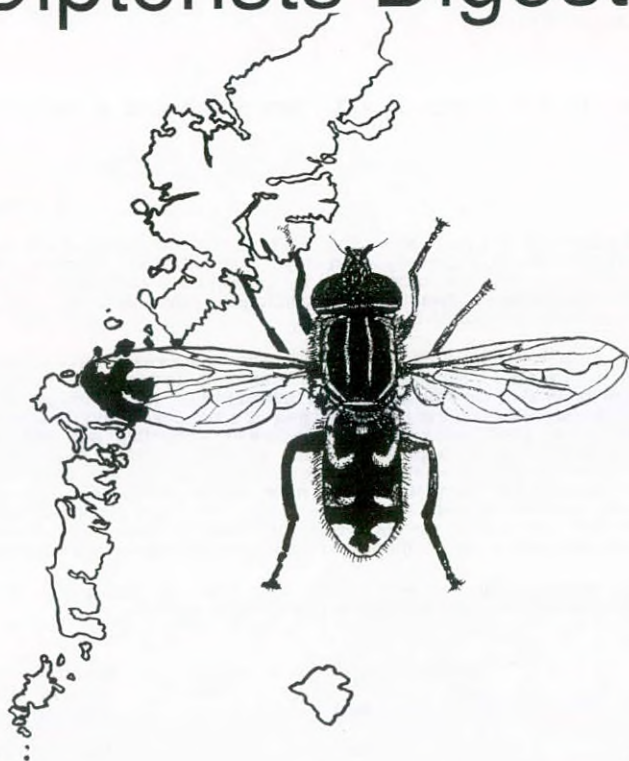


# Dipterists Digest



Scottish Islands Series

# Dipterists Digest



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# A Survey of Diptera on the Isle of Rum - 1990

Edited by Derek Whiteley

Contributions by E.G. Hancock, A.R. Plant, K.P. Bland, D. Whiteley,  
D. Horsfield

Introduction

E.G. Hancock

Between 25-29 June 1990, the 10th Annual Scottish Entomologists' Field Meeting was located on Rum, previously spelt Rhum, apparently incorrectly (Campbell, 1991). To mark a decade of these field meetings it was appropriate to be invited by the Nature Conservancy Council to spend a week recording insects there. Twenty two entomologists travelled to the west of Scotland of whom fourteen contributed records of Diptera.

In the past, and since then, the support of the NCC and its successor bodies has been of great benefit to these annual field meetings which has been reciprocated by the provision of records on the sites visited. In 1990 we were specifically invited to Rum for several reasons. This island is one of the Inner Hebrides and has been managed as a National Nature Reserve since 1957. It has been over twenty years since extensive systematic recording was last undertaken and subsequently published as an impressive listing (Wormell, 1982). Also the effect of new management practices were beginning to have an effect on the landscape which might be reflected in a change in the insect fauna. The most visible of these was a programme of tree planting, sometimes within fenced areas to protect the plants from grazing damage by red deer. It has been shown in some of the results already published (Hancock, 1992) that there are some detectable additions to the fauna attributable to the greater abundance and variety of trees.

Along with the other groups of insects which were recorded during 1990 it is possible to summarise quantitatively the species diversity in the island reserve.

	British List	Rum (Wormell, 1982)	Rum (1990)	New to fauna in 1990	Total fauna	
Diptera	5950	550	296	108	658	(11%)
Other recorded groups (Hancock, 1992)	8501	1351	349	56	1407	(16.5%)

This table is possibly an over-simplistic summary of the results to date. As has been demonstrated within other orders of insects some species should be considered for deletion from the earlier lists. In the case of the Diptera this is also suggested, as is discussed under the species concerned. However, this will not significantly alter the overall percentages. The above figure of 11% of the British dipterous fauna now found to occur on Rum can be related to the other groups which have previously been identified. It falls to 5% for even less popular insects such as Hymenoptera and Collembola, but is as high as 35% for Ephemeroptera and Plecoptera according to Wormell (1982).

## Collectors

DB	David Beaumont	AKS	Ashley Kirk-Spriggs
KPB	Keith Bland	AP	Adrian Plant
GNF	Garth Foster	DMR	David Robertson
EGH	Geoff Hancock	GER	Graham Rotheray
DH	David Horsfield	DW	Derek Whiteley
RK	Roger and Rosie Key		

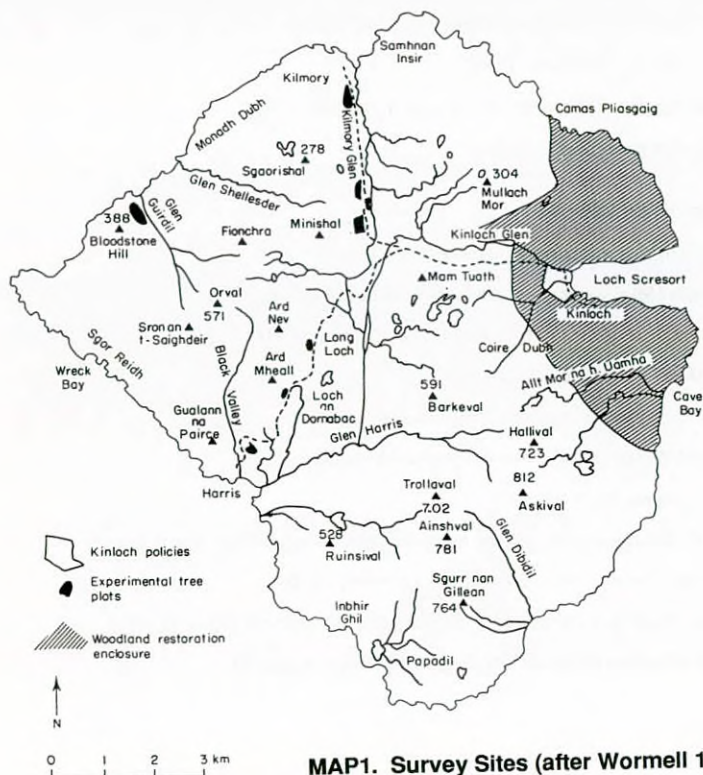
(NOMR 1989) refers to records in Ravenscroft et.al. (1991) taken in the summer of 1989 on Rum. We have included these records because they include significant additions to the hoverfly list.

Water traps were operated by Ashley Kirk-Spriggs.

## Acknowledgements

Derek Whiteley would like to thank Jonathon Cole for identifying his Empidoidea and Calyptrates. Ashley Kirk-Spriggs and Adrian Plant's Dolichopodidae were identified by C.E. Dyte. Fungus gnats were identified by Peter Chandler. Other material was identified by the authors except where otherwise indicated.

Special thanks from the team go to Peter Wormell for his guidance and enthusiasm and to N.C.C. (now Scottish Natural Heritage) staff for making our stay comfortable and enjoyable.



MAP1. Survey Sites (after Wormell 1982)

## SYSTEMATIC LIST

Records submitted by members of the field trip have been amalgamated and edited. Check list follows Kloet and Hincks (1976) with a few modifications eg Hoverflies follow Stubbs and Falk (1983).

\* indicates an addition to Wormell's 1982 published list.

### **NEMATOCERA (E.G. Hancock)**

Except where otherwise stated records are of one to three specimens swept from low-lying vegetation. Cave Bay is a translation of Bagh na h-Uamba (NGR: 17/4297) and is used as an abbreviation for this area.

#### **TIPULIDAE** - Large-palped Craneflies

***Dolichopeza albipes*** (Stroem) Kinloch; by stream near castle and upstream from there (EGH)

***Tipula scripta*** Meig. Kinloch; saltmarsh, woods (EGH)

***Tipula alpium*** Bergroth Hallival, (DB) Cave Bay (EGH)

***Tipula varipennis*** Meig. Cave Bay, (EGH)

\****Tipula pruinosa*** Wied. Kinloch; woods (EGH)

***Tipula oleracea*** L. Kinloch; saltmarsh (EGH)

***Tipula fulvipennis*** Degeer. Kinloch; woods, Kilmory; Cave Bay (EGH)

***Tipula luna*** Westhoff. Kilmory; dunes (EGH)

#### **LIMONIIDAE** - Short-palped Craneflies

\****Limonia flavipes*** (Fabr.) Kilmory; swept by cottage (EGH)

***Limonia nubeculosa*** Meig. Kilmory; on cliff faces near beach (EGH)

***Limonia autumnalis*** (Staeger) Kinloch; woods, Kilmory; dunes (EGH)

***Limonia didyma*** Meig. Kilmory; by stream (EGH)

***Limonia chorea*** (Meig.) Kinloch; woods, Kilmory; dunes (EGH)

***Antocha vitripennis*** (Meig) Kinloch, Kilmory; common by stream (EGH)

***Pedicia rivosa*** (L) Hallival, larva (RK)

***Pedicia schummeli*** (Edwards) water trap on moorland above Kinloch; Cave Bay (EGH)

\****Pedicia claripennis*** (Verrall) Kinloch (water trap); Cave Bay, (EGH)

***Ula sylvatica*** (Meig) Kinloch, water trap both on shore and on moorland above (EGH)

***Austrolimnophila ochracea*** (Meig) Kinloch; common in wooded area (EGH)

- \**Limnophila mundata* Loew Kilmory; streamside (EGH)
- Limnophila fulvonervosa* (Schumm) Kinloch; common in wooded areas Cave Bay. (EGH)
- Limnophila meigeni* Verrall water trap on moorland above Kinloch
- \**Limnophila phaeostigma* (Schumm) Kilmory, dunes (EGH)
- Limnophila squalens* Zett. Cave Bay (EGH)
- Limnophila nemoralis* (Meig) typical form, Kinloch; by stream (EGH), f. *separata* (Walker) Hallival, (DB); Cave Bay (EGH); Harris (DR).
- Pilaria filata* (Walker) water trap on moorland above Kinloch (EGH)
- Cheilotrichia cinerascens* (Meig) Kilmory; dune area (EGH)
- Gonomyia dentata* de Meijere Harris (DR)
- \**Gonomyia lucidula* de Meijere Kinloch; streamside (EGH)
- \**Gonomyia conoviensis* Barnes Kinloch; streamside (EGH)
- Erioptera fuscipennis* Meig. Kinloch; in woods (EGH)
- Erioptera lutea f. taenionota* Meig. Kinloch; in woods, Kilmory; in dunes area and up slopes (EGH)
- \**Erioconopa trivialis* Meig. Harris (DR)
- \**Ormosia pseudosimilis* (Lundstroem) water trap on moorland above Kinloch. (EGH)
- \**Molophilus pusillus* Edwards Kinloch; woods (EGH)
- \**Molophilus ochraceus* (Meig) Kinloch; woods (EGH)
- Molophilus griseus* (Meig) Kinloch; woods (EGH), Cave Bay Harris (DR)
- Molophilus occultus* de Meijere Water trap on moorland above Kinloch (EGH)
- \**Molophilus appendiculatus* (Staeger) Kinloch; woods water trap (EGH)
- \**Tasiocera murina* (Meig) Cave Bay; swarming in overhanging vegetation (EGH)

#### ANISOPODIDAE - Window Gnats

- \**Sylvicola cinctus* (Fabr.) One female Kinloch; in woods (one in water trap)  
 Three females Kinloch; streamside vegetation  
 Four males, one female Kilmory; dunes  
 One male, one female Cave Bay

Despite particular attention being paid to this family no examples of *Sylvicola fenestralis* (Scop.) were found. With the difficulties inherent in the existing keys for characters based on colour, especially for females, it is possible that earlier records are *cinctus*. *S. fenestralis* is quite uncommon in Scotland and most specimens in old museum collections have proved to be *cinctus* upon examination of the genitalia.

It is also suspicious that earlier lists from the island do not record *cinctus*. The earlier record for Rum of *fenestralis* as common at Kinloch in 1960 (Wormell, 1982) perhaps should be set aside.

The surprising absence of *S. punctatus* (Fabr.) from any of the various samples taken during this stay on the island in 1990 is most curious. This dung feeding fly is normally one of the most common in any area of land devoted to agriculture. There may be more than one factor involved but the most pertinent observations were made by a member of the party, David McCracken then of the West of Scotland Agricultural College. He had come to the island particularly to study the insect fauna of dung in order to relate it to the dietary requirements of the Chough in other parts of Scotland. He found that fresh dung of cattle and ponies were virtually sterile of the beetle and fly larvae normally associated. This was traced to the use of ivermectin, an insecticide being used regularly on the island as an antiparasitic drug. This is excreted in a still potent form and has a severe effect on the fauna and decomposition of dung (Madsen, 1990; McCracken & Bignall 1992). The use of this chemical was commented on adversely by several of the party within the context of a National Nature Reserve and may well explain the apparent absence of this particular fly. It is possible that *S. punctatus* may have become locally extinct as its short generation time is less than the persistence of ivermectin in the environment.

#### **BIBIONIDAE** - March Flies

*Dilophus femoratus* Meig, Kilmory; dunes

#### **MYCETOPHILIDAE** - Fungus Gnats

*Macrocera centralis* Meigen, Kinloch Castle (EGH)

*Mycomya winnertzi* (Dziedzicki), Kinloch Castle (EGH)

*Boletina dubia* (Meig), Kinloch Castle (EGH) Harris (DW)

*Exechiopsis subulata* (Winnertz), Kinloch Castle (EGH)

*Synplasta* (= *Allodiopsis*) *excogitata* (Dziedzicki), Kinloch Castle (EGH)

*Exechia* sp. Kilmory Dunes (EGH)

*Mycetophila evanida* Lastovka, Cave Bay (EGH)

*Mycetophila fungorum* Degeer, Kilmory Plantation (EGH)

*Brevicornu sericoma* (Meigen), Cave Bay (EGH)

#### **SCATOPSIDAE**

*Scatopse notata* (L.) Coire Dubh (DH)

#### **CECIDOMYIIDAE** (K.P. Bland)

+ confirms Harrison record

+ *Dasineura urticase* (Perris), North side of Loch Scresort, galls common on *Urtica dioica* (KPB)

\* *Geocrypta gallii* (Loew, H.), Kilmory enclosure, galls on flower spikes of *Galium verum* (KPB)

- + *Rhabdophaga rosaria* (Loew, H.), Kinloch Glen, rosette galls on *Salix aurita* common (KPB)  
+ *Rhopalomyia ptarmicae* (Vallot), North side of Loch Scresort, galled flowers of *Achillea ptarmica* frequent (KPB)

**LARGER BRACHYCERA** (Derek Whiteley)

**STRATIOMYIDAE** - Soldier Flies

*Beris chalybeata* (Forster), Kinloch Glen (DH) Kinloch Castle (DW) Limestone Ridge (DW)

*Microchrysa flavicornis* Meigen, Limestone Ridge, Glen Shellesder (DW)

**RHAGIONIDAE** - Down Lookers

*Chrysopilus (auratus) cristatus* (Fabr.), Harris (DH, DR) Kinloch Glen (DH), Kilmory Dunes (DW) Kinloch Castle (DW) 30 year wood Kilmory (DW)

*Rhagio scolopacea* (L.), Fionchra (DH) Harris Basin (DR) 30 year wood Kilmory (DW) Limestone Ridge (DW) Kilmory House (DW)

*Rhagio tringarius* (L.), Kinloch (DR)

**TABANIDAE** - Horse Flies

*Chrysops relictus* Meigen. Harris (DH, DW, DR, KPB) Papadil (DH) Kinloch Castle (DW) male by a boggy pool near Loch Beauty (DW)

*Haematopota crassicornis* Wahlberg. Minishal (DH) Kinloch Glen (DH) Harris Basin (DR) male by boggy pool near Loch Beauty (DW)

*Haematopota pluvialis* (L.) Glen Harris (DH) Kilmory Glen (DH, DW) males and females Kilmory House (DW) Papadil (DH, DR) Kilmory Dunes (EGH, DW) females boggy pool near Loch Beauty (DW) Glen Shellesder (DW) Harris (DW)

*Hybomitra montana* (Meigen) Limestone Ridge, Glen Shellesder (DW) Orval (RK)

**EMPIDOIDEA** (Adrian Plant)

**HYBOTIDAE**

\**Symbalophthalmus dissimilis* (Fal.) Streamside vegetation, Glen Harris (AP)

\**S. fuscitarsis* (Zett.) Herb-meadow, Kinloch (DH) Not recorded as Scottish by Collin (1961) but has now been taken near Inverness (I MacGowan) and by AP in West Ross

\**Platypalpus luteus* (Meig.) Streamside vegetation, Glen Harris (AP)



- P verralli* (Coll.) Kilmory Plantation, Glen Harris (AP), Kinloch Glen (DH)
- \**P. cilliaris* (Fal.) Kilmory Plantation, abundant at Kinloch woods and adjacent moorland (AP/AKS)
- P. notatus* (Meig.) Kinloch woods, Harris plantation (AP) Harris (DW)
- \**P. candicans* (Fal.) In woodland and herb-meadow at Kinloch and Harris (AP/DH)
- \**P. cursitans* (Fal.) Kinloch woods, pan trap (AP/AKS)
- \**P. pallidiventris* (Meig.) Marsh at Kinloch, Herb-rich heath at Inbhir Ghil (DH)
- Tachypeza nubila* (Meig.) On rocks at Glen Shellesder (DH), common on smooth surfaces of buildings at Kinloch (AP)
- Tachydromia arrogans* (L.) Kilmory (EGH)
- Tachydromia umbrarum* Hal. Kinloch, tree trunks and buildings (AP)
- \**T. aemula* (Loew.) Kinloch, tree trunks buildings and streamsides (EGH/AP)
- Chersodromia arenaria* (Hal) Harris beach, common amongst rocks and seaweed (AP)
- \**C. speculifera* Walk. Lock Scresort, on tree trunk above beach. An apparently rare sea shore species; the habit of resting on tree trunks above the beach has been observed elsewhere in the West Highlands (AP)
- Hybos culiciformis* Kilmory (EGH)
- Hybos femoratus* (Mull.) Very common in woodland and on moorland to 400 m a.s.l. at Kinloch, Kilmory, Harris, Glen Shellesder, Coire na Grunnd, Coire Dubh, Mhonadh Mhiltich, Fionchra, Bloodstone Hill (AP/DH/AKS)
- Trichina clavipes* Meig. Common in woodland at Kinloch, Kilmory and Harris, also on adjacent moorland (DH/AP)
- Bicellaria nigra* Meig. Abundant in woodlands and meadows at Kinloch and Kilmory (AP/DH) Kinloch Castle (DW)
- B. pilosa* Lundbk. A moorland species; Coire Dubh, Fionchra (DH)
- Ocydromia glabricula* (Fal.) Kinloch woods, Harris plantation (AP)
- EMPIDIDAE**
- Rhagas unica* Walk. Kinloch, frequent on tree trunks and man-made surfaces (AP) Harris (DW)
- Rhamphomyia flava* (Fal.) Kinloch woods and streamside vegetation at Harris (AP/DH/EGH)
- \**R. longipes* (Meig.) Harris, streamside vegetation (AP)
- R. albohirta* Coll. Kinloch, woodland and adjacent moorland (AP/AKS)

- R. stigmosa* Macq. Kilmory, Coire na Grunnd, Coire Dubh, Mhonadh Mhiltich, Kinloch (AP/DH)  
Locally common near moorland streams, but also in woodland and saltmarsh
- R. obscura* Zett. Boggy pool near Lock Beauty (DW), Glen Shellesder, blanket bog (DH)
- \**R. morio* Zett. Askival, grassland (DH) A northern species
- R. crassirostris* (Fal.) Kinloch woods, Kilmory plantation (AP)
- \**R. filata* Zett. Kinloch woods, Kilmory plantation (AP)
- R. umbripennis* Meig. Kinloch woods (AP)
- R. geniculata* Meig. Kilmory plantation, Kinloch, pan traps on moorland (AP/AKS)
- R. tibiella* Zett. Kilmory plantation (AP)
- R. dentipes* Zett. Kilmory plantation (AP)
- \**Empis stercorea* L. Harris plantation, Mhonadh Mhiltich, Kilmory plantation, Coire na Grunnd, Kilmory Glen (AP/EGH) Frequent in woodland and sheltered, more open situations
- E. tessellata* Fab. Kinloch woods, Kilmory plantation, Coire Dubh (AP/DH)
- \**E. grisea* Fal. Kinloch, frequent near woodland stream (AP,DW)
- E. nigripes* Fab. Kinloch, woodland and adjacent moorland (AP/AKS)
- \**E. planetica* Coll. Kinloch, near woodland streams and in pan traps (AP/AKS)
- E. livida* L. Kinloch, streamside (EGH)
- Hilara lundbecki* Frey. Lock Scresort (AP) A widespread species confined to saltmarshes
- H. interstincta* Fal. Kinloch, females swarming over rainwater pools in tracks (AP)
- \**H. obscura* Meig. Kilmory (EGH) Kilmory Wood (DW) Kinloch, woodland and wet heath (DH/AP). A northern and western distribution in Britain
- H. albipennis* von Ros. Kinloch, streamside vegetation (AP)
- H. maura* (Fab.) Kinloch, streamside vegetation (AP)
- \**H. quadrivittata* Meig. Kinloch woodland (AP)
- H. litorea* (Fal.) Kinloch, herb-meadow (DH) Harris plantation (AP)
- H. chorica* (Fal.) Kinloch, Harris, Kilmory; abundant, particularly near streams in open situations but also in woodland (AP)
- \**H. canescens* Zett. Harris, streamside vegetation (AP)
- Phylodromia melanocephala* (Fab.) Kilmory plantation. Abundant in boggy woodland in Kinloch (AP DH)

*Chelifera precatoria* (Fal.) Mhonadh Mhiltich, moorland stream (AP DH). This species, like others of the genus is probably commonest in the north and west of Britain

\**C. precabunda* Coll. Kilmory plantation, streamside (AP)

\**C. stigmatica* (Sch.) Kilmory plantation, streamside (AP)

\**C. pectinicauda* Coll. Kilmory plantation, streamside (AP)

\**C. diversicauda* Coll. Kinloch Glen, streamside (DH)

\**C. flavella* Zett. Fionchra, wet, herb-rich crags (DH)

*Dolichocephala guttata* (Hal.) Fionchra; wet, herb-rich crags (DH) Kinloch, around muddy pools and in woodland pan traps (AP/AKS)

*Trichopeza longicornis* (Meig.) Woodland at Harris and Kinloch (AP)

*Clinocera stagnalis* (Hal.) Kinloch woods (AP)

*C. fontinalis* (Hal.) Kinloch woods, Kilmory plantation (AP)

\**C. bipunctata* (Hal.) Kilmory plantation, near stream (AP)

*C. nigra* (Meig.) Bagh na Uamba (EGH), on stones in a shaded stream at Kilmory plantation (AP)

*Wiedemannia bistigma* (Curt.) Kilmory, Coire Dubh, Fionchra (AP), near streams

\**W. rhynchops* (Now.) Minishal, stones in stream (DH) Coire Dubh, splash zone of waterfall (AP)

#### DOLICHOPODIDAE

*Dolichopus atratus* Meig. Common and widespread. Over 200 in pan traps on moorland at Kinloch (AKS/AP). Also at Coire na Grunnd, Mhonadh Mhiltich, Kinloch, Loch Beauty, Harris, Kilmory and Papadil (EGH/DR/DH/DW/AP/AKS)

\**D. atripes* Meig. Present in woodland and open situations at Kilmory and Harris (DR/EGH/AP/DW/DH)

*D. diseifer* Stann. Moorland at Kinloch, yellow pan trap (AKS/AP)

*D. griseipennis* Stann. Harris (DR), Kinloch and Kilmory (EGH)

\**D. lepidus* Staeg. Kinloch, on foreshore rocks (DH) and pan traps on moorland (AKS/AP)

*D. nubilus* Meig. In woodland and open situations at Kinloch and Kilmory (DH/DW/AP)

*D. pennatus* Meig. Harris (DH) Kinloch and Kilmory (AP)

*D. plumipes* (Scop.) Widespread. Reported from Kilmory, Harris, Kinloch, Coire Dubh, Fionchra, Mhonadh Mhiltich, Coire na Grunnd (DH/DW/DR/EGH/AKS/AP)

*D. popularis* Wied. Woodland at Kinloch (EGH/AP) and Harris (AP)

- D. simplex* Meig. Kilmory dunes and machair (EGH/DW) Kinloch and Harris, in woodland (AKS/AP)
- D. unglatus* (L.) Kilmory dunes and machair (DW/AP) Harris, woodland (DR)
- \**D. urbanus* Meig. Kilmory, open situation (DW/AP) Harris, woodland (DR)
- D. vitripennis* Meig. Coire na Grunnd, Mhonadh Mhiltich, Kinloch, Harris, Inbhir Ghil, near Loch Beauty (DW/DH/AKS/AP)
- \**Hercostomus aerosus* (Fall.) Kilmory, Harris, Kinloch, Papadil (DH/DW/DR/AKS/AP)
- H. cupreus* (Fall.) Moorland and woodland at Kinloch and Kilmory 9DW/AP/AKS)
- H. nigripennis* (Fall.) Coire na Grunnd and woodland at Harris and Kilmory (DW/DW/AP)
- \**H. praetextus* (Hal.) Kinloch, on foreshore rocks (DH) A coastal species with only one previous record from Scotland (Ballachulish)
- Hypophyllus obscurellus* (Fall.) Kinloch woodland (AP/EGH)
- \**Medetera muralis* Meig. Rock outcrops at Glen Shellesder and Fionchra (DH)
- Rhaphium appendiculatum* (Zett.) Meadow and woodland at Kinloch (DH/AKS/AP)
- \**R. albomaculatum* (Becker) Fionchra, damp north-facing crags (DH)
- R. longicorne* (Fall.) Kinloch (DW) Glen Shellesder (DH) boggy pool near Loch Beauty (DW)
- Syntomon pallipes* (F.) Woodland at Kinloch and Harris (AP)
- \**S. pumilus* (Meig.) Kilmory (AP) Harris (DR)
- \**S. tarsatus* (Fall.) Kilmory (AP) Kinloch (DW)
- \**S. zelleri* (Loew.) Kinloch, pan traps on moorland (AKS/AP)
- \**Chrysotus cilipes* (Meig.) Kilmory (AP/DW) Harris (DR/DW)
- C. gramineus* (Fall.) Kinloch (AKS/AP/DH)
- \**C. kowarzi* Lndbk. Kinloch, pan traps on moorland (AKS/AP)
- \**Argyra elongata* (Zett.) On open ground at Mhonadh Mhiltich and Kinloch (AKS/AP)
- \**A. perplexa* Becker. Kinloch Glen (DH/EGH) Harris (DW) Papadil (DR)
- Argyra argentina* Kinloch Castle (EGH)
- \**Campsicnemus compeditus* Leow. Kinloch, pan traps on moorland (AKS/AP)
- C. curvipes* (Fall.) Kilmory (AP)
- C. loripes* (Hal.) Kinloch area (DR/DH/AKS/AP)

*Sympycnus cirripes* (Hal.) Kinloch, Coire na Grunnd, Mhonadh Mhiltich (DH/AKS/AP)

\**S. desoutteri* Par. Widespread at Kinloch, Harris and Kilmory (DR/DH/AKS/AP)

**ASCHIZA** (Derek Whiteley)

**LONCHOPTERIDAE**

*Lonchoptera lutea* Panzer Kinloch Castle streamside (EGH)

**PIPUNCULIDAE**

*Verrallia aucta* (Fallen) Kinloch Castle, 30 year-wood Kilmory (DW)

**SYRPHIDAE** Hoverflies

*Melanostoma mellinum* (L.) 30-year wood Kilmory (DW) Kilmory Dunes (DW) Glen Park and Fionchra (NOMR 1989) Harris Basin (DR) Glen Harris (DH) Glen Shellesder (DH) Kinloch Glen (DH)

*Melanostoma scalare* (F.) Glen Park (NOMR 1989) S. of Loch Scresort (DR) 30-year old wood Kilmory (DW) boggy pool by L. Beauty (DW)

*Platycheirus albimanus* (F.) Glen Park (NOMR 1989) Kinloch (DH, DW) Kilmory (DW)

\**Platycheirus angustatus* (Zett.) Papadil (DR, DH) Kinloch (DH, DW)

*Platycheirus clypeatus* (Meigen) Glen Park (NOMR 1989) Kinloch Castle (DW)

*Platycheirus immarginatus* (Zett.) Harris (DH)

*Platycheirus manicatus* (Meigen) Glen Park and Kinloch woodland (NOMR 1989)

\**Platycheirus melanopsis* (Loew) Fionchra (NOMR 1989)

\**Platycheirus nielseni* (as sp.A) Glen Park and Kinloch woodland (NOMR 1989)

\**Platycheirus ramsarensis* (Goeldlin, Maibach & Speight) Kilmory (DW)

*Platycheirus peltatus* (Meigen) Glen Park (NOMR 1989) Harris (DH) Kinloch (DH)

\**Platycheirus podagratus* (Zett.) Glen Park (NOMR 1989) Loch Papadil (DW) Kinloch (DW)

*Platycheirus scambus* (Staeger) A widespread species of damp habitat  
Glen Park (NOMR 1989) Papadil (DR) Kinloch (DH) Harris (DH, DW) Kilmory Dunes and house  
(DW) Kinloch meadows (DW)

*Pyrophaena granditarsa* (Forster) Glen Park (NOMR 1989)

\**Pyrophaena rosarum* (Fab.) Glen Park (NOMR 1989)

- Chrysotoxum bicinctum* (L.) Glen Park (NOMR 1989) Papadil (DR)
- \**Dasysyrphus lunulatus* (Meigen) Glen Park (NOMR 1989)
- Dasysyrphus venustus* (Meigen) Kinloch (DW)
- Episyrphus balteatus* (Degeer) Glen Park (NOMR 1989) Kinloch (DR,DH,DW) 30-year old wood Kilmory (DW)
- \**Meliscaeva auricollis* (Meigen) S. of Loch Scresort (DR) Kinloch (DH)
- \**Metasyrphus corollae* (Fab.) S. of Loch Scresort (DR) Papadil (DH) Kilmory Dunes (DW) Glen Park (NOMR)
- \**Metasyrphus luniger* (Fab.) Papadil (DH)
- \**Sphaerophoria abbreviata* Limestone Ridge, Glen Shellesder (DW) Uamha (DR)
- Sphaerophoria menthastri* (L.) Glen Park (NOMR 1989) Glen Harris (DH)
- \**Sphaerophoria philanthus* (Meigen) Glen Park (NOMR 1989)
- Syrphus ribesii* (L.) Harris Basin (DR) Glen Park (NOMR 1989)
- \**Syrphus torvus* (Ost.-Sacken) Glen Park (NOMR 1989) Kinloch (DH)
- Syrphus vitripennis* (Mg.) Kinloch (DR) Kinloch Meadows (DW) Glen Park (NOMR 1989)
- Cheilosia albitarsis* (Mg.) Glen Park (NOMR 1989) Abundant on buttercups Kinloch (DW)
- Rhingia campestris* Mg. Glen Park (NOMR 1989)
- Chrysogaster chalybeata* Mg. Harris Basin abundant (DW)
- Chrysogaster hirtella* Loew Glen Park (NOMR 1989) Kinloch Meadows (DW) Kilmory Dunes (DW) Inbhir Ghil (DH) boggy pool near L. Beauty (DW) Harris Basin (DR)
- Lejogaster metallina* (Fab.) Harris Basin (DR,DH) - abundant on buttercups (DW) Papadil (DH) Kilmory wet dunes (DW)
- Neoascia tenur* (L.) Glen Harris (DH) Harris (DH,DW) Kilmory dunes and house (DW)
- Trichopsomyia flavitarsis* (Mg.) 30-year old wood Kilmory (DW) - a female showing an interesting branch on the outer cross-vein.
- \**Pipiza noctiluca* (L.) Glen Park (NOMR 1989)
- Pipizella varipes* (Mg.) Kilmory dunes and house (DW) 30-year old wood Kilmory (DW) boggy pool near L. Beauty (DW)
- Eristalis arbustorum* (L.) Kilmory dunes (DW)

*Eristalis intricarius* (L.) Kinloch shore - dark and pale forms (DW) Kilmory dunes (DW) Harris - base rich flushes (DW)

*Eristalis nemorum* (L.) Kinloch (DW) Kinloch woodland (NOMR 1989)

*Eristalis rupium* (Fab.) Kinloch-on bramble flowers (DW) Glen Park (NOMR 1989)

*Helophilus pendulus* (L.) Kinloch (DW) Glen Park and Kinloch woodland (NOMR 1989)

*Myathropa florea* (L.) Larvae in beech rot hole Kinloch (GER)

*Sericomyia lappona* Kinloch (DW) on bramble. Glen Park (NOMR 1989)

*Sericomyia silentis* (Harris) Kinloch (DR,DW) Orval (RK) Glen Park, Kinloch woodland and Bloodstone Hill (NOMR 1989)

*Volucella pellucens* (L.) Kinloch (DR) Harris and Kinloch woodland (NOMR 1989)

\**Xylota coeruleiventris* Zett Kinloch (DR,DW) The 1960 specimen of *Xylota florum* (F) from Kinloch has been renamed *X. coeruleiventris* (A Brindle pers. comm. to DR)

*Xylota segnis* (L.) Kinloch (DH,DW)

#### TEPHRITIDAE

\**Orellia falcata* (Scop.) Kinloch Meadows (DW) White (1988) associates this species with *Tragopogon pratensis*. Mainly south-east England, with unconfirmed records for north-east Scotland.

\**Tephritis leontodontis* (Degeer) Kinloch Glen, Kinloch (DH)

*Tephritis vespertina* (Loew) Kinloch (DH)

#### OTITIDAE

*Herina frondescentiae* (L.) Kilmory Dunes (EGH) Glen Harris, Harris (DH)

#### PSILIDAE

*Loxocera albiseta* (Schrank) Kinloch Castle streamside (EGH) Harris (DW)

\**Loxocera ichneumonea* (L.) Harris (DH) Harris Basin (DR)

\**Psila atra* Meigen Kinloch (DH)

\**Psila humeralis* (Zett.) Fionchra (DH)

*Psila nigra* (Fallen) Kinloch (DH)

\**Psila nigromaculata* Strobl Kinloch Glen (DH)

#### HELCOMYZIDAE

*Heterocheila buccata* (Fallen) Kinloch (DH) Kilmory Machair (DW)

#### DRYOMYZIDAE

*Dryomyza analis* Fallen Kinloch Castle (DH) Kinloch (DW)

*Dryomyza flaveola* (Fabr.) Kilmory Glen (DH)

#### LAUXANIIDAE

*Minettia longipennis* (Fabr.) Kinloch (DH)

*Lyciella pallidiventris* (Fallen) Kinloch (DW)

*Lyciella quadrivittata* (Loew) Kilmory Glen (DH)

*Lyciella rorida* (Fallen) Kilmory Wood (DW)

\**Calliopum aeneum* (Fallen) Kinloch Castle (DH)

#### COELOPIDAE

*Coelopa frigida* (Fabr.) Fionchra, Glen Shellesder, Kinloch, Papadil (DH)

#### HELEOMYZIDAE

*Scoliocentra caesia* (Meigen) Papadil (DH)

\**Heleomyza [modesta (Meigen)] s. czernyi* Collart Fionchra (DH)

#### SEPSIDAE

*Sepsis cynipsea* (L.) Kilmory (EGH) Harris (DW)

#### SCIOMYZIDAE

\**Pelidnoptera fuscipennis* (Meigen) Kinloch abundant on Rhododendron leaves around the Castle (DW) Kinloch Castle deciduous woodland (DH)

\**Pherbellia cinerella* (Fallen) Kilmory machair (DW)

*Pherbellia dubia* (Fallen) Kinloch castle-herb meadow (DH)

*Pherbellia scutellaris* (Roser) Kinloch - tall herbs (DH/DW)



*Hydromya dorsalis* (Fabr.) Papadil (DMR) Glen Harris Schoenus heath, Harris, Papadil marsh by lochan (DH) Very common (DW)

*Ilione albiseta* (Scopoli) Harris marsh (DH)

*Ilione lineata* (Fallen) Glen Harris Schoenus heath, Harris marsh and Papadil (DH) Kinloch meadows (DW)

\**Limnia paludicola* Elberg Harris and between Harris and Papadil (DMR) Inbhir Ghil, Glen Harris, Papadil (DH)

*Renocera pallida* (Fallen) Boggy pool near L. Beauty (DW)

*Tetanocera elata* (Fabr.) Kinloch (DMR) Harris (DH)

*Tetanocera ferruginea* Fallen Glen Harris **Schoenus** heath (DH)

\**Tetanocera fuscinervis* (Zett.) Harris (DH/DW) Glen Harris (DH)

*Tetanocera hyalipennis* Roser Kilmory machair (DW) Loch Papadil (DH/DW) Harris basin (DMR) Inbhir Ghil, Glen Harris (DH)

\**Tetanocera robusta* Loew Harris (DH)

*Trypetoptera punctulata* (Scop) Harris basin (DMR) Shellesder limestone ridge (DW)

#### OPOMYZIDAE

*Geomyza balachowski* Mesnil. Papadil (DH)

*Opomyza germinationis* (L.) Harris, Inbhir Ghil, Papadil (DH)

*Opomyza petrei* (Mesnil) Kinloch, Kilmory Dunes (DW)

#### EPHYDRIDAE

*Ilythea spilota* (Curtis). Kilmory Machair (DW)

*Notiphila* sp. Loch Papadil (DW)

#### DROSOPHILIDAE

*Scaptomyza graminum* (Fallen). Harris, mined leaves of *Anthyllis vulneraria* but not common (Imagines reared); Kilmory machair, a few mines in *Anthyllis vulneraria* (KPB)

*Scaptomyza pallida* (Zett.) Kinloch Castle (DH)

**AGROMYZIDAE** (K.P. Bland)

- \**Agromyza johannae* de Meijere. Kinloch and Kilmory Fank enclosure (NG3600), characteristic leaf-mines on *Sarothamnus scoparius* frequent (KPB)
- \**Agromyza nana* Meigen. Harris, leaf mines noticed in both *Trifolium repens* and *T.pratense* (KPB)
- \**Paraphytomyza hendeliana* (Hering) Kilmory Frank enclosure, a few leaf-mines in *Lonicera periclymenum*. Imagines reared (KPB).
- \**Phytomyza angelicae* Kaltenbach. Kinloch, blotch mines in leaves of *Angelica sylvestris* common (Imagines reared) (KPB); An Uamh, characteristic blotch mines in leaves of *A.sylvestris* (EGH)
- \**Phytomyza aprilina* Goureau. North side of Loch Scresort, leaf-mines in *Lonicera periclymenum* frequent (Imagines reared) (KPB)
- Phytomyza ilicis* Curtis. Kinloch, leaf-mines common in Holly (KPB)
- \**Phytomyza obscurella* Fallen. Kinloch, leaf-mines in *Aegopodium podagraria* frequent (Imagines reared) (KPB)
- \**Phytomyza periclymeni* de Meijere. Kilmory Fank enclosure, a few leaf-mines in *Lonicera periclymenum* (Imagines reared) (KPB)
- \**Phytomyza plantaginis* Goureau. Harris, characteristic leaf-mines in *Plantago lanceolata* frequent (KPB)
- Phytomyza primulae* Goureau. North side of Loch Scresort and Harris, characteristic leaf-mines in *Primula vulgaris* seen in both places (KPB)
- \**Phytomyza ramosa* Hendel. Harris, several of the characteristic leaf-mines in *Succisa pratensis* seen (KPB)
- \**Phytomyza syngenesiae* (Hardy). Kilmory machair, leaf-mines in *Taraxacum* sp. (Imagines reared and male genitalia checked) (KPB)

**CHLOROPIDAE**

- Aphanotrigonum trilineata* (Meigen). Glen Harris, single puparium in seedhead of *Eriophorum angustifolium* collected on 27.vi.1990 (Imago reared) (KPB, identified by G.Rotheray)
- Cetema elongata/similis*. Harris, Kinloch (DW)
- Oscinella* sp. Hallival Summit (DW)

**CALYPTERATES.** (D Horsfield)

## OESTRIDAE

\**Hypoderma bovis* (L.) Kilmory Dunes (DW)

*Cephenemyia auribarbis* (Meigen). Coire Dubh (DH)

## TACHINIDAE

*Gymnocheta viridis* (Fallen). Harris (DH)

*Eriothrix rufomaculata* (Degeer). Kinloch (DW)

## CALLIPHORIDAE

*Calliphora vomitoria* (L.) Kilmory Wood (DW)

## SCATHOPHAGIDAE

*Cordilura pubera* (L.) Kinloch (DH)

*Scathophaga calida* (Haliday in Curtis). Fionchra (DH)

*Scathophaga furcata* (Say). Harris (DH)

*Scathophaga litorea* (Fallen). Harris (DH)

*Scathophaga stercoraria* (L.) Kilmory Dunes (DW)

*Scathophaga suilla* (Fabr.) Harris (DH), Loch Papadil (DW), Kilmory Wood (DW)

\**Scathophaga taeniopa* (Rondani). Loch Papadil (DW), Kinloch (DW)

*Cerastinostoma ostiorum* (Haliday in Curtis). Kinloch (DH)

## ANTHOMYIIDAE

\**Fucellia fucorum* (Fallen). Coire Dubh, Fionchra, Kinloch, Minstral (DH)

This is one of the shore-flies. It is therefore unusual to find it inland among the mountains. Wormell (1982) also records *Fucellia maritima* inland on Hallival. I can only agree with Wormell that the individuals were probably blown up from the shore. I also took another shore-fly, *Coelopa frigida*, inland.

\**Pegohylemyia brunneilinea* (Zett). Kinloch Castle (DH)

\**Pegohylemyia striolata* (Fallen). Kinloch Castle (DH)

\**Hydrophoria caudata* (Zett.) Harris (DH)

*Hydrophoria conica* (Wiedemann). Askival S.W. side (DH)

*\*Delia platura* (Meigen). Kinloch Glen (DH)

*Hylemya latifrons* (Snabl and Dziedzicki). Kilmory Dunes (DW)

*Hylemya strenua* Robineau-Desvoidy. Kinloch Castle (DH), Kinloch (DW)

*Hylemya variata* (Fallen). Harris, Inbhir Ghil, Papadil (DH)

*\*Nupedia aestiva* (Meigen). Askival, Harris, Hallival, Inbhir Ghil, Kinloch (DH)

*Nupedia infirma* (Meigen). Harris (DH)

#### FANNIIDAE

*Fannia canicularis* (L.) Glen Shellesder (DH)

*Fannia fuscula* (Fallen). Kinloch Castle (DH)

*\*Fannia mollissima* (Haliday in Westwood). Kinloch Castle, Kinloch (DH)

*\*Fannia parva* (Stein). Glen Shellesder, Kinloch Castle, Kinloch Glen (DH)

*\*Fannia postica* (Stein). Papadil (DH)

*Fannia rondanii* (Strobl). Kinloch Castle, Kinloch Glen, Kinloch (DH)

*Fannia serena* (Fallen). Harris, Kinloch Castle, Kinloch, Papadil (DH)

*\*Fannia sociella* (Zett). Kinloch Glen, Kilmory Glen (DH)

*Fannia tuberculata* (Zett). Kinloch Glen, Kilmory Glen (DH)

#### MUSCIDAE

*Azelia cilipes* (Haliday). Harris (DW), Glen Shellesder, Kinloch Castle, Kilmory Glen (DH)

*\*Thricops longipes* (Zett.) Askival, Harris, Minishal, Kinloch, Papadil (DH)

*Thricops nigrifrons* (Rob.-Desv.) Limestone Ridge (DW)

*Thricops nigritellus* (Zett.) Fionchra, Minishal (DH)

*Thricops rostratus* (Meade). Coire Dubh, Fionchra, Hallival SE side (DH)

*Thricops semicinereus* (Wiedmann). Kinloch Castle (DH), Kinloch (DW)

*Alloeostylus diaphanus* (Wied.) Kinloch (DW)

*Drymeia hamata* (Fallen). Inbhir Ghil (DH), Limestone Ridge (DW)

*Hydrotaea irritans* (Fallen). Glen Shellesder, Harris, Kinloch Glen, Kilmory Glen (DH)

*\*Hydrotaea pilitibia* Stein. Glen Shellesder (DH)

*Polietes domitor* (Harris). Kinloch Glen (DH)  
[=*Polietes albolineata* (Fallen)]

*Neomyia cornicina* (Fabr.) Harris (DH)  
[=*Orthellia viridis* (Wiedemann)]

*Phaonia incana* (Wiedemann). Kinloch, Papadil (DH)

*Phaonia tuguriorum* (Scopoli). Papadil (DH)  
[=*Phaonia signata* (Meigen)]

\**Lophosceles cinereiventris* (Zett). Kinloch Castle (DH)

*Lophosceles mutatus* (Fallen). Kinloch Castle (DH)

*Helina arctata* Collin. Kilmory Dunes (DW)

*Helina evecta* (Harris). Kinloch Castle, Kilmory, Kinloch Glen, Papadil (DH) Kinloch (DW)  
[=*Helina laetifica* (Robineau-Desvoidy)]

\**Helina consimilis* (Fallen). Glen Shellesder (DH)  
*Helina quadrum* (Fabr.) Papadil (DH)

*Helina reversio* (Harris). Coire Dubh (DH)  
[=*Helina duplicata* (Meigen)]

\**Mydaea corni* (Scopoli). Kinloch Castle, Kilmory Glen (DH)  
[=*Mydaea scutellaris* Robineau-Desvoidy]

\**Mydaea deserta* (Zett). Kilmory Glen (DH)

*Myospila meditabunda* (Fabr.) Kinloch Castle (DH) (EGH)

*Hebecnema umbratica* (Meigen). Harris (DW), Kinloch Castle (EGH), Kinloch Glen, Kinloch (DH)

*Hebecnema vespertina* (Fallen). Kinloch, Papadil, Kinloch Glen (DH)  
[=*Hebecnema affinis* Malloch]

*Graphomya maculata* (Scop.) Kinloch Glen (DW)

\**Graphomya minor* Robineau-Desvoidy. Harris (DH)  
[=*Graphomya picta* (Zett.)]

*Spilogona aerea* (Fallen). Kinloch (DW,DH)

*Spilogona denigrata* (Meigen). Kinloch, Kilmory Dunes (DW), Kinloch Castle, Kinloch Glen, Kilmory  
Glen (DH)

*Spilogona litorea* (Fallen). Kilmory Dunes (DW), Harris, Kinloch Glen, Papadil (DH)

\**Spilogona surda* (Zett.) Harris, Papadil (DH)

*Spilogona meadei* (Schnabl in Becker). Coire Dubh, Glen Shellesder, Fionchra, Minishal, Kilmory Glen (DH)

*Spilogona solitariana* (Collin). Askival (E.Side)(DH), Kilmory Wood (DW)

\**Limnophora exuta* (Kowarz). Kilmory Glen, Minishal (DH)

*Limnophora olympiae* Lyneborg. Kinloch, Kilmory (DH)

\**Limnophora triangula* (Fallen). Kinloch Glen, Kinloch (DH)

*Dexiopsis lacteipennis* (Zett.) Kinloch (DW)

\**Pseudocoenosia abnormis* Stein. Harris, Kinloch Glen, Kilmory Glen (DH)

\**Macrorchis meditata* (Fallen). Kilmory Dunes (DW), Kinloch Castle (DH)

*Caricea verna* (Fab.) Limestone Ridge (DW)

*Schoenomyza litorella* (Fallen). Kinloch (DW)

*Coenosia distinguens* Collin. Limestone Ridge (DW)

*Coenosia femoralis* (Robineau-Desvoidy). Inbhir Ghil (DH)

\**Coenosia means* Meigen. Fionchra, Glen Harris, Minishal (DH)

\**Coenosia mollicula* (Fallen). Inbhir Ghil, Kinloch (DH)

*Coenosia pedella* (Fallen). Kilmory Dunes (DW), Askival (DH), Harris (DW, DH)

*Coenosia pumila* (Fallen). Kinloch Glen (DH)

*Coenosia rufipalpis* Meigen. Kinloch (DW), Kinloch Castle, Kinloch (DH)  
[= *Coenosia flavicauda* Ringdahl]

*Coenosia tigrina* (Fabr.) Harris, Inbhir Ghil (DH)  
[= *Caricea tigrina* Fabr.]

\**Coenosia trilineella* (Zett.) Glen Shellesder (DH, DW)

#### HIPPOBOSCIDAE

*Ornithomya chloropus* (Bergroth). Kinloch Glen (DH)

*Lipoptena cervi* (L.) Loch Iain (GNF)

## COMMENTS ON THE FAUNA

### EMPIDOIDEA (A.R. Plant)

	Hybotidae	Empididae	Dolichopodidae
Number of species collected June 1990	19	42	36
Number of species not collected before June 1990	8	16	16
Total species now known	28	61	51

Notable species are remarked upon in the text. It is worth noting that some of the species new to the list were collected using pan traps; a collecting technique not used previously (eg. *Syntormon zelleri* and *Chrysotus kowarzi*). Other species previously unknown from Rum but present on the mainland were found to be common and widespread in June 1990 and may be recent colonists (eg *Platypalpus ciliaris*, *Hercostomus aerosus*, *Sympycnus desouteri*).

### HOVERFLIES (Derek Whiteley)

	Species	Additions to Wormell (1982)	Total
Wormell (1982)	54	-	54
Ravenscroft (1991) et. al. 1989 survey	31	9	63
1990 Survey	41	11	69

The total now stands at approximately 24% of the British hoverfly fauna. Some additions to Wormell's account are reviewed below.

*Platycheirus angustatus* is a widespread and fairly common species in England, Wales and Scotland.

*Platycheirus ramsarensis* is a new species resulting from a revision of the clypeatus group. It has already been recorded in upland areas of western England, northern England, Scotland and the Outer Hebrides. Its presence on Rum in upland boggy areas is predictable.

*Platycheirus nielseni* seems to be another northern and western species frequent in northern England and Scotland.

*Platycheirus melanopsis* is a scarce montane species of central Scotland and the Lake District.

*Platycheirus podagratus* is a northerly species, locally common in Scotland and northern England in bogs and boggy ground.

*Metasyrphus luniger* and *Metasyrphus corollae* are two of the most common hoverflies in England, and are also well distributed in Scotland. Both are migratory species.

*Sphaerophoria abbreviata*, now generally known as *fatarum* is also widespread and one of the more frequent species in the Scottish Highlands and England/Wales in open heathy areas often with Tormentil flowers.

*Sphaerophoria philanthus* has a predominantly northern and western distribution in Britain, associated with heaths, moorland edge and heathy woodland.

*Meliscaeva auricollis* is frequent in southern England, but more sparsely distributed in Scotland. These Rum records appear to extend the known range of this species to the north.

*Syrphus torvus* is widely distributed in England and Wales, but more sparse in Scotland. It may be overlooked on Rum and under-recorded as adults resemble *ribesii* at first glance.

*Xylota coeruleiventris* is a northern and western British species associated with dead wood in coniferous woodland. Widespread in Scotland. Not strictly new to Rum as it was mistakenly recorded as *Xylota florum* in 1960. *Xylota florum* has a distinct southerly distribution in Britain.

**COMMENTS ON SOME SPECIES WHICH ARE NOT INCLUDED ON THE LIST EDITED BY WORMELL (1982) (D. Horsfield)**

*Platypalpus candicans* (Fallen). Widely distributed in Britain where males are unknown (Collin, 1961).

*Rhamphomyia morio* Zett. This is a widely distributed upland species in Scotland (Collin, 1961), found down to sea-level on Orkney (Laurence, 1988).

*Hilara obscura* Meigen. A Scottish, Welsh and west and west-central English species (Collin, 1961).

*Chelifera diversicauda* Collin. Taken in Scotland, Wales and western England (Collin, 1961).

*Chelifera flavella* Zett. Taken sparingly in Scotland and Herts. (Collin, 1961).

*Dolichopus atripes* Meigen. Widespread in Britain (Assis Fonseca, 1978).

*Dolichopus lepidus* Staeger. Records given by Assis Fonseca (1978) show it to be widely distributed in Britain.

*Hercostomus aerosus* (Fallen). Very common over the whole of the British Isles (Assis Fonseca, 1978).

*Hercostomus praetextatus* (Haliday). All the records appear to be from the coast and it is very scarce according to Assis Fonseca (1978) with only one previous record from Scotland (Ballachulish).

*Medetera muralis* Meigen. Uncommon in England (Assis Fonseca, 1978). There are four records from Dunbarton by J.R. Malloch; it was noted as abundant on Ailsa Craig by J.M. Nelson and taken at Aberchirder in Grampian by Iain MacGowan (MacGowan, 1988; Nelson, 1980).

*Rhaphium albomaculatum* (Becker). Not uncommon, especially in the Scottish Highlands (Assis Fonseca, 1978).

*Argyra elongata* (Zett.) Assis Fonseca (1978) gives only Beinn Eighe and Nairn though MacGowan (1988) adds Loch Fleet and Beinn Dearg.

*Argyra perplexa* Becker. Records given by Assis Fonseca (1978) show it to be widely distributed in Scotland, England and Wales.

*Sympycnus desouteri* Parent. Very common over the whole of the British Isles (Assis Fonseca, 1978). According to MacGowan (1988) it is characteristic of dry grassland.

*Tephritis leontodontis* (Degeer) White (1988) states that it attacks the capitula of *Leontodon autumnalis* and *L. hispidus* and that it occurs throughout the British Isles, common in Scotland.



- Loxocera ichneumonea* (L.) Collin (1944) states that it has a wide distribution in Britain.
- Psila atra* Meigen. Collin (1944) notes the species from Scotland and Suffolk.
- Psila humeralis* (Zett.) Collin (1944) states that it is not uncommon in the Spey Valley.
- Psila nigromaculata* Strobl. Records given by Collin (1944) suggest it to be widely distributed.
- Calliopum aeneum* (Fallen). Collin (1948) states that it is common and widely distributed.
- Heleomyza [modesta* (Meigen)] *s. czernyi* Collart. Collin (1943) records it as not uncommon in Britain especially in coastal districts and Scotland.
- Nupedia aestiva* (Meigen). Very common in the Scottish Highlands, at least in the uplands (personal observations).
- Fannia canicularis* (L.) "Lesser house-fly" [not new to Rum]. The two specimens I took (males) were of the dark form with no yellow marks on abdominal tergites 2 and 3. The dark form has only ever been taken out of doors (Assis Fonseca, 1968).
- Fannia mollissima* (Haliday in Westwood). Assis Fonseca (1968) gives it as generally distributed and common. I have taken it at about 800m asl on Bidean nam Bian (Glencoe) in water-traps in some numbers.
- Fannia parva* (Stein). Assis Fonseca (1968) gives wide-ranging records from Scotland, England and Wales.
- Fannia postica* (Stein). Generally distributed and frequent (Assis Fonseca, 1968).
- Fannia sociella* (Zett.) Generally distributed and very common (Assis Fonseca, 1968).
- Hydrotaea pilitibia* Stein. Collin, J.E. (1966) gives records from Loch Hope, Loch Tummel, Kiloch Rannoch and Gairloch. Restricted to Scotland where it is scarce (Assis Fonseca, 1968).
- Lophosceles cinereiventris* (Zett.) Generally distributed and common (Assis Fonseca, 1968).
- Helina consimilis* (Fallen). Assis Fonseca (1968) records it mainly from western Britain. He gives records for the Isle of Arran and Shetland.
- Mydaea corni* (Scopoli). Generally distributed and common (Assis Fonseca, 1968).
- Mydaea deserta* (Zett.) Assis Fonseca (1968) gives localities only in Scotland and Wales, uncommon.
- Graphomya minor* Robineau-Desvoidy. Widely distributed in England and Wales but only one Scottish record is given by Assis Fonseca (1968). Inverness (Aviemore). Grimshaw (**Scott. Naturalist**, 1915:277) gives a record from S. Uist.
- Spilogona surda* (Zett.) Fairly common and noted from Nairns, Inverness and Perth in Scotland (Assis Fonseca, 1968).
- Limnophora exuta* (Kowarz). Ross and Dumfries are the only Scottish records given by Assis Fonseca (1968).
- Limnophora triangula* (Fallen). Very common (Assis Fonseca, 1968).

*Pseudocoenosia abnormis* Stein. Locally common (Assis Fonseca, 1968).

*Macrorchis meditata* (Fallen). Locally frequent (Assis Fonseca, 1968).

*Coenosia means* Meigen. Frequent, especially in the Scottish Highlands (Assis Fonseca, 1968).

*Coenosia mollicula* (Fallen). Generally distributed, common (Assis Fonseca, 1968).

*Coenosia trilineella* (Zett.) Scottish Highlands and Mid-lothian, fairly frequent (Assis Fonseca, 1968).

#### General Comments

Steel and Woodroffe (1969) state that generally speaking, the Rum [Diptera] fauna shows more affinities with that of NW England and N. Wales and relatively few Scottish species were collected.

The only species new to Rum taken by me that are apparently restricted to Scotland were:

*Argyra elongata*

*Psila humeralis*

*Coenosia trilineella*

*Hydrotaea pilitibia*

This handful of additional Scottish species does not alter the general affinities of the fauna as put forward by Steel and Woodroffe.

Another point is that some of the mainly northern species which are also present in NW England and N Wales may be more abundant on Rum. Possible examples are:

*Rhaphium albomaculatum*

*Mydaea deserta*

*Helina consimilis*

*Thricops longipes*

*Coenosia means*

#### References

- Assis Fonseca, E.C.M. (1968). *Handbooks for the Identification of British Insects, Diptera Cyclorrhapha Calyptrata, Section (b) Muscidae, X(4b)*. Royal Entomological Society of London.
- Assis Fonseca, E.C.M. (1978). *Handbooks for the Identification of British Insects, Diptera Orthorrhapha Brachycera, Dolichopodidae, IX(5)*. Royal Entomological Society of London.
- Cambell, J.L. 1991. Rum, Roum or Rhum? *Entomologists' Record*, 103; 329
- Collin, J.E. (1961). *British Flies*. VI. Empididae. Cambridge University Press, Cambridge.
- Collin, J.E. (1943). The British species of Helomyzidae (Diptera). *Entomologist's mon. Mag.* 79: 234-251.
- Collin, J.E. (1944). The British species of Psilidae (Diptera). *Entomologist's mon. Mag.* 80: 214-224.
- Collin, J.E. (1948). A short synopsis of the British Sapromyzidae (Diptera). *Transactions of the Royal Entomological Society of London*, 99: 225-242.

- Hancock, E.G. (1992). Some records of terrestrial invertebrates from Rum National Nature Reserve, 1990. *Glasgow Naturalist*, 22: 169-189.
- Laurence, B.R. (1988). The behaviour of *Rhaphomyia morio* Zett. (Dipt., Empididae) in Orkney. *Entomologist's mon. mag.* 124: 103-105.
- MacGowan, I. (1988). *A Preliminary Survey of Dolichopodidae (Diptera) in Scotland*. Nature Conservancy Council, unpublished report.
- McCracken, D. & Bignall, E. (1992). *Chemical alternatives to treatment of cattle with ivermectin*, JNCC, Peterborough, 2 pp.
- Madsen, M. et al. (1990). Treating cattle with ivermectin: effects on the fauna and decomposition of dung pats. *Journal of Applied Ecology* 27: 1-15.
- Nelson, J.M. (1980). Some invertebrates from Ailsa Craig. *Western Naturalist*, 9: 9-16.
- Ravenscroft, N.O.M. et. al. (1991). Some Hoverflies (Diptera; Syrphidae) of Rhum National Nature Reserve, Western Scotland. *Dipterists Digest No 8*; 25-28.
- Steel, W.O. & Woodroffe, G.E. (1969). The Entomology of the Isle of Rhum National Nature Reserve. *Transactions of the Society for British Entomology*, 16(2): 49-92.
- Stubbs, A.E. & Falk, S.J. (1983). *British Hoverflies An Illustrated Identification Guide*. British Entomological and Natural History Society, London.
- White, I.M. (1988). *Handbooks for the Identification of British Insects, Tephritid Flies Diptera: Tephritidae*, 10(5a). Royal Entomological Society of London.
- Wormell, P. (1982). The Entomology of the Isle of Rhum National Nature Reserve. *Biological Journal of the Linnaean Society*, 18(4): 291-401.



## APPENDIX

### RUM NATIONAL NATURE RESERVE

#### DIPTERA 1989

The following were recorded during June 1989 by Iain MacGowan. Those marked \* were new to Rum.

#### FAMILY: EMPIDIDAE

<i>Bicellaria nigra</i>	Kinloch Woods
<i>Chelifera preclatoria</i>	North shore, Loch Scresort
<i>Clinocera fontinalis</i>	Fionchra
* <i>Clinocera wesmaelli</i>	Mountain flush, Fionchra, 400 m
<i>Empis nigripes</i>	Kinloch Woods
<i>Empis tessellata</i>	Kinloch Woods
<i>Empis verralli</i>	Fionchra
<i>Hilara albipennis</i>	Kinloch Woods
* <i>Hilara lundbecki</i>	North shore, Loch Scresort
* <i>Oedelia flavipes</i>	North shore, Loch Scresort
* <i>Platypalpus candicans</i>	North shore, Loch Scresort
* <i>Rhamphomyia dentipes</i>	Woods near the school

#### FAMILY: DOLICHOPODIDAE

<i>Argyra diaphana</i>	Kinloch Woods
<i>Campsicnemus loripes</i>	Fionchra and Loch Scresort
<i>Dolichopus atratus</i>	Moorland
<i>Dolichopus nubilis</i>	Around shores, Loch Scresort
<i>Dolichopus plumipes</i>	Kinloch Woods
<i>Dolichopus popularis</i>	North shore, Loch Scresort
* <i>Hercostomus aerorus</i>	North shore, Loch Scresort
<i>Hydrophorus nebulosus</i>	400 m Fionchra
<i>Rhaphium appendiculatum</i>	Kinloch Woods
* <i>Rhaphium consobrinum</i>	Saltmarsh, Loch Scresort
<i>Rhaphium crassipes</i>	Kinloch Woods
* <i>Sympycnus desoutteri</i>	North shore, Loch Scresort
<i>Syntormon pallipes</i>	Kinloch Woods

#### FAMILY: SYRPHIDAE

<i>Chrysogaster hirtella</i>	Fionchra
<i>Cheilosia albitarsis</i>	Common in Meadow, Kinloch
<i>Melanostoma dubium</i>	Fionchra, 400-450 m
<i>Melanostoma scalare</i>	Kinloch Woods
<i>Platycheirus manicatus</i>	Kinloch Woods
<i>Syrphus ribesii</i>	Kinloch Woods
<i>Xylota segnis</i>	Kinloch Woods

#### FAMILY: STRATIOMYIDAE

<i>Beris chalybeata</i>	Kinloch Woods
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#### FAMILY: SCIOMYZIDAE

<i>Limnia paludicola</i>	North shore, Loch Scresort
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#### FAMILY: TACHINIDAE

<i>Hypoderma diana</i>	Near Malcolm's Bridge
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## Iain MacGowan

The Dipteran fauna of the Western Isles was summarised by Waterston (1981) who listed the 519 species which had been recorded up to that time. Waterston admitted that the list of species recorded from the Islands was far from complete and suggested that further investigation of the major families would lead to further additions.

Since 1980 I have been involved in entomological survey work on several of the larger islands in the group, as well as receiving specimens from some of smaller ones. As a result some 46 species of Diptera not included in Waterston's list have been recorded and many new island records have been obtained. These are summarised in Table 1.

The Western Isles are characterised by their lack of woodland cover with, in Lewis and Harris extensive areas of acidic moorland and loch, whilst in the southern isles of North and South Uist there are areas of fertile machair with nutrient rich lochs. The climate is also of great importance. Despite being far north in British terms the islands enjoy a relatively mild climate due to the effect of the gulf stream. The extreme western fringe of Lewis for example has very few days each year on which frosts are recorded. This has an effect on the insect fauna and encourages the presence of more southern species. The occurrence of *Sciapus zonatulus* on the western fringe is perhaps an example of this.

At the other extreme the mountains of Harris in particular and to a lesser extent those in the Uists experience low average summer maximum temperatures similar to those encountered in the high mountains of central and north west Scotland. Little work has yet been done on the montane fauna of the Western Isles but these low temperatures would lead to the prediction that a relatively complete montane Dipteran fauna may be present.

The policy woodlands around Lews Castle in Stornoway represent the only significant area of deciduous woodland in the Western Isles and as a result they contain species such as *Dasysyrphus lunulatus*, *Platycyberus sticticus*, *Rhaphomyia dentipes* and *Argyra diaphana* which have not as yet been recorded from elsewhere in the islands. The communities present in this relatively recent and isolated woodland deserve further study as it may provide information on the dispersive abilities of woodland insect species. Presumably the coniferous plantations now growing in Lewis will provide a habitat for a related community of insects in the future.

What the islands lack in woodland habitats they make up for in moorland and machair habitats. The edges of moorland lochs provide a habitat for the Dolichopodid *Dolichopus caligatus*, a species which seems to be little known in European terms but which occurs in good numbers in Lewis. Lochs with areas of emergent vegetation around the shores also provide a habitat for two species of the Dolichopodid genus *Thrycticus* - *T. bellus* and *T. divisus* - both of which are regarded as rare in British terms. The uncommon syrphid *Chrysogaster macquarti* is also present around moorland lochs.

The machair and dune areas of Lewis provide a habitat for two scarce dolichopodids - *Sciapus zonatulus* and *Dolichopus acuticornis*. I originally recorded *S.zonatulus* as *S.contristans* (MacGowan 1986) but after reference to recent revision of this species group by Meuffels and Grootaert (1990) it has become clear that the species involved is indeed *S.zonatulus*. Meuffels and Grootaert note that *S.zonatulus* seems to be more an inland species that the related *S.maritimus*, but that it has never the less been encountered in coastal regions.

The stands of *Phragmites* around some of the lochs in South Uist provide a habitat for the hoverfly *Tropida scita* which is found here at its most northerly station.

Waterston (1981) states that in his list the record of *Pipizella virens* from Lewis is probably based upon a misidentification. It seems probable that the species involved was *Pipizella varipes* which has now been recorded from the Western Isles. Waterston also fails to note the record of *Dolichopus punctum* from North Uist included in a paper by Dale (1884). This is not altogether surprising for in his review of the Diptera of the Western Isles Grimshaw (1914) states that: "... it is very doubtful if this species has ever been taken in Britain". However, Grimshaw supposed that the species referred to in Dale's list was *D.punctum* Meigen, whereas in the original paper no naming authority was given for this species. It seems more probable that Dale used Walker's *Insecta Britannica* Diptera as his reference work and that

the species in question was actually *D.punctum* Haliday which is now regarded as a synonym of *D.signifer* Haliday. *Dolichopus signifer* is a very rare species in Britain; published records (Fonseca 1978) seem to indicate a Lusitanian distribution similar to that of *Sciapus zonatulus* so it would seem quite possible that this species did occur in the Western Isles and indeed may still be present.

The species list produced by Waterston in 1981 has had the effect of encouraging further recording within the Western Isles and has led to an increased understanding of the fauna. Further work is still required particularly in montane and moorland habitats and perhaps in the colonisation of the new conifer plantations by insect species. Recording carried out to date has revealed that the Western Isles have a unique and interesting fauna which will fully reward further survey work.

The abbreviations used in the following Table follow those used by Waterston (1981):

Le	Lewis
Ha	Harris
NU	North Uist
SU	South Uist
Fl	Flannans
SK	St Kilda

An asterisk denotes a species new to the Western Isles.

Table 1 New records of Western Isles Diptera

DIPTERA		
Bibionidae	<i>Dilophus femoratus</i> (Meig.)	Fl
Stratiomyidae	<i>Beris vallata</i> (Forst.)	Le*
	<i>Chloromyia formosa</i> (Scop.)	
	<i>Nemotelus uliginosus</i> (L.)	Ha
Tabanidae	<i>Hybomitra montanus</i> Meig.	Le
Therevidae	<i>Thereva nobilitata</i> (Fab.)	NU
Empididae	<i>Chelifera precatória</i> (Fall.)	SU
	<i>Clincoera fontinalis</i> (Hal.)	SU Le
	<i>C. stagnalis</i> (Hal.)	NU Le
	<i>Empis borealis</i> L.	Ha*
	<i>E. livida</i> L.	Ha Le
	<i>E. lucidus</i> Zett	Le*
	<i>E. verralli</i> Collin	Ha
	<i>Hemerodromia baetica</i> Collin	Le*
	<i>Hilara interstincta</i> Fallen	Le*
	<i>H. lundbecki</i> Frey	Ha
	<i>H. matrona</i> Hal.	Le*
	<i>Platypalpus ciliaris</i> (Fallen)	Le*
	<i>P. coarctatus</i> (Collin)	Ha*
	<i>P. minutus</i> (Meig.)	Le
	<i>P. notatus</i> (Meig.)	NU SU
	<i>P. pallidiventris</i> (Meig.)	Le
	<i>P. strigifrons</i> (Zett.)	Ha
	<i>Rhamphomyia dentipes</i> Zett	Le*
	<i>R. geniculata</i> Meig.	Le*
	<i>R. nitidula</i> Zett.	Ha*
<i>R. stigmosa</i> Macq.	SU Le*	
<i>R. tibiella</i> Zett	Le*	

Dolichopodidae	Achalus flavicollis (Meig.)	Le
	Aphyrosylus celtiber Hal.	Le*
	A. ferox Hal.	Le*
	A. raptor Hal.	Le
	Argyra diaphana (Fab.)	Le*
	A. perplexa Beck.	Le*
	A. vestita (Wied.)	Le*
	Campsicnemus armatus (Zett.)	NU Le*
	C. loripes (Hal.)	Ha Le
	C. scambus (Fall.)	Ha SU
	Chrysotus gramineus (Fall.)	Le*
	Dolichopus acuticornis Wied.	Le
	D. brevipennis Meig.	NU
	D. caligatus Wahl.	Le*
	D. lepidus Staeg.	Le*
	D. longitarsis Stann.	FI*
	D. nubilus Meig.	Ha
	D. popularis Wied.	Le*
	D. rupestris Hal.	Le
	D. trivialis Hal.	Le
	D. ubanus Meig.	SU
	Hydrophorus albiceps Frey	Le*
	H. nebulosus Fall.	Le
	Liancalus virens (Scop.)	Le
	Medetera truncorum Meig.	Le*
	Rhaphium consobrinum Zett.	Le SU*
	R. crassipes (Meig.)	Le*
	# Sciapus zonatulus (Zett.)	Le*
	Sympycnus cirripes (Hal.)	Le
	S. desoutteri Parent	NU Ha
	Syntormon denticulatus (Zett.)	Le*
	S. monilis (Hal.)	SU
	S. tarsatus (Fall.)	Le
	Thrypticus bellus Loew.	Le*
	T. divisus (Strobl.)	Le*
	# See reference to S. zonatulus in text	
Lonchopteridae	Lonchoptera lutea Panzer	FI
Syrphidae	Cheilosia illustrata (Harris)	Le
	Chrysogaster hirtella Loew	NR
	C. macquarti Loew	Le*
	Dasysyrphus lunulatus (Meig.)	Le*
	Episyrphus balteatus (Degeer)	Le
	Eristalis intricarius (L.)	Le
	E. pertinax (Scop.)	SU
	E. tenax (L.)	SK
	Lejogaster metallina (Fab.)	Ha
	Metasyrphus corollae (Fab.)	SK
	M. latifasciatus (Macqu.)	Le*
	Neoascia tenax (Harris)	Ha
	Parasyrphus punctulatus (Verr.)	Le*
	Pipizella varipes (Meig.)	NU*
	Platycybeus albimanus (Fab.)	Ha
	P. clypeatus (Meig.)	Le Ha
	P. immarginatus (Zett.)	Le
	P. manicatus (Meig.)	Ha
	P. peltatus (Meig.)	Ha
	P. scambus (Staeg.)	Le
	P. sticticus (Meig.)	Le*
	Pyrophaena granditarsa (Forst.)	Le*
	Scaeva pyrastris (L.)	Le*

	<i>Syritta pipiens</i> (L.)	Le
	<i>Syrphus ribesii</i> (L.)	Le
	<i>S. torvus</i> O.S.	Le*
	<i>S. vitripennis</i> Meig.	Le
	<i>Tropida scita</i> (Harris)	SU*
<b>Tephritidae</b>	<i>Paroxyna loewiana</i> Hendel	Le*
<b>Sciomyzidae</b>	<i>Ilione albiseta</i> (Scopoli)	Ha
	<i>Limnia unguicornis</i> (Scopoli)	NU*
	<i>Pherbina coryleti</i> (Scopoli)	Ha Le
	<i>Renocera strobilii</i> Hendel	Le*
	<i>Tetanocera fuscinervis</i> Zett.	NU*
<b>Chloropidae</b>	<i>Cetema neglecta</i> Tonnoir	Le*
<b>Muscidae</b>	<i>Phaonia incana</i> (Wiedemann)	FI

## REFERENCES

- Dale, C.W., 1884. Captures on North Uist and St Kilda. **Entomologists Mon. Mag.** 20; 213-214
- Fonseca, E.C.M., 1978. Dolichopodidae. **Handbook for the Identification of British Insects** 9 (5). Royal Entomological Society of London.
- Grimshaw, P.H., 1914-1916. Diptera Scotica VI. The Western Isles. **Annals of Scottish Natural History** 1914; 204-213, 234-236, 258-262. 1915; 276-281. 1916; 115-119, 134-138.
- Haliday, A.H., 1851. Dolichopodidae. In: **Insecta Britannica Diptera** I; 144-220. F. Walker, London
- MacGowan, I., 1985. Notes on the Diptera of the Western Isles. **Entomologists Mon. Mag.** 121; 24.
- MacGowan, I., 1986. **Invertebrate Survey; Lewis and Harris**. NCC Internal Report.
- MacGowan, I., 1986. *Sciapus constrictans* (Dolichopodidae) in Scotland and other Diptera new to the Western Isles. **Entomologists Mon. Mag.** 122; 213.
- MacGowan, I., 1987. Dolichopodidae and Syrphidae (Diptera) new to Lewis. **Hebridean Naturalist** 9; 14-16.
- MacGowan, I., 1988. **Diptera from the Uists and Flannan Isles**. NCC Internal Report.
- Meuffels, J.G. and Grootaert, P. 1990. The identity of *Sciapus constrictans* (Wiedemann, 1817) (Dipt. Dolichopodidae) and a revision of the species group of its relatives. **Bull. Inst. Roy. Sci. Nat. Belge. Entomologie** 60 161-178.
- Waterston, A.R., 1981. The non-marine invertebrate fauna of the Western Isles. **Proc. Roy. Soc. Edinburgh** 79B; 215-321.
- Wormell, P., 1982. The Entomology of the Isle of Rhum National Nature Reserve. **Biol. J. Linn. Soc.** 18; 291-401.

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## A Survey of Diptera on South Uist and Adjacent Outer Hebridean Islands

Derek Whiteley, Steven P. Garland, and E. Geoffrey Hancock

In June 1988 D.W. and S.P.G. spent two weeks on South Uist surveying flies and other insects mainly by sweep-netting a range of habitats. Visits were also made to North Uist and Baleshare Island.

A year later work continued, again in June, mainly on South Uist. Additional visits were made to Baleshare, Benbecula, North Uist; and D.W. spent a day on Eriskay.

E.G.H. surveyed sites on South Uist, Eriskay, Benbecula and North Uist in July 1988.

Results from all three surveys have been combined and compared to the published list of Waterston (1981). A significant number of species are new additions to the published Outer Hebrides fauna, and many more species are additions to the fauna of the respective individual islands, mentioned above. The surveys also provided many useful records for national recording schemes and distribution maps. Voucher specimens were identified by the authors. In addition Jonathan Cole identified Derek Whiteley's Acalypterates, Calypterates, Empididae and Dolichopodidae. Alan Stubbs identified D.W.'s craneflies and Martin Speight re-examined D.W.'s *Platycheirus* specimens as part of his research and revision of the *clypeatus* group (Goeldlin, Maibach and Speight 1990).

The systematic list follows Kloet and Hincks (1976) and Stubbs and Falk (1983) for hoverflies. A few modern names in common usage have been adopted.

The following abbreviations are used:-

- \* Additional species to Waterston (1981) for the Outer Hebrides (EGH) Recorded by E.G. Hancock in July 1988
- (1988) Recorded by D. Whiteley/S.P. Garland in June 1988

Other records were made by D.W./S.P.G. in June 1989

### TIPULIDAE Craneflies

*Prionocera turcica* (Fab.) Loch Hallan SSSI (EGH)

*Nephrotoma submaculosa* Edwards. Kildonan machair, Baleshare abundant on sand dunes, Loch Kildonan, Eriskay swept from bog.

\**Nephrotoma appendiculata* (Pierre) Loch Hallan SSI (EGH) dunes. Howmore machair (EGH), Eriskay acid flush (EGH).

*Tipula alpium* Bergroth. Beinn Mhor moorland at an altitude of 1500-2000ft (EGH) and on the summit (DW).

*Tipula varipennis* Meigen. Kildonan machair, Smalag peat bog North Uist.

*Tipula scripta* Meigen. South Loch Eynort. Loch Druidibeg shore (EGH).

*Tipula lateralis* Meigen. Loch Hallan SSSI (EGH).

*Tipula oleracea* Linn. Benbecula Linciate (EGH) Loch Hallan SSSI (EGH) Loch Druidibeg plantation (EGH) Loch Skipport (EGH) Loch Kildonan and Kildonan machair.

\**Tipula fulvipennis* Degeer. Loch Druidibeg plantation (EGH).

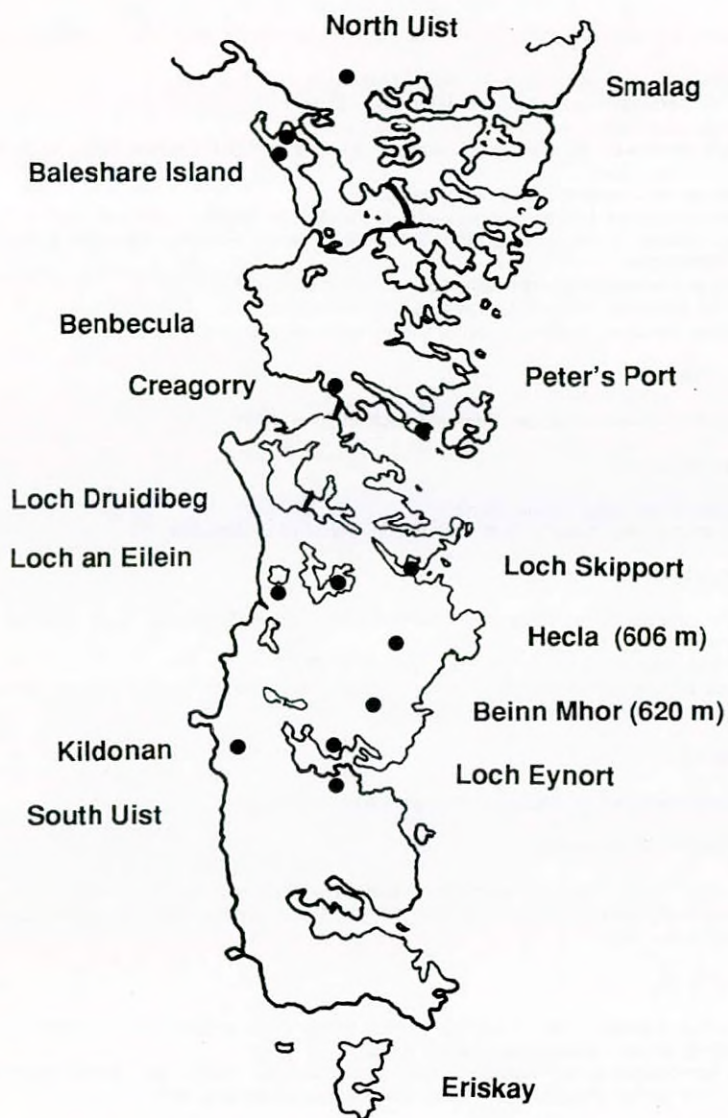
*Limonia nubeculosa* Meigen. Loch Druidibeg plantation (EGH)

*Limonia trivittata* (Schummel) Howmore machair (EGH).

*Limonia (Dicranomyia) autumnalis* (Staeger) Loch Skipport (EGH) Eriskay (EGH) Howmore machair (EGH) Loch Druidibeg NNR - Shore (EGH).

\**Antocha vitripennis* (Meigen) Howmore very common up river (EGH)

*Austrolimnophila ochracea* (Meigen) Loch Druidibeg plantation (EGH).



MAP 1. South Uist and Adjacent Islands showing main collecting sites

**Limnophila fulvonervosa** (Schummel) Loch Eynort, Smalag N. Uist, Loch Druidibeg plantation (EGH).

**Limnophila meigeni** Verrall Loch Druidibeg shore (EGH).

**Limnophila nemoralis** (Meigen) Loch Hallan SSSI (EGH)

**Limnophila nemoralis f. separata** (Walker) Loch Eynort

**Gonomyia dentata** de Meijere Loch Druidibeg NNR - shore (EGH) Caltinish (EGH) Loch Skipport (EGH) Eriskay (EGH).

**Erioptera stictica** (Meigen) Howmore machair (EGH).

**Erioptera fuscipennis** Meigen Eriskay acid flush (EGH) Loch Druidibeg NNR shore (EGH)

**Erioptera trivialis** Meigen Kildonan machair, Howmore machair (EGH) Loch Skipport (EGH) Eriskay acid flush (EGH)

\***Ormosia pseudosimilis** (Lundstroem) Loch Druidibeg plantation (EGH)

**Molophilus obscurus** (Meigen) Eriskay acid flush (EGH)

\***Molophilus occultus** de Meijere Loch Druidibeg NNR plantation and Caltinish (EGH).

#### PTYCHOPTERIDAE

\***Ptychoptera scutellaris** Meigen Drimisdal, Loch an Eilein (1988)

#### CERATOPOGONIDAE

\***Serromyia morio** (Fab) Eriskay Island.

**Palpomyia (quadrispinosa?)** South Loch Eynort. Requires confirmation.

#### ANISOPODIDAE

**Sylvicola cinctus** (Fab) Peter's Port Benbecula, Creagorry Benbecula Loch Skipport (EGH) Howmore machair (EGH).

**Sylvicola punctatus** (Fab) Loch Druidibeg plantation (EGH)

\***Sylvicola zetterstedti** (Edwards) Howmore machair, Loch a Mhoil South Uist bred from roots of *Angelica*. Adult emerged November 1988 (EGH).

#### BIBIONIDAE

**Dilophus femoratus** (Linn.) Kildonan machair and Loch Kildonan

#### STRATIOMYIDAE Soldier Flies

**Chloromyia formosa** (Scop.) Baleshare sand dunes (1988) Kildonan machair (1988).

\***Nemotelus nigrinus** Fall. Loch Kildonan (1988). A considerable extension to its known British range (Drake 1991).

#### RHAGIONIDAE

**Chrysopilus cristatus** (Fab) South Loch Eynort (1988) waste ground Creagorry Benbecula, Loch Druidibeg plantation, Benbecula Linciate (EGH).

**Rhagio scolopacea** (Linn.) Howmore (1988) slopes of Hecla (1988) very common on slopes just below the summit; slopes of Beinn Mohr, Loch Kildonan (1988 and 1989).

#### TABANIDAE Horseflies

**Chrysops relictus** Meigen Loch an Eilein males on buttercups, females South Loch Eynort, Smalag Bog North Uist (1988) Loch Kildonan (1988) males on Flag Iris with large black markings rather like *viduatus*.

**Haematopota crassicornis** Wahlberg Smalag North Uist peat bog (1988).

**Haematopota pluvialis** (Linn) Smalag North Uist peat bog (1988) Loch Eynort (1988) Loch Hallan SSSI (EGH) very common in bog at South Loch Eynort; Loch Druidibeg plantation. Males on **Eleocharis** at Loch Kildonan. Howmore (SPG).

**Hybomitra montana** (Meigen) Females in most upland peat bogs. Very common at a hill loch near Loch Eynort, slopes of Beinn Mhor, and common at a flower rich bog South Loch Eynort. Smalag North Uist bog (1988) Loch Eynort (1988) Females very variable in size and colouration of abdomen and antennae. Males at Loch Druidibeg lake islands (front cover photograph).

#### THEREVIDAE

**Thereva nobilitata** (Fab.) Howmore machair (EGH) Loch Kildonan (1988 and 1989)

#### EMPIDIDAE (broad sense)

**Tachypeza nubila** (Mg.) Loch Skipport (EGH)

**Platypalpus notatus** (Mg.) Howmore machair (EGH) Kildonan machair (1988) and lochside (1988).

**Hybos culiciformis** (Fab.) Loch Druidibeg plantation (EGH).

**Hybos femoratus** (Muller) Hecla (1988) Peter's Port Benbecula, Loch Eynort

**Trichina clavipes** Mg. Loch Druidibeg shore (EGH) plantation and lake islands. Loch Eynort and South Loch Eynort.

**Hilara chorica** (Fall.) Loch Druidibeg loch shore (EGH)

\***Hilara longivittata** Zett Howmore machair (EGH)

**Hilara lundbecki** Frey Baleshare Island, dunes and machair. Kildonan machair (1988 and 1989).

**Hilara maura** (Fab) Peter's Port Benbecula

**Empis livida** Linn Kildonan machair (1988) Benbecula Liniolate (EGH) Eriskay, Creagorry wasteland, Loch Kildonan, Loch Hallan SSSI (EGH).

\***Empis lucida** (Fall.) Loch Kildonan lochside (1988)

\***Rhamphomyia stigmosa** Macg. Loch Druidibeg lake island.

**Chelifera monostigma** (Mg.) Loch Druidibeg lake island

**Phyllodromia melanocephala** (Fab.) Loch Druidibeg plantation (EGH)

#### DOLICHOPODIDAE

**Dolichopus atratus** (Mg.) Smalag peatland North Uist (1988) Loch Eynort north shore (1988) Loch Skipport (EGH) Hecla mountain side (1988) South Loch Eynort, Loch Druidibeg plantation. Howmore (SPG).

**Dolichopus brevipennis** (Mg.) Loch an Eilein (1988) Kildonan machair (1988) Baleshare dunes very common (1988) Loch Kildonan (1988 and 1989) common Benbecula Liniolate (EGH).

\***Dolichopus caligatus** Wahl. A male at Howbeg-Howmore (EGH).

**Dolichopus griseipennis** Stann. Kildonan machair (1988)

**Dolichopus nubilus** (Mg.) Benbecula Liniolate (EGH).

**Dolichopus pennatus** (Mg.) Loch an Eilein (1988) Loch Kildonan (1988)

**Dolichopus plumipes** (Scop.) Common along the shores of Loch Kildonan (1988) Eriskay, Loch Druidibeg plantation, Caltinish freshwater loch (EGH).

**Dolichopus simplex** (Mg.) Loch an Eilein (1988) Kildonan machair (1988 and 1989) Baleshare machair - very common (1988) Eriskay, Loch Kildonan, Loch Eynort.

**Dolichopus unguulatus** (Linn.) Loch Kildonan (1988) common around Howbeg and Howmore (EGH).

**Dolichopus urbanus** (Mg.) Eriskay, Peter's Port Benbecula, Loch Druidibeg plantation, Loch Skipport (EGH)

\***Hydrophorus albiceps** Frey Caltinish freshwater lochan (EGH) Loch Hallan SSSI (EGH)

\***Hydrophorus balticus** (Mg.) Loch Hallan SSSI (EGH).

\***Medetera petrophiloides** Parent. Baleshare dunes and machair (1988)

**Syntormon pallipes** (Fab.) Loch Eynort, Loch Druidibeg plantation, Loch Kildonan, Loch Skipport (EGH) Loch Hallan (EGH).

**Syntormon pumilus** (Mg.) Kildonan machair and Loch Kildonan (1988).

**Syntormon tarsatus** (Fall.) Common on boggy ground at Eriskay.

\***Argyra perplexa** Becker. Howmore machair (EGH) and Loch Druidibeg NNR shoreline (EGH).

**Campsicnemus scambus** (Fall.) Loch Eynort.

**Sympycnus desouteri** (Parent) Kildonan machair, Loch Kildonan shoreline very common. Eriskay common. Peter's Port Benbecula.

#### SYRPHIDAE Hoverflies

\***Melanostoma dubium** (Zett.) A female taken on top of Beinn Mhor has all the characteristics of **dubium**. A montane species of boggy ground and an interesting addition to the fauna of South Uist and the Outer Islands.

**Melanostoma mellinum** (Linn.) Smalag Bog North Uist (1988) Loch an Eilein (1988) Loch Eynort (1988) and flower-rich bog South Loch Eynort.

**Melanostoma scalare** (Fab.) A very widespread and common species. Summit of Hecla (1988) new to South Uist, Smalag Bog North Uist. Loch Druidibeg plantation and lake islands. Caltinish (EGH) and Loch Skipport (EGH).

**Platycheirus albimanus** (Fab.) A widespread and common species. Summit of Hecla (1988) Loch Eynort (1988) Loch Kildonan (1988) Loch Druidibeg lake island.

**Platycheirus angustatus** (Zett.) Loch Kildonan (1988) new to South Uist.

**Platycheirus clypeatus** (Mg.) *sensu stricto*. Creagorry and Peter's Port Benbecula, Eriskay, Loch Kildonan. Specimens identified by Martin Speight. New to Eriskay.

**Platycheirus immarginatus** (Zett.) male Baleshare Loch (SPG)

**Platycheirus manicatus** (Mg.) A widespread species. Summit of Hecla (1988) Loch Kildonan (1988) Eachkamish, Baleshare on dunes (1988) Pollacher shore, Peter's Port Benbecula. New to Benbecula.

\***Platycheirus podagratus** (Zett.) South Loch Eynort boggy ground, Eriskay and Loch Kildonan, South Uist. New to both islands.

\***Platycheirus ramsarensis** (Goeldlin, Maibach and Speight). Specimens from Loch Kildonan South Uist, 26 June 1989 were examined by Martin Speight during his revision of the *clypeatus* group, and subsequently given PARATYPE status (DW) New to science in 1990 (Goeldlin, Maibach and Speight 1990).

\***Platycheirus scutatus** (Mg.) Loch Kildonan (1988) New to Outer Isles.

**Platycheirus scambus** (Staeger) Loch Kildonan, Eriskay Island, Liniolate Benbecula (EGH) New to Eriskay and Benbecula.

\***Pyrophaena granditarsa** (Forster) Very common along the western shore of Loch Kildonan (1988 and 1989).

**Episyrphus balteatus** (Degeer) Widespread but not particularly common. Eriskay, Kildonan, Loch Druidibeg plantation and lake island, Howmore lochside, Baleshare North Uist. Howmore machair (EGH) New to all islands. Previously recorded on Barra.

**Metasyrphus corollae** (Fab.) Kildonan hovering over bare sandy path along the machair. Eriskay Island. New to both islands.

**Syrphus ribesii** (Linn.) A single specimen on Loch Druidibeg lake island. An abundant British species apparently quite rare on the islands. Previous record on Barra.

**Cheilosia bergenstammi** Becker. Howmore machair (EGH) New to South Uist.

**Rhingia campestris** Meigen. Widespread and common especially in cattle rearing areas. Kildonan machair (1988) Loch Eynort (1988) common feeding on Iris flowers South Loch Eynort, hovering over sandy path on Kildonan machair, Baleshare lochside, Loch an Eilein on Iris.

**Chrysogaster hirtella** Loew. Abundant in many wetland areas Loch Kildonan (1988) Eriskay Island, waste ground Creagorry Benbecula. Baleshare lochside and along ditches abundant on all flowers Common on buttercups and **Scirpus** beds Kildonan. Also on Kingcups Smalag bog North Uist (1988) Loch an Eilein. One of the most common hoverflies in the area. New to Benbecula, North Uist and Eriskay.

**Lejogaster metallina** (Fab.) Abundant in **Scirpus** beds Loch an Eilein (1988) Baleshare lochside and flower-rich ditches, abundant on all flowers. Loch Eynort, Eriskay Island, Creagorry waste ground Benbecula. New to Eriskay and Benbecula.

**Neoscia tenur** (Harris) Loch an Eilein (1988) Loch Kildonan (1988) Loch Eynort (1988) Creagorry wasteland Benbecula. Liniolate Benbecula ditches and grassland (EGH).

**Trichopsomyia flavitarsis** (Mg.) Kildonan machair (1988) Benbecula, Creagorry waste ground - abundant on tipped material with sparse vegetation. New to both islands.

- \**Anasimyia lineata* (Fab.) Loch an Eilein (1988) Loch Kildonan Baleshare lochside. New to the Outer Islands, but well distributed in Scotland.
- Anasimyia lunulata* (Mg.) Loch Kildonan (1988 and 1989) abundant associated with *Eleocharis*. Baleshare lochside on Iris leaves, daisies and Kingcup flowers. Previously recorded on South Uist - an interesting expansion of its known British distribution.
- Eristalinus aeneus* (Scop.) South Loch Eynort on Tormentil in flower-rich boggy area. New to South Uist but previously recorded from Barra.
- Eristalinus sepulchralis* (Linn.) Loch Eynort (1988) South Loch Eynort in boggy areas.
- Eristalis arbustorum* (Linn.) Loch Kildonan (1988) and Loch an Eilein (1988)
- Eristalis intricarius* (Linn.) Loch Eynort (1988 and 1989) Kildonan (1988) in large numbers hovering over sandy paths through the machair. Loch an Eilein on white flowers. Loch Druidibeg lake island.
- Melophilus pendulus* (Linn.) Kildonan (1988) Loch Druidibeg lake islands and plantation. Loch Hallan (EGH) Howmore machair (EGH) Baleshare lochside. Loch Kildonan.
- Syrirta pipiens* (Linn.) Loch Eynort (1988) and Loch Druidibeg lake islands. Benbecula Liniolate (EGH)
- \**Tropidia scita* (Harris) Several specimens swept from *Eleocharis* on the western shore of Loch Kildonan 21 June 1988, and also repeated in 1989, indicating a resident population and a considerable expansion of its known British range.
- Sericomyia lappona* (Linn.) Summit of Beinn Mhor.
- Sericomyia silentis* (Harris) Cottongrass bogs at Loch Eynort and South Loch Eynort. Beinn Mhor on moorland between 1500-2000ft in altitude (EGH).
- Volucella bombylans* (Linn.) Loch Druidibeg plantation and lake islands. Only in the vicinity of trees.

#### TEPHRITIDAE

- Paroxyna absinthii* (Fab.) Kildonan machair (1988)

#### OTTITIDAE Picture-wing Flies

- Herina frondescentiae* (Linn.) Eriskay, Loch Kildonan, very common on wasteland at Creagorry, Benbecula, Baleshare machair (1988) slopes of Hecla, Smalag bog on Tormentil flowers (1988) very common along a flower-rich ditch at Baleshare.

#### MICROPEZIDAE

- Calobata petronella* (Linn.) Loch Eynort, Loch Druidibeg plantation

#### PSILIDAE

- \**Psila luteola/pallida* Kildonan machair (1988)
- Psila rosae* (Fab.) Caltinish freshwater loch (EGH)
- \**Psila atra* Meigen. Loch Kildonan - fairly common
- Loxocera ichneumonae* (Linn.) Loch Kildonan (1988) quite common resting on the base of Iris plants looking down. Eriskay (EGH) Benbecula Liniolate (EGH)

#### HELCOMYZIDAE

- Helcomyza ustulata* Curtis Kildonan beach (1988) a large and very active fly which was quite common on the sandy beach making short dashing flights.
- Heterocheila buccata* (Fall.) Loch Eynort (1988) Loch Kildonan (1988) South Loch Eynort.

#### DRYOMYZIDAE

- \**Dryomyza analis* (Fall.) South Loch Eynort

## CHAMAEMYIDAE

*Chamaemyia flavipalpis* Haliday Loch Kildonan (1988) Eriskay Island

## LAUXANIIDAE

*Minettia tubifer* (Mg.) Loch an Eilein (1988) Baleshare machair (1988) Kildonan machair

\**Sapromyza albiceps* Fall. Loch Druidibeg Plantation

*Lyciella lorida* (Fall.) South Loch Eynort, Loch Druidibeg lake island

*Calliopum aeneum* (Fall.) Loch an Eilein (1988) Baleshare machair (1988) Creagorry waste ground, Benbecula

\**Calliopum simillimum* (Collin) Kildonan machair (1988 and 1989)

## COELOPIDAE

*Coelopa frigida* (Fab.) Kildonan machair (1988) South Loch Eynort

## HELEOMYZIDAE

\**Suilla notata* (Mg.) Loch Eynort (1988)

*Heleomyza modesta* (Mg.) Beinn Mohr

## SEPSIDAE

\**Themira minor* (Haliday) Loch an Eilein (1988) Loch Kildonan (1988)

*Sepsis cynipsea* (Linn.) Peter's Port Benbecula, Loch Kildonan

## SCIOMYZIDAE

*Pherbellia cinerella* (Fall.) Baleshare dunes and machair (1988) Kildonan machair and loch (1988) Eriskay, waste ground Creagorry Benbecula

*Hydromya dorsalis* (Fab.) a very common species on the shore of Loch Kildonan. Also Kildonan machair (1988)

*Ilione albiseta* (Scop.) abundant in many places at Kildonan (1988 and 1989). Also Loch an Eilein - abundant on *Eleocharis* (1988) Baleshare (1988)

\**Limnia paludicola* Elberg Smalag bog North Uist (1988)

*Pherbina coryleti* (Scop.) Baleshare lochside, Kildonan (1988) very common in 1989

\**Renocera strobli* Hendel Loch an Eilein, Baleshare machair Kildonan machair and lochside vegetation (all 1988)

*Tetanocera ferruginea* Fall. Slopes of Beinn Mohr

*Tetanocera hyalipennis* Ros. South Loch Eynort - new to South Uist

## SPHAEROCERIDAE

*Sphaerocera curvipes* Lat. Beinn Mohr mountain slopes.

## OPOMYZIDAE

*Opomyza germinationis* (Linn.) Kildonan machair. Loch Kildonan

## ANTHOMYZIDAE

\**Anthomyza unguicella* (Zett.) Creagorry Benbecula

## EPHYDRIDAE

- Philygria punctatonervosa* (Fall.) Kildonan machair (1988)  
*Lamproscatella sibilans* (Haliday) Loch Kildonan (1988 and 1989)  
*Scatella paludum* (Mg.) South Loch Eynort  
*Scatella stagnalis* (Fall.) South Loch Eynort, Beinn Mohr, Loch Eynort

## AGROMYZIDAE

- Cerodontha denticornis* (Panzer). Eriskay Island

## CHLOROPIDAE

- Meromyza pratorum* Meigen Baleshare Island dunes (1988)  
\**Epichlorops puncticollis* (Zett.) Loch Eynort (1988)  
\**Chlorops scalaris* Meigen Peter's Port, Benbecula

## TACHINIDAE

- Prosenia siberita* (Fab.) Loch Hallan SSSI (EGH)  
*Gymnocheta viridis* (Flin.) Loch Eynort (1988)  
*Siphona* sp, probably *geniculata* (Deg.) Kildonan machair, Eriskay (1988)

## CALLIPHORIDAE

- \**Calliphora loewi* Enderlein Baleshare Island dunes (1988) and the slopes of Beinn Mhor, South Uist (1989). The first records for the western islands (L. Davies pers. comm.) see also Davies and Laurence 1992.  
*Calliphora vicina* (Rob.-Desv.) Loch Druidibeg lake island  
*Lucilia sericata* (Mg.) Loch Kildonan machair and lochside  
*Cynomya mortuorum* (L.) Loch Kildonan

## SCATHOPHAGIDAE

- Norellisoma spinimanum* (Fall.) Loch an Eilein (1988) Loch Eynort (1988)  
*Scathophaga litorea* (Fall.) Baleshare machair, Kildonan machair, Loch Kildonan (all 1988)  
*Scathophaga stercoraria* (L.) Kildonan machair, Loch Kildonan shore (1988) Eriskay, Beinn Mhor summit, Baleshare Island (1988)  
*Scathophaga furcata* (Say) Smalag bog (1988) Eriskay, Beinn Mohr summit, Loch Druidibeg plantation, Peter's Port on seaweed  
*Scathophaga calida* (Curt.) Peter's Port  
*Ceratinostoma ostiorum* (Curt.) Loch Eynort on seaweed (1988) Peter's Port Benbecula on seaweed  
*Gimnomera tarsea* (Fall.) Loch Druidibeg plantation, Loch Kildonan and Kildonan machair (1988 and 1989)

## ANTHOMYIIDAE

- Fucellia fucorum* (Fall.) Eriskay Island  
*Fucellia tergina* (Zett.) Loch Kildonan  
*Pegohylemyia seneciella* (Meade) Baleshare Island dunes (1988) Loch Kildonan and Kildonan machair  
*Hydrophoria ambigua* (Fall.) Loch Druidibeg plantation  
*Hydrophoria caudata* (Zett.) Eriskay Island  
\**Hydrophoria linogrisea* (Mg.) South Loch Eynort  
*Delia albula* (Fall.) Eriskay Island  
*Nupedia aestiva* (Mg.) Eriskay Island



*Nupedia infirma* (?) South Loch Eynort  
*Pegomya bicolor* (Wied.) Loch Kildonan machair, Peter's Port  
\**Pegomya haemorrhoea* (Zett.) Peter's Port's

#### FANNIIDAE

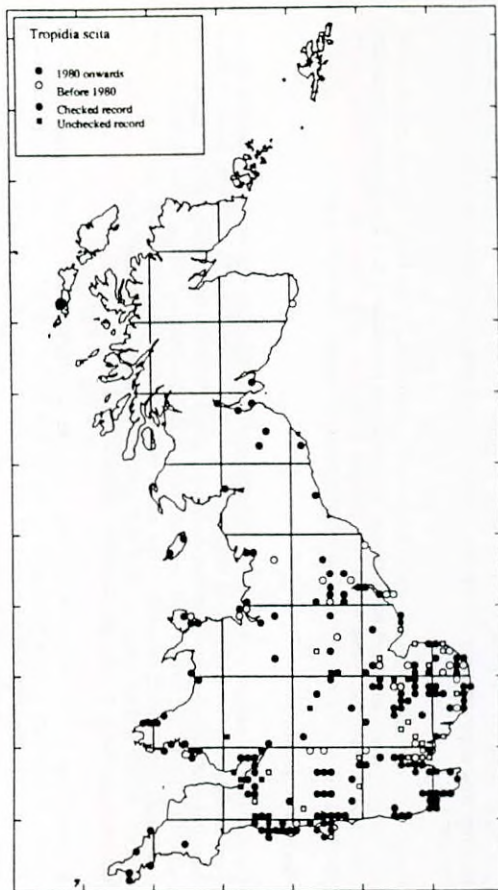
*Fannia postica* (Stein) Creagorry, Peter's Port  
\**Fannia rondanii* (Strobl.) Loch Druidibeg plantation and lake islands  
*Fannia serena* (Fall.) Loch Druidibeg plantation and lake islands, Loch Kildonan and Peter's Port

#### MUSCIDAE

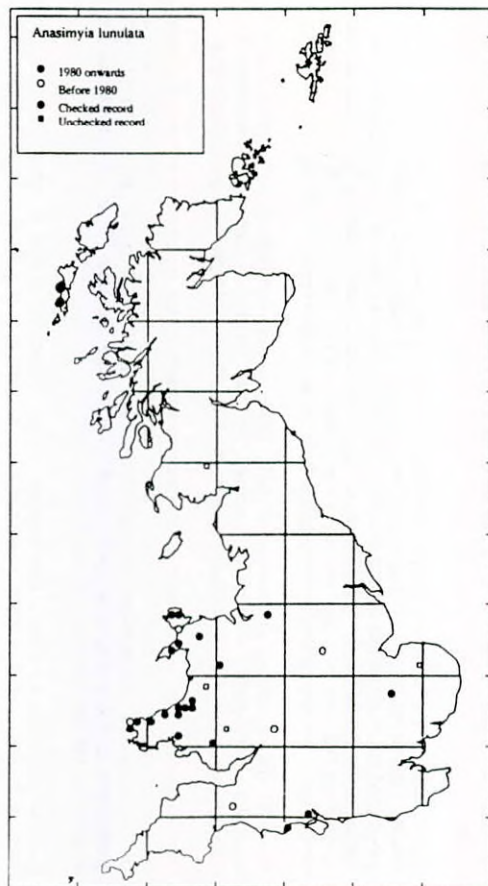
*Morellia hortorum* (Fall.) Kildonan machair (1988) Loch Kildonan  
*Azelia cilipes* (Hal.) Loch Druidibeg plantation, South Loch Eynort  
*Azelia zetterstedti* Rond. Loch Druidibeg plantation  
\**Drymeia hamata* (Fal.) Loch an Eilein (1988)  
\**Hydrotaea cinerea* (Rob-Desv.) Loch Kildonan  
*Hydrotaea irritans* (Fall.) Baleshare dunes and machair (1988) Loch Kildonan (1988) Eriskay Island,  
Loch Druidibeg lake island  
*Phaonia incana* (Wied.) Kildonan machair (1988) Eriskay island  
\**Helina arctata* Collin Eriskay Island  
*Helina impuncta* (Fall.) Peter's Port  
*Helina protuberans* (Zett.) Eriskay Island  
*Hebecnema umbratica* (Mg.) Howmore machair (EGH) Loch Druidibeg lake island  
*Myospila mediotabunda* (Fab.) Hecla (1988) Eriskay Island  
\**Graphomya picta* (Zett.) Loch an Eilein (1988)  
*Spilogona denigrata* (Mg.) Loch Eynort (1988) South Loch Eynort  
*Spilogona surda* (Zett.) Loch Kildonan  
*Spilogona litorea* (Fall.) Loch Kildonan (1988)  
\**Spilogona vana* (Zett.) Eriskay Island  
*Pseudocoenosia abnormis* Stein Loch Eynort  
*Schoenomyza litorella* (Fall.) Loch Kildonan, Beinn Mhor, Kildonan machair  
*Coenosia femoralis* Rob.-Desv. Eriskay Island, Peter's Port  
*Coenosia mollicula* (Fall.) Kildonan machair (1988 and 1989) Peter's Port, Loch Kildonan  
*Coenosia pedella* (Fall.) Baleshare dunes (1988) Kildonan machair and lochside  
*Coenosia tigrina* (Fab.) Loch Kildonan  
*Coenosia tricolor* (Zett.) Baleshare dunes (1988) Loch Kildonan (1988) Eriskay Island

#### HIPPOBOSCIDAE

*Ornithomya chloropus* Bergroth swept from vegetation Kildonan machair (1988) a host non-specific bird parasite



**MAP 2.** Distribution of *Tropidia scita*  
(map provided by Stuart Ball, Hoverfly Recording Scheme)



**MAP 3.** Distribution of *Anasimyia lunulata*  
(map provided by Stuart Ball, Hoverfly Recording Scheme)

## NOTES ON SURVEY SITES

**The Islands.** 202 species were recorded in this survey. 45 were additions to the Waterston (1981) list. More were new to the respective islands of North Uist, Baleshare, South Uist, Benbecula and Eriskay.

**Woodlands.** The islands are virtually treeless. Individual trees occur in scattered localities but woodland stands are rare. The famous small woodlands at Allt Volagir and Meall Mor on South Uist were visited but no diptera of any significance were found. The lake islands of Loch Druidibeg were somewhat more productive. A small area of relict woodland of rowan, yew, willow and birch has survived on two islands. The ground flora was dominated by Royal Fern (*Osmunda regalis*). Plantations on the edge of Loch Druidibeg include a number of alien trees and shrubs.

Some 31 diptera species were recorded here, including the only records of *Syrphus ribesii*, *Volucella bombylans*, *Calliphora vicina*, *Fannia rondanii*, *Ormosia pseudosimilis*, *Rhamphomyia stigmata*, *Chelifera monostigma*, *Sapromyza albiceps* and *Tipula fulvipennis*.

**Loch Kildonan.** The west shore of Loch Kildonan is clearly a very important site. Here the basic machair meets the acidic peat 'blacklands' and a very interesting assemblage of flies has developed. The dolochopterid *Sympycnus desouteri* and the hoverflies *Tropidia scita*, *Pyrophaena granditarsa* and *Anasimyia lunulata* are all very common in June. The small black aquatic soldierfly *Nemotilus nigrinus* was also found.

Some of these species show a considerable northward extension of their known distribution, (see maps of *T. scita* and *A. lunulata*) and present a biogeographical problem. Are they relics of a shrinking distribution? Have they arrived on strong southerly winds? None are particularly strong fliers. Have they been artificially introduced to the islands and found habitats to their liking? One interesting theory is that ships trading along the west coast of Britain would return in ballast which would be dumped on the islands with its inherent insect fauna.

**Machair.** A scan of the annotated species lists allows researchers to construct a species list for machair localities. This flower-rich shell sand running along the western coast behind the sand dunes supports a rich and interesting fauna. *Eristalis intricarius* is the typical common hoverfly in June, with large numbers of *Rhingia campestris* in cattle grazed areas. *Dolichopus brevipennis*, *Nephrotoma submaculosa*, *Pherbellia cinerella* and *Thereva nobilitata* are other characteristic species.

**Bogs.** The eastern flower-rich bogs of South Uist; and Benbecula and North Uist are characterised by plenty of horseflies *Chrysops relictus*, *Haematopota pluvialis* and the impressive *Hybomitra montana*. *Eristalinus aeneus* and *sepulchralis* both occur in the same general locality, but the characteristic hoverfly was *Sericomyia silentis*, present in good numbers in June.

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We would like to thank all the islanders for being helpful in many ways. Special thanks are due to Dougie of Drimisdal for allowing us to camp on his land and for the use of his garage as a laboratory. Also thanks to the people of Howmore for accommodation and warm hospitality. Rod Evans of the former NCC provided us with a boat and access to Loch Druidibeg National Nature Reserve. Our planned trip to the Monach Islands had to be cancelled owing to strong winds. One day perhaps?

## References

- Davies L. and Laurence B.R.** (1992) The Distribution of Calliphora species in Britain and Ireland (Dipt., Calliphoridae) **Ent. mon. mag.** 128: 207-213
- Drake C.M.** (1991) **Provisional atlas of the Larger Brachycera (Diptera) of Britain and Ireland.** Biological Records Centre. Monks Wood.
- Goeldin de Tiefenau P., Maibach A., Speight M.C.D.** (1990) Sur quelques espèces de Platycheirus (Diptera, Syrphidae) nouvelles ou méconnues. **Dipterist Digest** 5: 19-44
- Kloet G.S. and Hincks W.D.** (1975) **A Check List of British Insects.** 2nd Edition. Part 5. Royal Entomological Society.
- Stubbs A.E. and Falk S.J.** (1983) **British Hoverflies.** British Entomological and Natural History Society.
- Waterston A.R.** (1981) Present knowledge of the non-marine invertebrate fauna of the Outer Hebrides. **Proc. R. Soc. Edin.** 79B, 215-321.

## Composite List of Diptera Collected in South Uist, Benbecula and North Uist in August 1989

### P. SKIDMORE

In late August 1989 a week was spent at Howbeg in South Uist for the purpose of carrying out a survey of the Diptera of South Uist, Benbecula and North Uist as part of a study for a Doctorate at Sheffield University financed by the A.O.C. in Edinburgh. Whilst extensive lists are available for the Outer Hebrides, notably that of Waterston (1981), such literature seldom provides any information on relative frequency of the species included, and hence gives no true picture of the faunal structure. In the limited time available for field work, the method of collecting was to some extent standardised in that each sample taken was the total result of about 100 sweeps. Fourteen sites were sampled from a range of the available habitats from the northernmost tip of North Uist to the southern tip of South Uist. The weather throughout the week was such that collecting was only possible on four days (22, 23, 24 and 25 August), the remaining days being characterised by gale-force winds, low temperatures and driving rain.

The list below provides statistical data on all of the species which have been identified to date. Much undetermined material remains in the more critical families including Chironomidae, Psychodidae, Sciaridae, Ceratopogonidae, Phoridae and Agromyzidae. In the interests of brevity a system of codes is used to indicate the sites in which samples were collected, and numbers following the site code give the numbers of males and females collected of the species concerned. A very few which were merely observed but not collected in the samples are included; these are indicated by an X after the site code.

The total number of sites from which samples were collected was fourteen, comprising nine on South Uist, one on Benbecula and four on North Uist. The total number of specimens upon which the list is based is 3312. 233 species are listed below of which almost a quarter (actually 57) are not included in Waterston (l.c.) for the Outer Hebrides. According to the same published list, 136 of the species below are additions to the known dipterous fauna of the island upon which they were taken. This fact suggests that we are as yet far from having a complete list of the Diptera of the Outer Hebrides.

It will be seen from the list that the species taken in greatest numbers were *Schoenomyza litorella* (349), *Platypalpus strigifrons* (233), *Sympycnus desoutteri* (167), *Hydrellia modesta* (161) and *Pherbellia cinerella* (154). On the basis of the number of sites in which a species was taken, the commonest species were *Tipula paludosa* (11 sites out of 14), *Hydrellia modesta* (10), *Melanostoma mellinum* (9), *Scathophaga stercoraria* (9), *Syntormon pallipes* (8), *Opomyza germinationis* (8), *Scatella stagnalis* (8), *Schoenomyza litorella* (7), *Coenosia pumila* (7), *Opomyza petrei* (7), *Helina impuncta* (7), *Limonia autumnalis* (6), *Sylvicola cincta* (6), *Sympycnus desoutteri* (6), *Coelopa frigida* (6), *Pherbellia cinerella* (6), *Leptocera lutosa* (6), *Coenosia tigrina* (6), *C. tricolor* (6) and *Helina evecta* (6).

The Outer Hebrides are amongst the most barren-looking parts of Britain, dominated mainly by bog and moorland, although on the western side are some very fine sand dune systems interspersed with lakes bordered by herb-rich fens and some of our most impressive pastures overlying the machair. Natural woodland is virtually absent, being restricted to a few steep slopes and gorges such as the Allt Volagir Nature Reserve in South Uist. That this was not always the case is very apparent from the occurrence of long dead birches in the peat and in the lower shore of Loch Eynort. But today stands of woodland, even small plantations of aliens are very rare. Considering the overall impression of desolation which greets the eye throughout much of the Outer Hebrides it is surprising that they have a remarkably rich dipterous fauna. This seems the more

astonishing from their relative remoteness from the mainland of West Scotland, and, more importantly perhaps, when one recognises that the prevailing winds blow from the islands towards the mainland. Colonisation perhaps occurred mainly from Ireland, until the incidence of human transportation made itself felt.

Locality codes:

### 1 South Uist

- 1a: Pollachar Marsh (NF 746147) 25 Aug, rich fen pasture;
- 1b: Allt Volagir NR (NF 800293), 25 Aug, rich herbage under relict *Corylus* and *Populus tremula* canopy
- 1c: Allt Volagir stream and bay (NF 800291), 25 Aug, stream margins below Reserve boundary;
- 1d: Loch Eynort (NF 792284), 25 Aug, grassy and boggy slopes with *Calluna*, *Pteris* etc;
- 1e: Loch Ardvule (NF 715297), 22 and 25 Aug, lake edges with *Carices*, *Samolus*, *Senecio aquaticus* etc;
- 1f: marshy field near Penninerine marsh (NF 735346), 24 Aug;
- 1g: Loch a Mhoil (NF 735347), 24 Aug, rich fen with *Phragmites*, *Potentilla palustris*, *Lathyrus pratensis* etc;
- 1h: Howbeg shore (NF 747357), 24 Aug, Marram stands on dunes above shore;
- 1i: Loch Druidibeg (NF 787383), 22 Aug, boggy edge of lake amongst *Pteris*, *Calluna* etc.

### 2 Benbecula

Peter's Port (NF 848458), 25 Aug, dry grassy margins of road with *Pteris*, *Salix repens* etc.

### 3 North Uist

- 3a: Baleshare dunes (NF 7859), 24 Aug, windswept dunes, heavily sheep grazed but with clumps of Marram;
- 3b: Baleshare laneside (NF 780616), 24 Aug, herb-rich drain on machair ungrazed by sheep;
- 3c: Balmartin, near Hosta (NF 724733) 24 Aug, bed of *Petasites hybridus* and adjacent herb rich pasture on machair;
- 3d: Voiskinish (NF 895735), 22 Aug, margins of saline creek including short cropped grass to waters edge and boggy moorland community with *Callunetum*, *Salix*, *Carices* and *Festuca* above.

Species not included by Waterston (lc) for the Outer Hebrides are indicated by a mark (!). whilst those not given for the island from which they are recorded in the present list are given an asterisk (\*).

### TRICHO CERIDAE

*Trichocera regelationis* (L.), \*1b(1); \*2(1:2)

### TIPULIDAE

*Nephrotoma cornicina* (L.), [1h(1)]

*Tipula* (*Savtshenkia*) *marmorata* Mg., 1b(1:2), 1d(3); \*3d(5:2)

*T. rufina* Mg., 1i (2); 3d(1:)

*T. (Vestiplex) scripta* Mg., 1b(1:); \*2(1:)

*T. (Yamatatipula) lateralis* Mg., 1e(1:); \*3b(6:4)

*T. (s. str.) oleracea* L., 1a(1), 1d(2), 1e(3:1)

*T. paludosa* Mg., 1a(10:8), 1b(X), 1c(1:), 1d(1:), 1e(3:2), 1g(3); \*2(2:1); \*3a(1:4),  
3b(1:), 3c(1:), 3d(1:)  
*Limonia* (s. str.) *trivittata* (Schum.), \*1g(1)  
*L. (Dicranomyia) autumnalis* (Stg.), 1a(1:), 1b(2:), 1d(1:), 1i(1:); \*2(1:); \*3d(3:3)  
*L. (Melanolimonia) morio* (F.), \*3d(1:)  
*Brachylimnophila nemoralis* f. *separata* (Wlk.), 1c(1:2), 1d(1:)  
*Gonomyia dentata* de Meijere, 1c(1:)  
*Erioptera fuscipennis* Mg., 3b(1:)  
*E. trivialis* Mg., 1a(1:), 1e(3:2); \*3b(1:), 3d(1:)

#### PTYCHOPTERIDAE

*Ptychoptera albimana* (F.), \*1g(1); \*3b(6:1)

#### ANISOPODIDAE

*Sylvicola cinctus* (F.), 1a(1:1), 1b(1:), 1c(5:), 1d(1:1); \*3a(1:), 3d(11:1)  
*S. punctatus* (F.), 1e(1:1)

#### BIBIONIDAE

*Dilophus febrilis* (L.), \*1a(2:10), 1d(1:); 3a(1:)

#### CEROPLATIDAE

*Macrocera fasciata* Mg., \*3d(1:)  
*M. stigma* Curtis, \*3d(1:)

#### MYCETOPHILIDAE

*Leia fascipennis* Mg., \*1g(1)  
! *Rymosia bifida* edw., 1b(1:)  
! *R. fasciata* (Mg.), 1b(2:)  
! *Exechia fusca* (Mg.), 1b(1:)  
! *Allodia lugens* (Wd.), 1b(1:)  
! *Brevicornu sericoma* (Mg.), 1b(1:)  
! *Zygomomyia humeralis* (Wd.), 1b(1:)

#### TABANIDAE

*Haematopota pluvialis* (L.), 1e(1:)

#### HYBOTIDAE

! *Drapetis curvipes* (Mg.), 1c(1:1), 1e(1:), \*3c(1:), 3d(2:3)  
! *Chersodromia hirta* (Wlk.), 1h(1:3)  
*Tachydromia aemula* (Lw.), 1g(5f). NB. Records of *T. arrogans* in Waterston (lc)  
presumably refer to *aemula*  
*Platypalpus longicornis* (Mg.), \*1e(1:), 1g(2:)  
*P. nigratarsis* (Fln.), 1a(1:); 2(1:2); \*3d(1:)  
*P. notatus* (Mg.), \*1b(2:), 1d(1:), 1i(1:)  
*P. pallidiventris* (Mg.), 1a(1m); \*3a(10:11)  
*P. strigifrons* Zett., \*1a(7:20), 1e(50:105), 1g(12:10), 1h(4:4), 1i(4:1), \*3a(7:9)  
*Hybos femoratus* (Ml.), 1a(1:), 1c(1:); 2(1:)  
*Trichina clavipes* Mg., 1d(1:)

## EMPIDIDAE

- Rhamphomyia* (s. str.) *variabilis* (Fln.), \*1a(1:), 1b(1:2), 1c(3:), 1d(3:1); \*2(51:19); \*3d(1:2)
- R. (Holoclera) sciarina* (Fln.), \*1a(2:)
- R. (Lundstroemiella) hybotina* Zett., \*1a(1:4); \*2(1f); \*3d(2:5)
- Hilara chorica* (Fln.), 1a(3), 1i(2:1); \*3d(16:14)
- H. lundbecki* Frey, 3b(1:)
- Phyllodromia melanocephala* (F.), 1b(1:), 1d(1:)
- Chelifera diversicauda* Collin, \*1b(4:1), 1g(1:)
- C. precatória* (Fln.), \*1a(1:)
- Clinocera fontinalis* (Hal.), \*1b(1:), 1c(1:1), 1d(1:)
- C. stagnalis* (Hal.), \*1a(2:)

## DOLICHOPODIDAE

- Dolichopus atripes* Mg., 1b(1:1)
- D. griseipennis* Stann., \*3a(1:)
- D. nubilus* Mg., 3d(5:4)
- D. plumipes* (Scop.), 1c(2:)
- D. trivialis* Hal., \*3b(3:)
- ! *Hydrophorus balticus* (Mg.), 3b(1:)
- Syntormon pallipes* (F.), 1a(29:7), 1b(1:), 1c(1:1), 1e(5:5), 1i(1:); 3b(2:1), 3c(1:), 3d(37:8)
- ! *Argyra ?argentella* (Zett.), 1b(1:)
- A. ?argentina*, \*1b(1:). NB The male agrees better with *argentella*, the female with *argentina* (Mg.), but they probably belong to the same species. Waterston (lc.) records *argentina* from Barra.
- Campsicnemus armatus* (Zett.), 1e(2:); \*3d(1:4)
- C. curvipes* (Fln.), 1b(1:1), 1i(1:)
- C. loripes* (Hal.), 1s(2:2), 1b(1:1), 1c(4f), 1d(5:4); \*2(1:1); 3d(3:2)
- C. scambus* (Fln.), \*1b(35:24)
- Sympycnus cirripes* (Hal.), \*1b(2m); \*3d(1:)
- S. desoutterii* Parent, 1a(3:1), 1e(20:19), 1i(3:); \*3a(5:9), 3b(64:30), 3c(1f), 3d(10:2)

## LONCHOPTERIDAE

- Lonchoptera furcata* (Fln.), 1a(1:), 1g(4:), 3a(1:)
- L. lutea* Pz., 1a(7:10), 1e(4:8), 1g(1:1); 3a(1:1), 3c(1:), 3d(1:)

## SYRPHIDAE

- Syrphus vitripennis* Mg., 1b(1:); \*3b(1:)
- Metasyrphus corollae* (F.), \*1h(1:), \*3b(1:)
- Episyrphus balteatus* (Deg.), \*1b(1:)
- Sphaerophoria* sp., 1a(3:). NB These are not *S. scripta* and hence cannot be positively identified at present.
- ? *Chrysotoxum arcuatum* (L.), 3d (possible sighting). NB This species has not yet been recorded from the Outer Hebrides so confirmation is needed.
- Melanostoma mellinum* (L.), 1b(1:), 1c(1:), 1f(1:), 1g(1:3), 1i(1:); 3a(1:), 3b(2:5), 3c(1:), 3d(2:)
- M. scalare* (F.), \*1a(2:), 1c(1:), 1i(1:3)
- Platycheirus clypeatus* (Mg.), 1a(1:2), 1e(2:4), 1h(1:1)
- P. cyaneus* (Ml.), 1a(3:1), 1i(1:1)
- P. manicatus* (Mg.), 1a(1:), 1e(1:), 1f(1:)
- P. peltatus* (Mg.) (s. lat.), 1c(1:)
- Rhingia campestris* (Mg.), 1f(1:); 3b(1:)
- Liogaster metallina* (F.), 1e(1:); 3b(1:1)
- Neoascia tenur* (Harris), 1a(1:); 3b(1:1)



*Volucella bombylans* (L.), 1d(1)  
*Sericomyia silentis*(Harris), 1b(1)  
!*Helophilus hybridus* Lw., 1f(7), 1g(5); \*3d(1:)  
*H. pendulus* (L.), 1a(1:1), 1e(1:)  
*Eristalis abusivus* Collin, 1f(2:1), 1g(2:1)  
*E. arbustorum* (L.), 1f(1)  
*E. intricarius* (L.), 3d(2:)

#### PSILIDAE

*Psila rosae* (F.) gp., 1a(1)

#### HELCOMYZIDAE

*Heterocheila buccata*(Fln.), 1h(4:)

#### LAUXANIIDAE

*Lyciella rorida* (Fln.), 1b(3)  
*Calliopum aeneum*(Fln.), 1e(1), 1g(1:6+)

#### COELOPIDAE

*Coelopa frigida*(F.), 1a(7:3), 1e(1), 1g(6), 1h(2:1); \*2(1:); \*3a(1:4)

#### HELEOMYZIDAE

*Suillia bicolor* (Zett.), \*1b(1)  
!*S. notata v. hilaris*(Zett.), 1b(3:3)  
!*Heteromyza commixta* Collin, 1d(1:), 1i(1:)  
!*Tephrochlamys rufiventris* (Mg.), 1 (Lochboisdale (:1))  
!*Neoleria maritima* (Ville.), 1e(2:1), 1g(1:); \*3a(4:1), 3c(1:)

#### SEPSIDAE

*Orygma luctuosum* Mg., \*1h(4:1)  
!*Themira annulipes* (Mg.), 1a(1:)  
*T. lucida* (Stg.), 1e(1), 1g(1:), \*3a(1)  
*T. minor* (Hal.), 1e(4:)  
!*T. pusilla* (Zett.), 1a(1:)  
!*T. superba* (Hal.), 1e(1:)  
*Nemopoda nitidula* (Fln.), \*1a(2)  
*Sepsis cynipsea* (L.), 1a(1:1), 1c(3:1), 1e(2:)  
*S. flavimana* Mg., 1a(1:1), 1c(1:)  
*S. fulgens* Mg., \*1a(1:2), 1e(1)  
*S. orthocnemis* Frey, 1a(2:), 1b(1:), 1c(1:1)  
!*S. punctum* (F.), 1a(1)

#### SCIOMYZIDAE

*Pherbellia cinerella*(Fln.), 1a(7:3), 1e(2), 1f(6), 1g(5); \*3a(130), 3c(1)  
*Hydromya dorsalis*(F.), 1c(1)  
*Ilione albiseta* (Scop.), 1a(2:), 1g(3); \*3b(1)  
*I. lineata*(Fln.), 1a(2:2), 1b(1:), 1g(1)  
*Pherbina coryleti* (Scop.), 1a(4:), 1e(2:1), 1g(2)  
!*Tetanocera elata*(F.), 1a(1:)  
*T. ferruginea* Fln., 1a(1:1)  
*T. hyalipennis* v. Roser, \*1e(1); \*3b(1:)

## SPHAEROCERIDAE

- Lotophila atra* (Mg.), 1a(15:9), 1e(21:7), 1g(2); 3a(6:1)  
*Sphaerocera curvipes* Latr., \*1a(4:), 1e(1)  
! *Herniosina bequaerti* (Ville.), 1d(1)  
! *Kimosina empirica* (Hutton), 3a(1)  
! *Leptocera* (s. str.) *finalis* (Collin), 1g(1:)  
*L. fontinalis* (Fln.), \*1a(1:), 1b(1:), 1d(1:)  
*L. nigra* (Oliv.), \*1a(1:)  
*L. (Rhachispoda) lutosa*, 1a(4), 1c(5:), 1d(11:), 1e(2), 1i(1:); \*3d(3:1)  
! *Minilimosina vitripennis* (Zett.), 3a(1:2)  
*Opacifrons coxata* (Stenh.), 1b(1:)  
*O. humida* (Hal.), 3d(1:)  
*Spelobia clunipes* (Mg.), \*1g(1), 1i(1:); \*2(1); \*3(3)  
*S. rufilabris* (Stenh.), \*1g(1); \*2(1:); \*3a(2)  
*Thoracochaeta brachystoma* (Stenh.), \*1h(3); \*3a(4)  
*T. zosteræ* (Hal.), 1g(2), 1h(8); \*3a(1)  
! *Trachyopella minuscula* (Collin), 3a(1:1) NB On the structure of the male surstyli this most closely resembles *minuscula* as figured by Pitkin (1987)

## PIOPHILIDAE

- ! *Liopiophila varipes* (Mg.), 1b(1:)

## OPOMYZIDAE

- Geomyza balachowskyi* Mesnil, 1a(1:), 1g(1:1)  
*Opomyza germinationis* (L.), 1a(2:24), 1e(4:8), 1g(1:4), 1i(1:); \*2(1:); \*3a(1:6), 3b(1:2), 3d(1:)  
*O. petrei* Mesnil, 1a(2:), 1c(1:), 1d(1:), 1g(1:), 1i(1:); \*3a(1:), 3b(2:)

## CARNIDAE

- ! *Meonura flavifacies* Collin, 1a(1:); \*3a(1:)

## EPHYDRIDAE

- Notiphila cinerea* Fln., 1a(5), 1e(73)  
! *Parydra coarctata* (Fln.), 1a(1)  
! *P. pusilla* (Mg.), 1a(6)  
*Hydrellia modesta* Lw., 1a(32:43), 1c(1:), 1d(6:4), 1e(8:11), 1g(1); 2(15:23); 3a(1:), 3b(1:7), 3c(2:4), 3d(1:2). NB Records in Waterston (lc.) for *griseola* assumed to refer to this ubiquitous species.  
! *H. subalbiceps* Collin, 1a(1:)  
! *Philygria sexmaculata* Becker, 3a(4)  
! *Pelina aenea* (Fln.), 1a(1), 1b(3)  
*P. aenescens* (Stenh.), \*3b(4)  
*P. nitens* Lw., \*3b(1)  
*Limnellia quadrata* (Fln.), \*1a(1:)  
! *L. surturi* Anders., 1i(1:)  
*Lamproscatella sibilans* (Hal.), 1c(1), 1i(1); \*2(5); 3b(1), 3d(14)  
*Scatella stagnalis* (Fln.), 1a(45), 1d(4), 1e(8), 1g(6), 1h(1); \*2(1); \*3b(1), 3d(3)  
*S. subguttata* (Mg.), \*1c(1:1), 1h(1)

## DIASTATIDAE

- ! *Diastata costata* Mg., 2(1:)

## DROSOPHILIDAE

- Scaptomyza (s. str.) flava*(Fln.), \*1b:(1), 1g(2:2)  
*S. graminum* (Fln.), \*1a(2), 1g(1:2)  
*S. (Parascaptomyza) pallida* (Zett.), \*1a(1:5), 1e(1), 1g(1:2); \*2(1:); \*3a(8), 3c(8)  
*Drosophila andalusica* Strobl, \*1b(1:1), 1g(1:1); \*3a(2), 3c(2)  
*D. fenestrarum* Fln., \*3d(1)

## AGROMYZIDAE

- Phytomyza ranunculi* (Schr.), \*1a(1: +)  
*Cerodontha denticornis*(Pz.), 1a(1:1); 3b(1:)

## CHLOROPIDAE

- Oscinella frit* (L.), 1a(1:)  
!*O. hortensis* Collin, 1a(1:1), 1c(1:1), 1d(1:1), 1g(1:1); \*2(2:3); \*3a(2:1), 3c(1:1)  
!*Elachiptera cornuta* (Fln.), 1a(3:1 +)

## TACHINIDAE

- Linnaemyia vulpina* (Fn.), \*3d(1:)  
!*Ceromyia bicolor* (Mg.), 1b(1:1), 1c(1:)  
*Siphona* sp., 3a(1), 3b(4:), 3d(1:)  
!*Medina collaris*(Fln.), 1b(1:)

## CALLIPHORIDAE

- Calliphora uralensis* Ville., 1f(1:)  
*C. vicina* R.-D., 1g(1:1), 1g(1:); 3c(1:)  
*C. vomitoria* (L.), \*3d(X)  
*Melinda agilis* (Mg.), 1e(1:2)  
*Cynomya mortuorum* (L.), 3a(1:)  
!*Lucilia caesar* (L.), 1a(1:1), 1f(3:)  
*L. sericata*(Mg.), \*1f(1:)

## SCATHOPHAGIDAE

- Scathophaga calida* Curtis, 1a(2:3), 1b(3:), 1c(1:1), 1d(1:), 1e(1:5); \*3c(1:1), 3d(2:2)  
*S. furcata*(Say), 1a(2:), 1d(2:), 1g(2), 1i(2:3); 3d(1:)  
*S. litorea* (Fln.), 1a(3:2), 1c(8:), 1d(2:), 1e(1:1); 2(1:3), 3d(1:)  
*S. stercoraria* (L.), 1a(5:7), 1b(1:), 1c(1:), 1e(4:5), 1f(3), 1g(7); 3b(1:1), 3c(7:9), 3d(1:)  
!*S. suilla* (F.), 1b(1:)

## ANTHOMYIIDAE

- Pegomyia bicolor*(Wd.), 1c(1:)  
!*P. fulgens* (Mg.), 1b(2:)  
!*P. haemorrhoea*(Zett.), 1d(1:)  
*Paradelia intersecta* (Mg.), 1d(1:), 1i(1:); \*3a(1:1), 3d(1:)  
*Nupedia aestiva*(Mg.), 1c(1:1), 1e(2:5); 3b(17:21), 3d(3:3)  
*N. infirma* (Mg.), 1a(2:), 1c(2:), 1d(5:), 1e(1:1), 1g(6:), 1i(1:); \*3a(1:1), 3d(1:)  
*Anthomyia liturata*(R.-D.), 2(1:)  
*Hylemya variata* (Fln.), 1d(1:2)  
*Fucellia fucorum* (Fln.), 1f(1:), 1g(1:), 1h(1:); \*3a(1:1)  
*Botanophila brunneilinea* (Zett.), \*1a(2:), 1f(1:1), 1g(1:1)  
*B. fugax* (Mg.), 1g(5:3), 1h(1:1); 3c(1:1)  
!*B. sericea* (Mall.), 1c(1:1), 1i(1:1)  
*B. striolata*(Fln.), \*3a(2:1)

*Peregrina audacula* (Harris), \*1g(2):  
!*Hydrophoria linogrisea*(Mg.), 1b(1)  
*Subhylemyia longula* (Fln.), 1g(1:); \*3a(1:5)  
*Delia echinata* (Seguy), \*1a(1:)  
*D. platura* (Mg.), \*1a(1:), 1c(1:), 1d(3), 1g(1:1); \*2(1:)

#### FANNIIDAE

*Fannia canicularis* (L.), 1g(1:), Howbeg cottage (X)  
*F. fuscula* (Fln.), \*1c(1:), 1i(2:); \*3d(1:2)  
!*F. genualis* (Stein), 1d(2:), 1i(1:)  
!*F. mutica*(Zett.), 3d(4:)  
!*F. rondanii*(Strobl), 1b(1:), 1d(1:)

#### MUSCIDAE

*Hydrotaea armipes*(Fln.) (= *occulta*, Mg.), 1a(1:), 1c(1:), 1d(1:)  
*H. dentipes* (F.), 1f(3:3), 1g(1:); \*2(1:); 3c(1:)  
*H. irritans*(Fln.), 1c(1:), 1e(2:), Lochboisdale(1:); \*3a(1:), 3b(1:), 3d(1:)  
*Azelia cilipes* (Hal.), 1a(1:), 1b(1:), 1i(1:); \*2(1:1); 3d(1:)  
!*A. gibbera*(Mg.), 1b(1:), 1d(3:), 1i(1:3); 2(1:)  
*Drymeia hamata*(Fln.), 1h(1:); 3c(1:), 3d(1:2)  
*Morellia hortorum*(Fln.), 1a(1:)  
*Neomyia cornicina* (F.), 1e(1:1), 1g(1:)  
*Myospila mediatubunda* (F.), 1a(2:2), 1e(1:), 1f(2:); 3c(2:4)  
*Hebecnema umbratica* (Mg.), 1i(1:); \*2(1:); \*3c(2:)  
*Spilogona denigrata* (Mg.), 1b(1:)  
*Limnophora maculosa* (Mg.), 1e(1:); 3d(1:)  
*Graphomya maculata*(Scop.), 1g(1:)  
!*Pseudocoenosia abnormis* Stein, 1c(1:), 1d(1:), 1i(7:7); \*3d(3:)  
!*Limnospila albifrons* (Zett.), 3d(1:)  
*Schoenomyza liorella* (Fln.), 1a(53:73), 1d(1:), 1e(111); \*2(1:); 3a(48:50), 3b(9), 3d(2:1)  
*Dexiopsis lacteipennis* (Zett.), 1d(1:); \*3d(1:)  
*Coenosia femoralis* (R.-D.), \*1d(1:)  
*C. mollicula*(Fln.), \*1a(1:), 1g(3); \*3c(2:)  
*C. pedella*(Fln.), \*3a(15:75)  
*C. pumila* (Fln.), 1a(5:8), 1c(1:8), 1e(1:14), 1g(2:2 - this sp?); 2(14:27); 3b(2:6), 3d(1:)  
*C. tigrina* (F.), 1a(1:), 1e(1:2), 1g(9); 3a(1:), 3b(3:6), 3c(2:1)  
*C. tricolor* (Zett.), 1a(3:2), 1e(8:1), 1g(2:2), 1h(1:); \*3a(2:18), 3b(12:7)  
*Helina evecta*(Harris), 1a(1:), 1i(1:3); \*2(1:); \*3b(1:), 3c(5), 3d(2:)  
*H. impuncta* (Fln.), 1a(2:), 1b(2:), 1c(2:), 1d(3:), 1i(5:17); \*2(1:); \*3d(1:1) NB All of the specimens of *H. impuncta* had three postsutural dorsocentrals and some also had a pair of presutural acrostichals. Some of these specimens would key out to *depuncta* in Fonseca (1968) but the arista in that species is much more long-plumose than in *impuncta*. Grimshaw (1905) noted that all of the specimens of *impuncta* which he had seen from Orkney also had three pairs of postsutural dorsocentrals. Whilst such specimens also occur on the mainland, the normal number is four.  
*H. maculipennis* (Zett.), 1i(2:)  
*H. quadrum*(F.), \*3b(1:)  
*H. reversio* (Harris), 1g(1:1); 3a(1:2)  
*Phaonia incana* (Wd.), 1a(1:), 1c(1:)

## References

- Fonseca, E. C. M. d'A. 1965. A Short Key to the British Drosophilidae (Diptera) including a new species of *Amiota*. *Trans. Soc. Brit. Ent.* **16**(10); 233-244.
- Fonseca, E. C. M. d'A. 1968. Diptera Cyclorrhapha Calyptrata Section (b) Muscidae. *Handbk. Ident. Br. Ins.* **10**(4b); 119p.
- Grimshaw, P. 1905. Diptera Scotica IV - Orkneys and Shetlands. *Scot. Nat.*; 22-35.
- Pitkin, B. R. 1988. Lesser Dung Flies Diptera: Sphaeroceridae. *Handbk. Ident. Br. Ins.* **19**(5e); 175p.
- Waterston, A. R. 1981. Present Knowledge of the non-marine invertebrate fauna of the Outer Hebrides. *Royal Soc. Edinburgh. Proc. section B.* **79**(4); 215-321.

## Editorial Postscript

This edition of **Dipterists Digest** is a special collection of papers on the flies of a remote and relatively poorly recorded part of the British Isles - the Outer Isles and Rum.

For me, it was a great pleasure to work on the Hebrides in the summers of 1988 and 1989, followed by an enjoyable expedition to Rum in 1990. The pleasure continued as results and comments were gathered from colleagues and collated in the following years. Publication has taken a little longer than anticipated as other priorities emerged. I apologise to authors and contributors for the delay.

Originally it was intended to issue this collection as a special edition of **Dipterists Digest**, but as No. 14 marks the end of the first era, and we clear the decks for the next phase, with a new editor, it seemed appropriate that the old editor should go out with a bit of personal indulgence.

Publication has been made possible by a generous grant from the **Wilf Nelson Memorial Bursary**, and this volume is dedicated to the memory of Wilf Nelson, warden of Rum National Nature Reserve, who tragically died in an accident whilst undertaking fieldwork on the island in 1989.

I hope readers will enjoy browsing the species lists from these magic islands. Moreover I hope these papers will add to our overall ecological understanding of the species involved.

Derek Whiteley  
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