

## Hymenoptera: Ants, Bees, Wasps etc.

A very large and diverse group. Only the ants, bees and social wasps are moderately well known. Other groups have been little recorded in Fife although there are likely to be many hundreds of species, especially amongst the parasitic groups.

<b>Update/Revision History: Revised by Gordon Corbet, June 2006 with contributions from Anne-Marie Smout and Brian Little.</b>
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### Symphyta - sawflies

With herbivorous or wood-boring caterpillar-like larvae; recording has been heavily biased towards coastal sites.

### Xyelidae

*Xyela julii*: Tentsmuir [larvae in pine cones].

### Siricidae - wood-wasps

*Sirex cyaneus*: In imported timber.

*Sirex juvencus*: Largo.

*Sirex noctilio*: Lesser Horntail Wasp: Sporadic, in imported timber.

*Urocerus gigas*: Greater Horntail Wasp; In imported timber.

### Argidae

*Arge cyanocrocea*: Newburn [larvae on bramble].

### Cimbicidae

*Cimbex femoratus*: Burnturk, Kennoway [on birch].

*Trichiosoma lucorum*: Tentsmuir.

### Tenthredinidae

*Aglaostigma aucupariae*: Dumbarrie Links [larvae on *Galium* spp.]

*Aglaostigma fulvipes*: Dumbarrie Links [larvae on *Galium verum*].

*Amauronematus crispus*: Tentsmuir, on *Salix repens*, as *A. vittatus*.

*Amauronematus fallax*: Tentsmuir, on *Salix repens*.

*Amauronematus leucolaenus*: Tentsmuir, on *Salix repens*.

*Amauronematus mundus*: Tentsmuir.

*Ametastegia glabrata*: Dumbarrie Links, Is of May.

*Ardis brunniventris*: S coast.

*Athalia cordata*: Dumbarrie Links, Tentsmuir [larvae on *Plantago* etc.]

*Blennocampa pusilla*: Widespread, galls on leaves of rose.

*Brachythops flavens*: Moss Wood (Wemyss) [larvae on *Carex*].

*Dinura stilata*: Dumbarrie Links, on hawthorn.

*Dolerus aeneus*: Fleecefaulds, Tentsmuir.

*Dolerus aericeps*: Cullaloe, Dumbarrie Links, Tentsmuir.

*Dolerus asper*: Moss Wood (Wemyss).

*Dolerus ferrugatus*: Tentsmuir.

*Dolerus gonager*: Dumbarrie Links.

*Dolerus haematodes*: Newburn [larvae on grasses and sedges].

*Dolerus liogaster*: Dumbarrie Links, Tentsmuir.

*Dolerus madidus*: W Lomond, on *Juncus*.

*Dolerus picipes*: Dumbarrie Links.

*Empria immersa*: Tentsmuir.

*Empria liturata*: Tentsmuir.

*Empria pumila*: Dumbarrie Links.

*Euura atra*: Tentsmuir.

*Euura mucronata*: Carlingnose.

*Heterarthrus nemoratus*: Moss Wood (Wemyss) [larvae mine birch leaves]

*Macrophya albipuncta*: Dumbarnie Links, on *Geranium pratense*.  
*Monophadnoides geniculata*: Dumbarnie Links.  
*Nematus luteus*: Tentsmuir.  
*Nematus cadderensis*: Tentsmuir, on birch.  
*Nematus caeruleocarpus*: Tentsmuir.  
*Pachynematus clitellatus*: Dumbarnie Links.  
*Pachyprotasis rapae*: Dumbarnie Links.  
*Phymatocera aterrima*: Widespread in gardens, larvae on Solomon's seal, *Polygonatum*.  
*Pontania collectanea*: Tentsmuir, galls on *Salix repens*.  
*Pontania pedunculi*: Widespread, galls on leaves of *Salix caprea*.  
*Pontania proxima*: Ceres, Lumbo Den, galls on leaves of *Salix alba*.  
*Pontania viminalis*: Radernie, galls on leaves of *Salix*.  
*Priophorus pallipes*: Dumbarnie Links, Newburn [larvae on hawthorn].  
*Pristiphora erichsonii*: 'Fife', on larch.  
*Protomphytus carpini*: Dumbarnie Links [larvae on *Geranium*].  
*Protomphytus pallipes*: Moss Wood (Wemyss), as *Ametastegia pallipes* [larvae on *Viola*].  
*Rhogogaster viridis*: Tentsmuir [larvae on alder].  
*Tenthredo acerrima*: Dumbarnie Links, Fleecefaulds, Tentsmuir.  
*Tenthredo arcuata*: Fleecefaulds.  
*Tenthredo perkinsi*: Tentsmuir.  
*Tenthredo schaefferi*: Dumbarnie Links.  
*Tenthredopsis nassata*: Dumbarnie Links.  
*Tenthredopsis tessellata*: Dumbarnie Links.

## Apocrita

Parasitic Apocrita

## Ichneumonidae

Larvae parasitic in other insects; very many more likely to be present.

*Alomyia debellator*: Thornton.  
*Amblyteles armatorius*: Dumbarnie Links.  
*Amblyteles uniguttatus*: I of May.  
*Atractodes vestalis*: Largo links.  
*Buathra tarsoleuca*: Kinghorn. As *Cryptus tarsoleucus*.  
*Cholastes braconius*: Calais Muir, Pettycur.  
*Chorebus alecta*: Pettycur; parasite of agromyzid fly on *Artemisia*.  
*Clistopyga incitator*: Aberdour.  
*Diadegma crataegi*: Flisk; from the moth *Parornix torquillela*.  
*Diplazon elegans*: I of May.  
*Enicospilus cf. ramidulus*: Dumbarnie Links.  
*Eurylabus tristis*: Dumbarnie Links, from caterpillar of moth, *Hadena* sp.  
*Gelis agilis*: Dumbarnie Links; and West Fife, as *Pezomachus instabilis*. [  
*Gelis areator*: Dunfermline, as *Hemiteles areator*.  
*Gelis festinans*: Thornton, as *Pezomachus festinans*.  
*Gelis fraudulentus*: Wemyss Woods, as *Pezomachus fraudulentus*.  
*Gelis keisenwetteri*: Elie as *Pezomachus keisenwetteri* var. *bellicosus*.  
*Glypta lugubrina*: St Davids.  
*Hemiteles bipunctator*: I of May, as *H. tristator*.  
*Heteropelma calicator*: Tentsmuir.  
*Homotropus elegans*: I of May, as *Homocidus elegans*.  
*Ichneumon extensorius*: Cullaloe, hibernating under bark.  
*Ichneumon sarcitorius*: Aberdour.  
*Ichneumon suspiciosus*: Falkland, Pettycur.  
*Mesochrus fulgurans*: I of May.  
*Ophion luteus* s.l.: I of May, Inchkeith.  
*Ophion obscuratus*: Dumbarnie Links.  
*Orthopelma mediator*: Lundin Links; in galls of *Diplolepis rosae* (Robin's Pin-cushion).  
*Paraperithous gnathaulax*: NE Fife'  
*Phygadeuon infelix*: Charlestown, as *P. inflatus*.  
*Pimpla spuria*: NE Fife'.  
*Pimpla turionellae*: In caterpillars on magpie moths, some as *P. examinator*.

*Pimpla wilchristi*: Tentsmuir.  
*Promethes sulcator*: I of May.  
*Pycnocyrtus director*: St David's, as *P.peregrinator*.  
*Scambus rugicans*: Aberdour, from the moth *Epiblema scutulana*.  
*Sinarachna nigricornis*: 'Kirkcaldy & NE Fife'.  
*Stenichneumon trilineatus*: In caterpillars of magpie moths.  
*Stilpnus deplanatus*: Kilconquhar.  
*Trophocampa vidua*: In caterpillars of magpie moths.  
*Zatypota discolor*: 'NE Fife', parasitic on spiders.

### **Braconidae**

*Acoelius subfasciatus*: Aberdour, from cocoon of the moth *Stigmella anomalella*.  
*Apanteles endemus*: In caterpillars of magpie moths.  
*Apanteles glomeratus*: In caterpillars of Large White butterflies.  
*Apanteles limbatus*: In caterpillars of Magpie moths.  
*Dinocampus coccinellae*: In ladybirds [= *Periletus coccinellae*].  
*Mesochorus angustatus*: In caterpillars of Magpie moths.  
*Sathon falcatus*: Dumbarrie Links [parasitoid of Dark arches moth, *Apamea monoglypha*].

### **Figitidae**

*Melanips sylvanus*: Fife'.

### **Chalcididae**

*Brachymeria minuta*: Dumbarrie Links [parasitic on flies].

### **Eurytomidae**

*Tetramesa hyalipennis*: Torry Bay.

### **Torymidae**

*Torymus affinis*: Parasitoid in oak-apple galls.  
*Torymus flavipes*: Falkland, parasitoid in oak galls.  
*Torymus nitens*: Falkland, parasitoid in galls of *Andricus kolleri* on oak.

### **Pteromalidae**

*Callitula pyrrhogaster*: Dumbarrie Links; [parasitoid of cecidomyiid flies.]  
*Mesopolobus fuscipes*: Falkland, parasitoid in oak galls.  
*Mesopolobus sericeus*: Widespread, parasitoid in oak marble galls, *Andricus kolleri*.  
*Mesopolobus tibialis*: Falkland, parasitoid in oak galls.  
*Mesopolobus xanthocerus*: Falkland, parasitoid in oak galls.  
*Pteromalus albipennis*: Dumbarrie Links, in seed-heads of *Carduus* and *Arctium*].  
*Pteromalus elevatus*: Dumbarrie Links, in seed-heads of *Centaurea nigra*.  
*Pteromalus maerens*: Hyperparasite in caterpillars of Magpie moths, as *Habrocystus maerens*.  
*Stenomalina gracilis*: Newburn etc; parasite on two-winged flies; as *Stenomalus muscarum*.  
*Theocolax formiciformis*: St Andrews [a wingless parasite of furniture beetles, *Anobium*.]

### **Eupelmidae**

*Ormocerus skianeurus*: Falkland, parasitoid in oak galls.

### **Eulophidae**

*Aulogymnus arsames*: Falkland, parasitoid in oak galls.  
*Chrysocharis pubicornis*: Pettycur, on agromyzid fly in yarrow.  
*Chrysocharis prodice*: Saline, from moth *Stigmella salicis*.  
*Elachartus nigrifulus*: Pettycur, from larvae in ragwort.  
*Mestocharis bimacularis*: Parasitoid in eggs of water beetles.

*Necremnus tidius*: Aberdour, from beetles on rock-rose.  
*Neochrysocharis dimas*: Kinkell Braes, from a moth, *Elachista* sp.  
*Pnigalio pectinicornis*: Calais Muir Wood, from the moth *Phyllonycter quercifoliella*.

### Trichogrammatidae

*Prestwickia aquatica*: Parasitoid in eggs of water beetle *Ilybius fuliginosus*.

### Mymaridae

*Caraphractus cinctus*: Parasitoid on eggs of water beetles.

### Diapriidae

Most parasitic in Diptera.

*Trichopria nigricornis*: Tentsmuir.

### Chrysididae - ruby-tailed wasps

Parasitic, mainly in nests of solitary wasps and bees.

*Chrysis ignita*: Widespread on coast.

*Chrysis impressa*: Newburn.

*Chrysis ruddi*: S coast.

*Pseudomalus auratus*: NO21, 42.

### Non-parasitic Apocrita

#### Cynipidae - gall-wasps

Larvae stimulate plants to form galls; some are inquilines, i.e. feed in galls caused by another species, or parasites. Most have been identified only by the galls.

*Alloxysta brachyptera*: Hyperparasite of aphids.

*Andricus albopunctatus*: Falkland, galls on catkins and leaves of oak.

*Andricus curvator*: Galls widespread on oak.

*Andricus fecundator*: Artichoke gall; Burnturk, Falkland, galls on buds of oak.

*Andricus kollari*: Marble gall; Widespread on oak.

*Andricus lignicola*: Cola-nut gall; Widespread in buds of oak.

*Andricus quadrilineatus*: Falkland, galls on catkins and leaves of oak.

*Andricus quercusradicis*: Truffle gall; Falkland, galls on oak.

*Andricus seminationis*: Falkland, galls on catkins of oak.

*Andricus solitarius*: Falkland, galls on catkins of oak.

*Aulacidea hieracei*: Roscobie; galls in stems of *Hieraceum* sp.

*Biorhiza pallida*: Oak apple; Auchtermuchty, Falkland, galls on oak.

*Cynips divisa*: Widespread, galls on oak.

*Cynips longiventris*: Falkland, galls on leaves of oak.

*Dilyta subclavata*: 'Fife'.

*Diplolepis rosae*: Robin's pin-cushion; Widespread on rose.

*Diplolepis spinosissimae*: S coast; galls on *Rosa pimpinellifolia*.

*Isocolus jaceae*: Kirkcaldy, Largo, galls in achenes of knapweeds.

*Liposthenes glechomae*: Kincaig, galls on leaves of ground-ivy, *Glechoma hederacea*, as *Liposthenus latreillei*.

*Neuroterus albipes*: Smooth spangle; Craighall Den, Falkland; on leaves of oak.

*Neuroterus anthracinus*: Oyster gall; Widespread on oak; as *Andricus anthracinus*.

*Neuroterus numismalis*: Silk-button spangle; Craighall Den, Falkland, Rires, on oak.

*Neuroterus quercusbaccarum*: Common spangle-gall; Widespread, on leaves of oak.

*Phanacis centaureae*: Dumbarnie Links, Kincaig, galls in stems of *Centaurea*.

*Synergus gallaepomiformis*: Widespread; inquiline in marble galls, *Andricus kolleri*, on oak.

*Synergus reinhardii*: Falkland; inquiline in marble galls, *Andricus kolleri*, on oak.

*Synergus umbraculus*: Newburn; inquiline in marble galls, *Andricus kolleri*, on oak.

The 'aculeate' hymenopterans: ants, bees and wasps. Names follow the checklist by G Else in Archer, M (ed.), 2005: *Members' handbook; Bees, Wasps & Ants Recording Society*. Centre for Ecology & Hydrology.

## **Formicidae - ants**

Mostly predators on other insects, especially aphids.

*Formica lemani*: Widespread.

*Lasius flavus*: Yellow Meadow Ant: Mainly coastal.

*Lasius mixtus*: I of May.

*Lasius niger*: Small Black Ant; Scattered, including towns.

*Leptothorax acervorum*: Widespread on heathland.

*Monomorium pharaonis*: Pharaoh's ant; Sporadic in heated buildings.

*Myrmica lobicornis*: Coastal.

*Myrmica rubra*: Widespread.

*Myrmica ruginodis*: Widespread.

*Myrmica sabuleti*: I of May.

*Myrmica scabrinodis*: Dumbarnie Links, Elie, Springfield.

*Myrmica sulcinodis*: NO20 (Lomonds?).

*Tetramorium bicarinatum*: A tropical species, sometimes found in hot-houses as in Pittencrieff Park, Dunfermline (1963), as *T. guineense*.

## **Pompilidae - spider-hunting wasps**

*Anoplius concinnus*: Pettycur.

*Anoplius nigerrimus*: Tentsmuir.

*Ceropales maculata*: St Andrews, 1948; Thornton, pre-1900.

*Pompilus cinereus*: Tentsmuir.

*Priocnemus parvula*: Torry Bay.

## **Vespidae – wasps**

### **Eumeninae - mason wasps**

*Ancistrocerus oviventris*: Widespread, at least formerly; including *A. pictus*.

*Ancistrocerus parietinus*: Newburn.

*Ancistrocerus parietum*: Fife Ness, Inchcolm, Kinghorn, Torry Bay.

*Ancistrocerus scoticus*: I of May and S coast.

### **Vespinae - social wasps**

Predators on insects and other invertebrates.

*Dolichovespula norwegica*: Norwegian Wasp; Old records W Fife.

*Dolichovespula sylvestris*: Tree Wasp; Widespread.

*Vespula austriaca*: Scarce, parasite of *V. rufa*.

*Vespula germanica*: German Wasp; Widespread.

*Vespula rufa*: Red Wasp; Widespread.

*Vespula vulgaris*: Common Wasp; Widespread.

### **Crabronidae - digger wasps**

*Crabro cribrarius*: Widespread on coast, often on umbel flower-heads.

*Crabro peltarius*: Tentsmuir.

*Crossocerus elongatulus*: NO42.

*Crossocerus leucostomus*; Tentsmuir.

*Crossocerus tarsatus*: Torry Bay.

*Ectemnius cavifrons*: Anstruther, Newburn, Torry Bay.

*Ectemnius cephalotes*: NO31.

*Ectemnius continuus*: Cullaloe, Tentsmuir.

*Harpactus tumidus*: N Queensferry, as *Gorytes tumidus*.

*Mellinus arvensis*: Widespread.

*Mimesa equestris*: NO52.

*Oxybelus uniglumis*: NT28.

*Pemphredon inornata*: Inverkeithing.

[*Pemphredon lethifera*: Kinghorn, pre-1900.]

## Apidae – bees

### Colletinae

*Colletes daviesanus*: Pettycur; and NO51 (pre-1970).

*Colletes succinctus*: Tentsmuir.

### Andreninae – mining bees

*Andrena bicolor*: Widespread south coast.

*Andrena clarkella*: Morton Lochs, Torry Bay.

*Andrena haemorrhoa*: Dumbarnie Links, Newburn, Torry Bay.

*Andrena helvola*: Torry Bay (third record for Scotland).

*Andrena nigroaenea*: Widespread south coast.

*Andrena scotica*: Kinghorn, Newburn.

*Andrena tarsata*: Thornton.

[*Andrena wilkella*: Kinghorn, pre-1900].

### Halictinae – mining bees

*Halictis rubicundus*: Widespread on coast.

*Halictis tumulorum*: Angle Park.

*Lasioglossum calceatum*: Dumbarnie Links, Torry Bay.

*Lasioglossum cupromicans*: Kincaig cliff, Kinghorn, Torry Bay.

*Lasioglossum fratellum*: Torry Bay.

*Lasioglossum rufitarse*: Torry Bay, plus NO42.

*Lasioglossum villosulum*: St Monans, Torry Bay.

*Sphecodes ephippius*: St Andrews, 1870.

### Megachilinae - leaf-cutter bees

*Megachile centuncularis*: St Andrews, Torry Bay.

[*Megachile circumcincta*: Kinghorn, pre-1900].

*Osmia rufa*: Anstruther, Newburn.

### Apinae – social and cuckoo bees

All *Apis* and *Bombus* are social bees; *Nomada* species are solitary cuckoo bees.

*Apis mellifera*: Honey bee; Widespread.

*Bombus barbutellus*: Barbut's cuckoo-bee; One coastal record, a parasite of *B.hortorum* (formerly in *Psithyrus*).

*Bombus bohemicus*: Gypsy Cuckoo-bee; Widespread, a parasite of *Bombus lucorum* (formerly in *Psithyrus*).

*Bombus campestris*: Field Cuckoo-bee; A few scattered sites, a parasite of *Bombus pascuorum* (formerly in *Psithyrus*).

*Bombus hortorum*: Small Garden Bumblebee; Widespread.

*Bombus lapidarius*: Large Red-tailed Bumblebee; Widespread.

*Bombus lucorum*: White-tailed Bumblebee; Widespread.

*Bombus monticola*: Moors and coast.

*Bombus muscorum*: Scarce, coastal.

*Bombus pascuorum*: Common Carder Bee; Widespread.

*Bombus pratorum*: Early Bumblebee; Widespread.

*Bombus sylvestris*: Four-coloured cuckoo-bee; Widespread, a parasite of *Bombus pratorum* (formerly in *Psithyrus*).

*Bombus terrestris*: Buff-tailed Bumble-bee; Widespread, usually the first to appear in spring.

[*Bombus vestalis*: Presence doubtful; a parasite of *Bombus terrestris* (formerly in *Psithyrus*)]

*Nomada fabriciana*: Kinghorn/Kirkcaldy, Torry Bay.

*Nomada goodeniana*: Dumbarnie Links.

[*Nomada obtusifrons*: Thornton, pre-1900.]