.9.76 | controlled | St Agnes, Scilly 20.4.77 |

RINGED STRANGERS ON LUNDY

| | | | |
|---------------------------|----------------|--------------------|--------------------------------|
| Manx Shearwater F.S 92490 | ringed 4.9.74 | pullus Skokholm, | dead Lundy S. Light 13.5.77 |
| Blackbird 3250.062 | ringed 8.9.75 | FG Eksel, Belgium, | dead Lundy 16.1.77 |
| Willow Warbler 993.086 | ringed 19.4.76 | adult Calf of Man | controlled Lundy 6.4.77 |

THE DIPTERA (TWO-WINGED FLIES) OF LUNDY ISLAND

R. P. LANE

(*Department of Entomology*), *British Museum (Natural History)*, London SW7

The Diptera of Lundy have been poorly studied in the past. Therefore, it is hoped that the production of an annotated checklist, giving an indication of the habits and general distribution of the species recorded will encourage other entomologists to take an interest in the Diptera of Lundy.

This checklist is a synthesis of results from a trip to Lundy (20-27 July 1972) and all previous records of Diptera from Lundy. The collation of somewhat scattered records has been undertaken in an attempt to create a foundation on which all future recording may be based. The visit was conducted as a preliminary survey, further study of particular groups will undoubtedly be fruitful and yield a more accurate picture of the dipterous fauna.

The dipterous fauna of Lundy, as expected, shows a strong maritime element with species typical of beaches and clifftops—the latter being maintained by continual soaking with seaspray. Some species are characteristic of acid bogland, independent of proximity to the sea, whilst others are catholic in their taste, frequenting a nebulously defined habitat—woodland. On Lundy the woodland habitat occurs around Millcombe, although the dense *Rhododendron*-dominated vegetation of the island's east side is probably ecologically synonymous in this situation.

A principal factor determining the distribution of flies on the island is undoubtedly prevailing wind action. By virtue of reduced wind speed and turbulence airborne insects are probably 'dumped' on the leeward side in much the same way

as demonstrated over the South Downs in Sussex. Many flies however, particularly Sphaeroceridae, were collected in very exposed areas along the windward side, generally on dung or extracted from animal burrows.

A few species present are worthy of particular note. The large numbers of Thaumaleidae found swarming above fresh-water trickles on the cliffs around Quarry beach are an example. These unusual flies are very localised, mainly inhabiting northern parts of the British Isles, where the larvae inhabit thin films of water, feeding on encrusting diatoms and detritus.

Limosina empirica (Hutton) (Sphaeroceridae), a small unobtrusive fly, has hitherto only been found in a glue factory in London's east end! A species, to date unrecorded from the British Isles is *Chyromya flavella* Zett. This fly breeds in birds' nests, feeding on guano, and is probably widespread throughout Britain.

One family noticeable by its absence is the Simuliidae. These are small robust blood-sucking flies with larvae inhabiting flowing fresh water. A thorough search was made for the immature stages in many trickles and watercourses on the Island, to no avail. Their absence has been noted from St. Kilda (L. Davies, personal communication) and may be typical of most islands off the West coast of Britain. The reason for the absence of Simuliids is difficult to elucidate, since there are at least some permanent streams on Lundy. One possible factor may be larval intolerance of high levels of ions from seaspray.

Approximately 70 species have been recorded from Lundy, and these are increased to 282 by the present study. Of these original records 37 have been confirmed by subsequent collection (R.P.L.).

The first published records of Diptera from Lundy were by F. A. Walker (1890)—son of the famous entomologist Francis Walker—who recorded six species. Donisthorpe (1913), a hymenopterist working on myrmecophiles, recorded the brachypterous Sciarid *Peyerimhoffia brachyptera* Kieffer in the nests of the ant *Lasius alienus* Forst. This was the first record of this peculiar fly to Britain, two specimens having previously been collected in Algeria. The main collections of Diptera made on Lundy were by: Bristow (1931); Carpenter (1943); Hartland Rowe (1950) and Smith (1958).

The exact localities and dates are not given (unless of particular relevance), since they are of little significance at this stage in the knowledge of Lundy Diptera; it should be noted, however, for 10-km. grid recording that the grid square reference SS14 applies to all records. The specimens collected by myself are deposited in the British Museum (Natural History).

The format of the list although repetitive is thought to be the most appropriate. The following abbreviations of collectors names have been used throughout:

| | |
|----------|-----------------------------|
| F.A.W. | — F. A. Walker 1890 |
| W.S.B. | — W. S. Bristow 1931 |
| H-C. | — G. D. Hale-Carpenter 1943 |
| M.G.P. | — M. G. Palmer 1946 |
| H-R. | — Hartland-Rowe 1950 |
| A.L.G. | — A. L. Galliford 1953 |
| K.G.V.S. | — K. G. V. Smith 1958 |
| M.W.S. | — M. W. Service 1970 |

All or part of, the term "common and generally distributed", applies throughout, unless otherwise stated. In Diptera it is difficult to determine with any accuracy to what extent the rarity of any species is due to under-collection (or study) or low population levels. Hence, the use of such terms should be regarded as tentative.

The nomenclature follows Kloet and Hincks (1975).

Asterisks denote new records for the Island.

I am indebted to the following specialists for identifying (or checking) specimens of their respective groups with enthusiasm: B. H. Cogan; P. S. Cranston; J. P. Dear; C. E. Dyte; A. M. Hutson; J. Ismay; A. C. Pont and K. G. V. Smith.

I also wish to thank Messrs. J. Dymond, A. M. Hutson and M. J. D. Brendell for help on the island.

TIPULIDAE (Crane flies)

- ***Dolichozepea albipes** (Stroem). Uncommon, usually found in damp woods during April, May and June.
- Tipula** (*Savtshenkia*) **marmorata** Meigen. Adults fly between July and October. Recorded by H.C. who bred adults from pupae found under stones.
- ***T. (Vestiplex) scripta** Meigen. Flies May to August.
- ***T. (Lunatipula) cava** Riedel. Very common species on Lundy during July. Usually common in woodland between May and September.
- ***T. (Yamatotipula) lateralis** Meigen. Flies March to September.
T. (s.s.) oleracea Linnaeus. Common species, although less so than *paludosa*, flying April to September with a peak during May and June. Also recorded by F.A.W. and H.R.
- ***T. (s.s.) paludosa** Meigen. Flies during May and then again between July and October with a peak of activity during August and September. Also recorded by H.C., H.R. and K.G.V.S.
- ***T. (Acutipula) fulvipennis** Degeer. Frequent species usually found in woods flying May to September. Larvae were also collected under algal mats in fresh-water seepages at Quarry beach, and in gravel under rocks on stream bed at Sidelands.
- ***T. (Acutipula) maxima** Poda. Frequent, mainly in woods between April and August.
- ***Limonia (s.s.) nubeculosa** Meigen. Very common, flying February to November.
- ***L. (Neolimonia) dumetorum** Meigen. Common on heaths and in woods between June and September.
- ***L. (Dicranomyia) aquosa** (Verrall). Uncommon species usually found near waterfalls during June and July.
- L. (Dicranomyia) autumnalis** (Staeger). Flies May to November. Also recorded by K.G.V.S.
- ***L. (Dicranomyia) chorea** (Meigen). Common swarming species flying March to November.
- ***L. (Dicranomyia) goritiensis** (Mik). Frequent on wet coastal cliffs. Only recorded from Wales and west England. Flies March to August.
- ***L. (Geranomyia) unicolor** (Haliday). Frequent on rocky coasts around Britain between June and September.
- Pedicia (Tricyphona) immaculata** (Meigen). Flies April to November. Recorded by K.G.V.S.
- ***P. (Ludicia) claripennis** (Verrall). Local species flying May to October.

- **Paradelphomyia (Oxyrhiza) senilis* (Haliday). Uncommon species flying May to September.
- **Ephragma ocellaris* (Linnaeus). Frequent in wet woods between May and June.
- **Austrolimnophila ochracea* (Meigen). Flies between May and August.
- **Pseudolimnophila lucorum* (Meigen). Generally uncommon species flying May to July.
- **Limnophila (Eloeophila) maculata* (Meigen). Common by streams between May and September.
- **L. (Phylidorea) ferruginea* (Meigen). Flies April to September.
- **L. (Euphylidorea) aperta* (Verrall). Frequent during June and July.
- **L. (Euphylidorea) fulvonervosa* (Schummel). Flies between May and August.
- **L. (Euphylidorea) meigeni* Verrall. Common on heaths and moors between May and September. Also recorded by H.R. (as *weigeni*) and K.G.V.S.
- **L. (Brachylimnophila) nemoralis f. separata* (Walker). Frequent species in hilly districts, flying between May and September.
- **Gonomyia (s.s.) dentata* (de Meijere). Flies May to August.
- **Cheilotrichia (Platytona) cinerascens* (Meigen). Flies May to October.
- **Erioptera (s.s.) fuscipennis* Meigen. Flies May to September.
- **E. (s.s.) fusculentata* Edwards. Frequent species from Yorkshire southwards, between June and August.
- **E. (s.s.) lutea* Meigen. Flies May to October.
- **E. (s.s.) trivialis* Meigen. Flies April to October.
- **Ormosia (s.s.) nodulosa* (Macquart). Flies between May and September.
- **Molophilus appendiculatus* (Staeger). Flies May to September.
- **M. bifidus* Goetghebuer. Common species from Shropshire southwards. Flies between May and August.
- **M. occultus* de Meijere. Flies May to August.
Molophilus sp. Recorded by H.R. from damp undergrowth in Gannets Combe.

TRICHO CERIDAE (Winter gnats)

- **Trichocera regelationis* (Linnaeus). Abundant everywhere in winter but restricted to mountainous districts in summer. Common swarming species.

PTYCHOPTERIDAE

- **Ptychoptera albimana* Fabricius. Very common species especially between May and October. Usually found near water, in which the larvae develop.

ANISOPODIDAE (Window gnats)

- **Sylvicola cinctus* (Fabricius). Recorded from Inverness to Cornwall.
- **S. fenestralis* (Scopoli). Very common species often found in houses. Recorded from Ross to Cornwall.
- **S. punctatus* (Fabricius). Very common species often seen swarming. Like the above members of this genus it is found from Scotland to S.W. England.

PSYCHODIDAE (Moth Flies)

**Pericoma nubila* (Meigen).

Larvae of this species develop in streams. Adults are very common on vegetation, particularly *Mentha spp.*, around water-courses on the Sidelands.

**P. pulchra* Eaton.

Uncommon species distributed mainly in S.W. England.

**Psychoda gemina* Eaton.

Uncommon species generally distributed throughout southern England.

DIXIDAE

Dixa dilatata Strobl.

Like all other members of this family the larvae develop in water (usually still).

**D. submaculata* Edwards.

**Dixella martinii* Peus.

This species has only been recorded from S. Wales, Devon and Cornwall.

CHAOBORIDAE

**Chaoborus flavicans*? (Meigen).

Specimen too damaged to allow positive identification. The larvae are the familiar "phantom larvae".

Chaoborus sp.

Recorded by A.L.G. in pond near Quarry.

CULICIDAE (Mosquitoes)

**Mansonia richiardii* (Ficalbi).

This species bites man viciously between April and October. The larvae breed in fresh water.

Aedes (Ochelerotatus) punctor
(Kirby).

Species which bites man viciously, occasionally entering houses. Larvae breed in temporary ground pools. Recorded by M.W.S. who collected 12 blood-fed females, 6 of which had fed on rabbits.

**Culex (s.s.) pipiens* Linnaeus.

Very common species, often found in houses. Rarely bites man. Breeds in fresh, foul and brackish water. Hibernates as adult between October and April. Also collected by M.W.S. (personal communication).

CHIRONOMIDAE (Non-biting midges)

Macropelopia notata (Meigen).

Frequent species flying between May and August, also recorded by H.R. at Gannets Coombe.

**Natarsia nugax* (Walker).

Frequent during June and July.

**Procladius choreus* (Meigen).

Flies April to September.

Psectrotanypus varius (Fabricius)

Flies between April and September. Recorded by H.R. at Gannets Coombe.

**Zavrelimyia nubila* (Meigen).

Frequent, Perthshire southwards between May and October.

Acricotopus lucens (Zetterstedt).

The specimens collected are slightly smaller than those from other parts of the British Isles. Also recorded by H.C.

**Brillia modesta* (Meigen).

Flies March to October.

- **Chaetocladius melaleucus* (Meigen). Uncommon although widely distributed.
Halocladius fucicola (Edwards). This is a typically maritime species commonly found swarming or dancing along rocky coasts. Also recorded from the west side of Lundy by H.C.
- **Orthocladius* (s.s.) *rubicundus* (Meigen). Flies April to August.
- **Metricnemus* sp. Series of female specimens in det.
- **Chironomus plumosus* (Linnaeus). Very common species flying April to September.
- **C. riparius* Meigen. Flies April to September.
- **Pentapedilum sordens* (van der Wulp). Frequent species flying between June and September.
- **P. uncinatum* Goetghebuer. Uncommon although widely distributed. Flies May to July.
- Pseudochironomus prasinatus* (Staeger). Distributed mainly in the Midlands and North of England. Flies during June and July. Recorded by H.R. at Gannets Coombe.
- **Micropsectra apposita* (Walker). Uncommon species breeding in small streams.
- **M. fusca* (Meigen). Common on moors throughout the British Isles. Flies between May and August.
- **M. praecox* (Meigen). Uncommon species with a recorded distribution from eastern England to Scotland. Flies between April and May.
- Chironomidae* 'larvae'. Recorded on the seashore in the 1950 report of the Lundy Field Society (p. 44).

CERATOPOGONIDAE (Biting midges)

- Forcipomyia* (*Synthyridomyia*) *murina* (Winnertz). This uncommon species is only recorded from southern England. Recorded by H.C.
- **Atrichopogon* (s.s.) *pavidus* (Winnertz). Common species especially on Honey-suckle flowers, generally species of this genus are flower feeders.
- **Culicoides* (*Oecacta*) *albicans* (Winnertz). Uncommon species predominantly occurring in wooded areas. Specimens were collected at Millcombe.
- **C.* (s.s.) *punctatus* (Meigen). Commonly found biting horses and cattle usually on the belly.
- **Stilobezzia* (*Neostilobezzia*) *gracilis* (Haliday). Females are predacious on other flying insects.
- **Palpomyia flavipes* (Meigen). Females are predacious on other insects, especially Chironomidae.

THAUMALEIDAE

- **Thaumalea verralli* Edwards. This species is recorded from Devon, Cornwall and Scotland. For further notes see introduction.

BIBIONIDAE (March flies, St. Mark's flies, Fever flies)

Dilophus febrilis (Linnaeus).

This species may often be found in huge swarms after a mass emergence. The larvae feed on roots of grasses and other plants, occasionally causing damage to crops. Recorded by H.C.

SCATOPSIDAE

**Scatopse notata* (Linnaeus).

This is the commonest species of the genus. The larvae breed in dung.

**Rhegmoclema collini* Cook.

An infrequently recorded species although widely distributed.

**R. coxendix* (Verrall).

Distributed mainly in the south and east of England.

MYCETOPHILIDAE (Fungus gnats)

**Diadocidia ferruginosa* (Meigen).

**Symmerus annulatus* (Meigen).

Uncommon but widely distributed, in the south of England at least.

**Macrocera centralis* Meigen.

**M. fasciata* Meigen.

Uncommon but widely distributed.

**M. phalerata* Meigen.

**M. stigmoides* Edwards.

Frequent.

**M. vittata* Meigen.

**Macrorrhyncha flava* Winnertz.

Often found on umbellifer flowers. Larvae develop in rotting wood.

**Antlemon servulum* (Walker).

Uncommon species found only in south and east England.

**Neuratelia nigricornis* Edwards.

This is a very rare species only previously from Crowborough (type locality) and a single specimen from Newcastle.

**Sciophilila nigronitida* Landrock.

**Boletina dubia* (Meigen).

Generally common in damp places where larvae feed on liverworts.

**B. gripha* Dziedzicki.

Usually found amongst vegetation on banks of flowing water.

**Anatella simpatica* Dziedzicki.

Very uncommon species although widely distributed.

**Exechiopsis* (s.s.) *subulata* (Winnertz).

Frequent.

**Brevicornu* (s.s.) *sericoma* (Meigen).

Very common and variable species.

**Trichonta terminalis* (Walker).

Uncommon. Larvae feed in flat fungi on wood.

**T. vitta* (Meigen).

This is the only member of the genus which is common. Larvae have been bred from the fungus *Porcia vaporaria*.

**Phronia conformis* (Walker).

Larvae develop in rotting wood.

**P. nigricornis* (Zetterstedt).

A locally common species.

**P. tarsata* (Staeger).

A locally common species the larvae of which develop in fallen branches.

Phronia sp.

The author has a few specimens of an unplaced species.

**Zygomia humeralis* (Wiedemann).

Like most other members of this family the larvae are saprophagous, feeding on a range of fungi.

**Sceptonia nigra* (Meigen).

SCIARIDAE

Sciara thomae (Linnaeus).

This is one of the largest British Sciarids and is very common. Also recorded by H.C.

Sciara spp.

The author has many specimens (49) of this genus consisting of 5 or 6 species. These have to remain unnamed until the family has been wholly revised in Britain for any determinations would be only provisional.

Plastosciara (*Peyerimhoffia*)
brachyptera (Kieffer).

Recorded by Donisthorpe. See introductory notes.

**Phytosciara* (*Dolichosciara*) *flavipes*
(Meigen).

Very common in wooded areas especially in south and south-west England.

STRATIOMYIDAE (soldier flies)

**Beris vallata* (Forster).

Small species resembling a sawfly.

**Chloromyia formosa* (Scopoli).

Very common species, flying May-July.

**Pachygaster leachii* Curtis.

RHAGIONIDAE (Snipe flies)

Rhagio lineola Fabricius.

Common species also recorded by M.G.P. and W.S.B. as *Leptis lineola*.

Chrysopilus cristatus (Fabricius).

Flies between May and August in damp shady situations amongst dense vegetation. Also recorded by H.R.

TABANIDAE (Horse flies, Gad flies, Stouts, Clegs)

**Haematopota crassicornis*
Whahlberg.

Common species mainly in the north of England and Scotland, flying May to October. Bites man freely.

H. pluvialis (Linnaeus).

Common species in the south of England, flying May-September. Bites man freely. Also recorded by H.R. and W.S.B.

EMPIDIDAE

**Drapetis* (*Crossopalpus*) *humilis* Frey.

Probably not uncommon but overlooked as there are few records. This species has long been associated with dung, especially horse dung, and K. G. V. Smith informs me that it is predacious on Sphaeroceridae.

**Chersodromia arenaria* (Haliday).

Short winged species found on the sea-shore where it preys on other insects. Collected on a dead seal on Quarry beach where it was present in a predatory role rather than necrophorus role.

Platypalpus nigratarsis Fallén

Also recorded by K.G.V.S.

**P. pallidiventris* Meigen.

A very common species.

Hybos culiciformis (Fabricius).

Commonly found on bushes where it preys on small diptera, e.g. Sciaridae or Chironomidae. Also recorded by K.G.V.S.

- H. grossipes** (Linnaeus). Mostly recorded from Scotland where it is common. There are only a few records from southern England. Found on herbage where it is predacious on small flying insects. Recorded by H.R.
- *Hilara litorea** Fallén. Common species often found hovering over water where it mates and takes its prey.
- Empis (Pachymeria) tessellata** Fabricius. This is the largest British empid, often found in large numbers on Umbellifereae where it feeds on plant juices and other insects. Also recorded by W.S.B.
- Rhamphomyia (s.s.) variabilis** (Fallén). Frequents low herbage and sandy places. Recorded by K.G.V.S.
- *Chelipoda vocatoria** (Fallén). Although not common is widely distributed, being found on moist ground and low herbage.
- Phyllodromia melanocephala** Fabricius. A local but widely distributed species often found in some numbers on leaves of dwarf birches and low vegetation. Also recorded by K.G.V.S.
- *Chelifera precatoria** (Fallén). Fairly common near water where it preys on Chironomidae.
- *Clinocera (Hydrodromia) stagnalis** (Haliday). Common on damp mud in which the larvae develop.

DOLICHOPODIDAE

- *Dolichopus atripes** Meigen. Uncommon species found in woods and humid places near water, flies during July and August.
- *D. plumipes** (Scopoli). Very common species found in meadows and humid places in woods both near the coast and inland. Flies during June and July.
- *D. unguatus** (Linnaeus). Very common species around water, both coastal and inland. Flies June-August.
- *D. vitripennis** Meigen. Commonly found in marshy districts particularly near the coast. Flies June-July.
- *Hercostomus (s.s.) cupreus** (Fallén). Not uncommon in woods and near water where it flies during June and July.
- *H. (s.s.) nigripennis** (Fallén). Frequents low herbage, flying between June and August.
- *Hypophyllus obscurellus** (Fallén). Commonly occurring in woods and borders of ponds where it flies June-September.
- *Liancalus virens** (Scopoli). Common species wherever water trickles down a vertical surface, particularly in shaded situations. Flies during July and August.

- Aphrosylus** sp. indet. Recorded by H.R. amongst seaweed stalks at low water. Larvae of this genus are frequently found in the littoral zone.
- Medetera** sp. indet. Recorded by H.R. as 'not uncommon in the lab'. The larvae of this genus live in the bark mines of Scotylid beetles on whose larvae they feed.
- ***Chrysotus cilipes** Meigen. A local species, although abundant where it occurs. Found during July in humid meadows.
- ***C. neglectus** (Wiedemann). Frequents low herbage in humid meadows between May and September.
- Campicnemus** (s.s.) **loripes** (Haliday). Flies during July and August. Also recorded by K.G.V.S.
- ***C. (Ectomus) alpinus** (Haliday). Uncommon species flying during July.
- ***Sympycnus desoutteri** Parent.
- ***Sciapus platypterus** (Fabricius). Common during summer months on trees and trunks.

LONCHOPTERIDAE

- ***Lonchoptera furcata** (Fallén). Although a common species the males are rarely caught. Flies April-October.
- L. lutea** Panzer. Very common species flying between April and October. Also recorded by H.R. and K.G.V.S.

PHORIDAE

- ***Phora** sp. near **aterrima** (Fabricius). Larvae of this genus are predacious on root aphids.
- ***Megaselia (Aphiocheata)** sp.
- ***Megaselia** (s.s.) sp. Generally a group with saprophagous larvae, although there is evidence of facultative parasitism.

SYRPHIDAE (Hover flies, Drone flies)

- Eristalis pertinax** (Scopoli). Very common species. The larvae are the well known rat-tailed maggots which inhabit foul or stagnant water, liquid animal dung or carrion. Also recorded by H.R. as *Tubilifera pertinax*.
- E. arbustorum** (Linnaeus). Flies from April to September. Larvae are found in the same habitats as the preceding species. Also recorded by H.R. as *Tubilifera arbustorum*.
- ***Syrirta pipiens** (Linnaeus). Larvae have short 'tails' and inhabit animal dung and rotting vegetable matter.
- ***Volucella bombylans** (Linnaeus). Commonly flying between May and August. The larvae live as scavengers in the nests of the wasp *Vespa germanica* (Fabricius).
- Melanostoma mellinum** (Linnaeus). Common in marshy places from April to November. The larvae are carnivorous, feeding on insect larvae and aphids. Recorded by H.R. and K.G.V.S.

- M. scalare** (Fabricius). Common in marshy areas where the larvae are predacious on other insects. Recorded by H.C.
- Platycheirus angustatus** (Zetterstedt). Another species common in marshy places with aphidophagous larvae. Flies between June and October. Recorded by K.G.V.S.
- ***Sphaerophoria scripta** (Linnaeus). Common in damp situations, flying June to October. Larvae predatory on insect larvae and aphids.
- Episyrphus balteatus** (Degeer). This species is thought to be migratory from the continent as it is often found swarming on the coast. Flies from February to October. Also recorded by H.R.
- Chrysotoxum fasciolatum** De Geer. This species was recorded by F. A. Walker but Verrall, when discussing this species, states "recorded frequently in mistake, I think, for *C. arcuatum* or the common *C. cautum* as I have never seen an authentic British specimen". Therefore the record for this species may be considered dubious.
- Scaeva pyrastris** (Linnaeus). Often found swarming between June and November. Also recorded by H.C. as *Lasiopticus pyrastris*.
- Dasyrphus lunulatus** (Meigen). Frequent species between May and October. Recorded by H.R.
- Metasyrphus corollae** (Fabricius). Also recorded by H.R. as *M. consisto* (Harris).
- TEPHRITIDAE** (Large Fruit-flies)
- ***Xyphosia miliaria** (Schrank). Fairly common species developing in flower heads of the Field thistle.
- ***Myoleja caesio** (Harris). Like other species of this group it develops in flower heads of Compositae.
- PLATYSTOMATIDAE** (Picture-wing flies)
- ***Rivellia syngenesiae** (Fabricius). Locally common. Usually found in association with sedges.
- CHAMAEMYIIDAE**
- ***Chamaemyia juncorum** (Fallén). Although widely distributed, not very common.
- LAUXANIDAE**
- ***Minettia** (s.s.) **fasciata** (Fallén). Generally distributed in south England. Flying May-September.
- ***Sapromyza** (s.s.) **sordida** Haliday. Widely distributed, flying May-September.
- ***Aulogastromyia anisodactyla** (Loew). Very uncommon species, flying during June and July.
- HELEOMYZIDAE**
- ***Heteromyza rotundicornis** (Zetterstedt). Commonest species of genus.

CHYROMYIDAE

**Chyromya flavella* Zetterstedt.

First British record, although probably widespread. Larvae develop in birds' nests.

SEPSIDAE

**Themira lucida* (Staeger)

Common throughout south England, with a few records from Scotland.

T. minor (Haliday).

Uncommon species distributed mainly in southern England and Ireland. Recorded by K.G.V.S.

Sepsis cynipsea (Linnaeus).

Also recorded by H.C.

S. fulgens Meigen.

Generally found in marshes and woodland during February and again between August and November. Recorded by H.C. as *S. tonsa*.

**S. orthocnemis* Frey.

Fairly common.

S. duplicata (Haliday).

Widespread but uncommon in South England, scarcer in the North. Recorded by K.G.V.S. as *Sepsidimorpha pilipes*.

**S. punctum* (Fabricius).

**S. thoracica* (Desvoidy).

Very uncommon species recorded from scattered localities in south England only.

SCIOMYZIDAE (Marsh flies)

Knutsonia lineata (Fallén).

Usually found on vegetation by streams and lakes where they predare on snails. Recorded by K.G.V.S. as *Elgiva lineata*.

SPHAEROCERIDAE

Sphaerocera (s.s.) *curvipes* Latreille.

Flies throughout the year but particularly common between April and June. This is the commonest fly on horse dung. Also recorded by H.C. as *S. subsaltans*.

**S. (Ischiolepta) denticulata* (Meigen).

Uncommon species with few records from south-west England where it frequents horse and cow dung. Flies most of the year, commonest in spring.

**Copromyza* (Olin) *atra* (Meigen).

Cosmopolitan species mainly distributed throughout the year. Commonly found on dung of horse, cow, sheep, dog and man.

**C. (Borborillus) ucinata* (Duda).

Uncommon.

**C. (s.s.) equina* Fallén.

Cosmopolitan species found every month of the year, especially common in spring and summer. Frequents horse dung, rarely on cow dung.

**C. (s.s.) similis* (Collin).

Common all the year round on dung of cow, horse, and man.

**Leptocera* (s.s.) *fontinalis* (Fallén).

Cosmopolitan species evenly distributed throughout the year.

**L. (Pseudocollinella) septentrionalis* (Stenhammer).

Uncommon species not previously recorded from south-west England. Usually found on mud near the coast in north and west England.

**Leptocera (Spinotarsella) humida* (Haliday).

Flies June-September. Always found associated with still water or slow-flowing streams, occasionally found on sea-shore.

- ***L. (*Limosina*) bequaerti?** Villeneuve Usually found associated with rabbit burrows, flying March-December. Found throughout south England.
- ***L. (*Limosina*) clunipes** (Meigen). Commonest species of the genus found throughout the year, particularly common during winter and early spring. Frequents open situations where it inhabits a wide range of habitats, common on horse dung, rare on cow dung.
- ***L. (*Limosina*) empirica** (Hutton). Very rare species found on corpses. Collected from dead seal on Quarry Beach. Duda recorded it from a human corpse in Vienna.
- ***L. (*Limosina*) luteilabris** (Rondani). Found throughout the year on carrion and in sea birds' nests.
- ***L. (*Limosina*) palmata** (Richards). Frequent throughout the year in shaded areas, woodland or burrows.
- ***L. (*Limosina*) pseudoleucoptera** (Duda). Very rare species only previously recorded from Surrey and the Scilly Isles, on horse dung. (det. O. W. Richards).
- ***L. (*Limosina*) talparum** (Richards). Uncommon species found mainly in early spring associated with moles' nests or runs (sometimes in nests of *Microtus*).
- ***L. (*Limosina*) vitripennis** (Zetterstedt). Flies during winter and early spring close to the ground under low vegetation.
- ***L. (*Trachyopella*) leucoptera** (Haliday). Uncommon species breeding in dung. Found on dead deer on Sidelands.
- L. (*Halidayina*) spinipennis** (Haliday). Frequents horse dung during spring and early summer. Recorded by H.C.

PALLOPTERIDAE

- ***Palloptera umbellatarum** (Fabricius). Breeds in flower heads of Carline-thistles and Spear-thistles.

PIOPHILIDAE (Cheese Skippers)

- ***Piophila (*Stearibia*) foveolata** Meigen. Fairly common species found on corpses
- ***P. (*Allopiophila*) vulgaris** Fallén. Frequents corpses. Collected from dead seal on Quarry Beach.
- ***P. (*Liopiophila*) nigrimana** Meigen. Uncommon species, feeding on decaying, usually dry, animal remains.

OPOMYZIDAE

- ***Geomyza balachowski** Mesnil. Very common species breeding in cereals and grasses.
- Opomyza germinationis** (Linnaeus). Breeds in various grasses. Recorded by K.G.V.S.
- O. petrei** Mesnil. Another grass-breeding species. Recorded by K.G.V.S.

ANTHOMYZIDAE

- ***Anthomyza gracilis** Fallén.
- ***A. sordidella** (Zetterstedt).
- ***Anagnota bicolor** (Meigen). Uncommon species recorded from hilly areas of Scotland and Wales.

EPHYDRIDAE (Shore flies)

**Notiphila* (s.s.) *cinerea* Fallén.

Very common species found on vegetation near water. The larvae attach themselves to airspaces in water plants to facilitate respiration.

**N.* (*Agrolimna*) *uliginosa* Haliday.

Generally found in western parts of England and Wales.

**Hydrellia cardamines* (Haliday).

H. griseola (Fallén).

Very common around ponds, where the larvae mine stems and leaves of plants. Recorded by K.G.V.S. as *Hydropota griseola*.

**H. modesta* Loew.

**H. mutata* (Zetterstedt).

Fairly common in south of England.

**Parydra coarctata* (Fallén).

**P. fossarum* (Haliday).

**Hyadina humeralis* Becker.

Uncommon species, found throughout south of England, often near water.

**Limnellia quadrata* (Fallén).

Particularly common in south-west England.

**S. paludum* (Meigen).

Frequent on the sea-shore.

**S. silacea* Loew.

Uncommon species found only in south of England.

S. stagnalis (Fallén).

Recorded by W.S.B. and M.G.P.

**Scatophila caviceps* (Stenhammer).

Rather uncommon species only previously found in Suffolk and Pembrokeshire.

DIASTATIDAE

Diastata unipunctata Zetterstedt.

Common species found throughout the year, in marshy habitats. Also recorded by K.G.V.S.

DROSOPHILIDAE (Small fruit flies)

**Scaptomyza* (s.s.) *graminum* (Fallén).

Breeds in chickweed and Caryophyllaceae.

S. (*Parascaptomyza*) *pallida* (Zetterstedt).

Breeds in decaying vegetable matter, never mines as do larvae of closely related species. Recorded by K.G.V.S. as *S. disticha* Duda.

**Drosophila* (*Lordiphosa*) *andalusiaca* Strobl.

Frequent in southern maritime areas.

MILICHIIDAE

**Phyllomyza securicornis* Fallén.

This species is myrmecophilous, possibly occurring in a wide range of nests.

AGROMYZIDAE (Leaf Miners)

**Cerodontha* (s.s.) *denticornis* (Panzer).

Widespread species. Recorded by K.G.V.S.

**Phytomyza ranunculi* (Schrank).

The larvae mine the leaves of *Ranunculus* sp.

CHLOROPIDAE (Gout flies, Frit flies)

**Dicraeus vagans* (Meigen).

Fairly common species.

**Tropidoscinis antennata* Collin.

Very rare species described in 1946 from Suffolk and only since found in Baffinshire. Thought to be associated with sedges. Flies during July.

Oscinella frit (Linnaeus).

Known as the Frit fly this species is a cereal pest throughout Europe and North America. In this country it attacks Barley, Wheat and Rye. Three generations are produced each year, the larvae overwintering in wild grasses. Also recorded by K.G.V.S.

**Meromyza nigriventris* Macquart.

Fairly common species.

**Meromyza* sp. indet. probably *variegata* Meigen.

**Diplotoxa messoria* (Fallén).

**Cetema elongata* (Meigen).

**C. paramyopina* Collin.

Uncommon species described as recently as 1966.

**Chlorops hypostigma* Meigen.

Fairly common species.

**Chloropisca glabra* (Meigen).

Fairly common species with larvae predatory on aphids.

TACHINIDAE (Parasite flies)

Linnaemya (s.s.) *vulpina* (Fallén).

Fairly common during July and August, especially on brambles. Parasitic on Pine Hawk, Lunar Clearwing and Hornet Clearwing moths. Recorded by W.S.B. and H.R.

Tachina grossa (Linnaeus).

Largest British Tachinid, recorded mainly from Devon and Cornwall. Recorded by H.R. as *Larvaevora grossa*.

SARCOPHAGIDAE (Flesh flies)

**Sarcophaga crassimargo* Pandellé.

Flies April-September in waysides and marshes.

CALLIPHORIDAE (Blow flies, Blue Bottles, Green Bottles)

Calliphora vicina Robineau-Desvoidy. Very common species throughout the year flying on warm winter days. Also recorded by H. C. and H.R. as *C. erythrocephala* Meigen.

C. vomitoria (Linnaeus).

Very common species. Also recorded by H.R. and F.A.W.

Lucilia caesar (Linnaeus).

Very common in woods and gardens. Also recorded by H.R. and F.A.W. as *Musca caesar*.

**L. sericata* (Meigen).

Very common species being the principal sheep blow-fly in Britain. Larvae develop in decomposing flesh and other rotting animal matter.

SCATHOPHAGIDAE (Dung flies)

Scathophaga stercoraria (Linnaeus).

Found throughout the year preying on small soft-bodied insects on dung. Also recorded by F.A.W. and H.C. This species was found in large numbers at the north end of the island clinging to sedges, and was heavily infected with the parasitic fungus *Entomophthora muscae* (Cohn) Fresenius.

**S. stercoraria* var. *merdaria* (Fabricius).

**Ceratinostoma ostiorum* (Curtis).

A maritime species occurring around the coast of most of Britain.

ANTHOMYIIDAE

**Chirosia cinerosa?* (Zetterstedt).

Widespread breeding in ferns.

**C. histricina* Rondani.

Delia florilega (Zetterstedt).

A southern English species. Recorded by K.G.V.S. as *D. trichodactyla* (Rondani).

**Hylemya vagans* (Panzer).

Fairly common species.

H. variata (Fallén).

Recorded by K.G.V.S.

**Paregle cinerella* (Fallén).

Fairly common and generally distributed throughout southern England.

**Nupedia aestiva* (Meigen).

**N. infirma* (Meigen).

FANNIIDAE (Lesser House flies)

**Fannia armata* (Meigen).

Very common species flying May-September.

**F. similis* (Stein).

Flies May-October.

**F. sociella* (Zetterstedt).

Very common species flying April-September.

MUSCIDAE (House flies, etc.)

Orthellia viridis (Wiedemann).

Flies between March and May and again between August and October, when the adults are found on excrement. Recorded by H.R. as *O. caesarion* (Meigen).

**Morellia hortorum* (Fallén).

Fairly common flying between May and August. Larvae are carnivorous inhabiting dung, usually cow dung.

M. simplex (Loew).

Very common between March and September when it is often a nuisance sucking sweat with *Hydrotaea*. Larvae as in *M. hortorum*. Recorded by H.R.

**Azelia* sp. indet.

**Drymeia hamata* (Fallén).

Common on flowers of *Senecio jacobaea* Linnaeus between June and September.

Hydrotaea irritans (Fallén).

Very common species, the female of which causes severe discomfort in late summer by sucking sweat. Flies June-September. Also recorded by H.C.

**Phaonia incana* (Wiedemann).

Flies May-August.

**P. signata* (Meigen).

Very common species between April and September.

- Helina duplicata** (Meigen). Very common species between April and October. Also recorded by K.G.V.S.
- H. laetifica** (Robineau-Desvoidy). Very common between February and June and again August and October. Recorded by F.A.W. as *Anthomyia locurum* Fallén.
- Hebecnema umbratica** (Meigen). Flies April-October. Also recorded by K.G.V.S.
- ***Myospila mediatubunda** (Fabricius). Flies April-September.
- ***Pseudocoenosia solitaria** (Zetterstedt). Fairly frequent between July and October with a scattered distribution.
- Coenosia femoralis** Robineau-Desvoidy. Flies May-September. Also recorded by K.G.V.S. as *C. geniculata* (Fallén).
- ***C. mollicula** (Fallén). Flies May to September.
- C. pedella** (Fallén). Frequent although local. Flies between June and August. Also recorded by K.G.V.S. as *C. decipiens* Meigen.
- C. tigrina** (Fabricius). Very common species between May and September. Also recorded by K.G.V.S.
- HIPPOBOSCIDAE** (Louse flies)
- Ornithomya avicularia** (Linnaeus). Common species ectoparasitic on a wide range of birds, e.g. hawks, owls, pigeons, jays, finches. Recorded by Thomson on meadow pipit trapped on Lundy.
- O. fringillina** Curtis. Smaller than preceding species. Ectoparasitic on robin, dunnoek, and finches. Recorded by Thomson on meadow pipits and linnet trapped on Lundy. There is also a specimen in the B.M. collected from a goldcrest by J. M. Dymond.

REFERENCES

- Bristow, W. S. 1931. A small collection of insects from Lundy Island. *Entomologist's mon. Mag.*, **67**, 232.
- Carpenter, G. D. H. 1943. New records of insects and woodlice from Lundy Island. *Entomologist's mon. Mag.*, **69**, 121-23.
- Donisthorpe, H. 1913. Ants and myrmecophiles. *Entomologist's Rec. J. Var.*, **25**, 367-369.
- Galliford, A. L. 1953. Notes on freshwater organisms of Lundy, with especial reference to Crustacea and Rotifera. *Rep. Lundy Fld. Soc.*, **7**, 29.
- Hartland-Rowe, R. C. B. 1950. Terrestrial and Freshwater Ecology: (5) Two-winged flies. *Rep. Lundy Fld. Soc.*, **4**, 31-33.
- Kloet, G. S. & Hincks, W. D. 1975. A checklist of British Insects. 2nd edition. Part 5. Diptera and Siphonaptera. *Handbk. Ident. Br. Insects.*, **11**(5), 1-139.
- Palmer, M. G. 1946. *Ilfracombe fauna and flora*. Exeter, 266 pp.
- Service, M. W. 1970. Mosquitoes, myxamotosis and Lundy. *Rep. Lundy Fld. Soc.*, **21**, 35.
- Service, M. W. 1971. A reappraisal of the role of mosquitoes in the transmission of myxamotosis in Britain. *J. Hyg. Camb.*, **69**, 105-111.
- Smith, K. G. V. 1958. Some records of Diptera and other insects from Lundy. *Entomologist's mon. Mag.*, **94**, 94.
- Thompson, G. B. 1953. Ectoparasites. *Rep. Lundy Fld. Soc.*, **7**, 25.
- Walker, F. A. 1890. List of insects observed on Lundy Island, July 31, 1888. *Entomologist*, **23**, 140.