

Chelicerata

Arachnida – spiders etc.

Comprises two large groups, the spiders and the mites; and two small groups, the harvestmen and the false scorpions. Only the spiders and the harvestmen have been moderately well recorded in Fife.

Update/Revision History: Revised by Gordon Corbet, January 2006.

Araneae - spiders

Predators on other invertebrates, mostly on insects, in all terrestrial habitats. Moderately well recorded in Fife, with 238 species recorded out of c.650 in Britain. Recording has been strongly biased towards coastal sites. Classification and names follow those used in the *Provisional atlas of British spiders* (Harvey et al. 2002, Biological Records Centre, Huntingdon).

Segestriidae

Segestria senoculata: Widespread, especially on walls and rocks.

Dysderidae

Dysdera crocata: Widespread, mainly on old walls, preying upon woodlice.

Harpactea hombergi: A few coastal records.

Oonopidae

Oonops pulcher: In and around buildings.

Mimetidae

Small spiders preying on other spiders.

Ero cambridgei: Two coastal sites and Barnyards Marsh.

Ero furcata: Widespread on coast.

Nesticidae

Nesticus cellulanus: Two old records on south coast.

Theridiidae - comb-footed spiders

Small spiders with globular abdomen, often abundant on foliage.

Anelosimus vittatus: On trees.

Enoplognatha ovata: Widespread in gardens etc.; three different colour varieties.

Enoplognatha thoracica: Widespread.

Neottiura bimaculatum: Two sites; as *Theridion bimaculatum*.

Paidiscura pallens: Widespread; formerly *Theridion pallens*.

Pholcomma gibbum: Widespread.

Robertus arundineti: Ruddon's Point.

Robertus lividus: Widespread in leaf-litter etc.

Robertus neglectus: An old record from Leven.

Steatoda bipunctata: In and around houses.

Steatoda phalerata: In grassland.

Theridion impressum: Widespread.

Theridion melanurum: St Andrews, 1966, indoors.

Theridion mystaceum: On bushes.

Theridion pictum: Tentsmuir.

Theridion sisyphium: On bushes at coast.

Theridion varians: Probably widespread.

Linyphiidae - money spiders

Small, usually dark spiders making small sheet webs responsible for the "gossamer" noticeable in grassland on damp mornings, 132 species recorded, in many habitats.

Agyneta cauta: Widespread.

Agyneta conigera: Tentsmuir and Dumbarnie Links.

Agyneta decora: Two coastal sites and Roscobie Hills.

A. olivacea: Roscobie Hills.

Agyneta subtilis: Tentsmuir and Dumbarnie Links, Kittocks Den.

Allomengea scopigera: Widespread in wet habitats.

Allomengea vidua: Barnyards Marsh.

Araeoncus crassiceps: Tentsmuir Point.

Araeoncus humilis: Tentsmuir Point.

Asthenargus paganus: Kiels Den, Springfield Wood.

Baryphyma trifrons: Widespread in wet habitats.

Bathyphantes approximatus: Widespread in wet habitats.

Bathyphantes gracilis: Widespread.

Bathyphantes nigrinus: Widespread

Bathyphantes parvulus: Widespread.

Bolyphantes alticeps: Local, in woods.

Bolyphantes luteolus: Widespread.

Centromerita bicolor: Widespread.

Centromerita concinna: Scattered.

Centromerus arcanus: Devilla Forest.

Centromerus dilutus: Local in woods.

Centromerus prudens: Widespread.

Centromerus sylvaticus: Local in woods and grassland.

Ceratinella brevipes: Widespread.

Cnephalocotes obscurus: Bankhead Moss, Roscobie Hills.

Dicymbium brevisetosum: Widespread.

[*Dicymbium nigrum*: Doubtful due to confusion with *D. brevisetosum*.]

Diplocephalus cristatus: Coastal sites in E Neuk.

Diplocephalus latifrons: Widespread in leaf-litter.

Diplocephalus permixtus: Widespread.

Diplocephalus picinus: Local.

Diplostyla concolor: Very common and widespread.

Dismodicus bifrons: Widespread.

Drapetisca socialis: Common, usually on bark of trees.

Drepanotylus uncatulus: An old record, Aberdour.

Entelecara erythropus: Widespread.

Erigone alettris: S coast and Tentsmuir; an introduction from N America, becoming dominant in exposed coastal sites.

Erigone arctica: Common on tideline.

Erigone atra: Widespread.

Erigone dentipalpis: Widespread, especially on coast.

Erigone longipalpis: Mainly in saltmarshes.

Erigone promiscua: Tentsmuir, I of May, Roscobie Hills.

Erigonella hiemalis: Widespread, especially on coast.

Evansia merens: Dumbarnie Links, Tentsmuir Point, in ants' nests.

Gnathonarium dentatum: Widespread in wet sites.

Gonatium rubens: Widespread.

Gongylidiellum vivum: Widespread in damp sites.

Gongylidium rufipes: Widespread.

Halorates distinctus: L Fitty, in marginal vegetation; one of only five sites in Scotland.

Halorates reprobis: Widespread at and below tideline.

Helophora insignis: Widespread in woods.

Hilaira excisa: In wet habitats.

Hypomma bituberculatum: Widespread in wetlands.

Hypomma cornutum: Letham, Newburn, Tentsmuir.
Kaestneria dorsalis: Widespread, on bushes.
Kaestneria pullata: Loch Gelly, in marginal vegetation.
Labulla thoracica: Local.
Lepthyphantes alacris: Widespread.
Lepthyphantes cristatus: Widespread.
Lepthyphantes ericaeus: Widespread.
Lepthyphantes expunctus: Devilla, Tentsmuir.
Lepthyphantes flavipes: Local on coast.
Lepthyphantes insignis: Dumbarnie Links, one of four Scottish sites.
Lepthyphantes leprosus: Widespread.
Lepthyphantes mengei: Common, especially on coast.
Lepthyphantes minutus: Widespread.
Lepthyphantes obscurus: Widespread.
Lepthyphantes pallidus: Dumbarnie Links, Tentsmuir Point, Saline Den.
Lepthyphantes tenebricola: Local in woods.
Lepthyphantes tenuis: Ubiquitous and abundant.
Lepthyphantes zimmermanni: Widespread.
Leptorhoptrum robustum: Scattered in wet habitats.
Leptothrix hardyi: Tentsmuir.
Linyphia hortensis: Kiels Den, Lielowan Reserve.
Linyphia triangularis: Widespread, on bushes etc.
Lophomma punctatum: Widespread in wet habitats.
Macrargus rufus: Widespread.
Maro minutus: Local in woodland.
Maso sundevalli: Widespread in leaf-litter.
Meioneta beata: Tentsmuir, Dumbarnie Links and Roscobie Hills.
Meioneta rurestris: Widespread.
Meioneta saxatilis: Local, wetland and coast.
Metopobactrus prominulus: Tentsmuir Point.
Micrargus apertus: Woodland.
Micrargus herbigradus: Widespread.
Micrargus subaequalis: Lundin Links, Newburn, Fleecefaulds.
Microlinyphia pusilla: Widespread in grass etc.
Microneta viaria: Widespread in woodland litter.
Milleriana inerrans: Carlingnose Reserve, Tentsmuir Point.
Minyriolus pusillus: Bankhead Moss, Tentsmuir Point.
Monocephalus castaneiceps: Lomonds.
Monocephalus fuscipes: Widespread in woodland litter.
Neriere clathrata: Widespread.
Neriere montana: Cameron Reservoir.
Neriere peltata: Local.
Oedothorax agrestis: Tentsmuir.
Oedothorax apicatus: 1 of May.
Oedothorax fuscus: Widespread, especially on coast.
Oedothorax gibbosus: Widespread in wet habitats.
Oedothorax retusus: Widespread.
Ostearius melanopygius: Indoors and on the coast.
Pelecopsis mengei: Devilla Forest, Roscobie Hills.
Pelecopsis nemoralis: Widespread.
Pelecopsis nemoraloides: Aberdour, Fife Ness, Tentsmuir Point.
Pelecopsis parallela: Coastal grass.
Peponocranium ludicrum: Widespread.
Pityohyphantes phrygianus: W Fife, in conifer plantations, probably expanding range.
Pocadicnemis juncea: Largo, Tentsmuir Point.
Pocadicnemis pumila: Widespread, especially on coast.
Poecilometes variegata: Widespread.
Porrhomma convexum: Flisk Woods, Tentsmuir Point.
Porrhomma microphthalmum: Largo, streamside; one of five recent sites in Scotland.

Porrhomma pallidum: Widespread.
Porrhomma pygmaeum: Widespread.
Saaristoa abnormis: Widespread.
Savignia frontata: Very common.
Silometopus ambiguus: Widespread on coast.
Silometopus elegans: Roscobie Hills, Tentsmuir Point.
Stemonyphantes lineatus: Widespread.
Tallusia experta: Local in wet sites.
Tapinocyba pallens: Scattered, especially in woods.
Tapinocyba praecox: Coastal dunes.
Tapinopa longidens: Widespread, mainly in woods.
Thyreosthenius parasiticus: Local, in woods.
Tiso vagans: Widespread.
Trichopterna thorelli: Widespread, especially on coast.
Troxochrus scabriculus: Out Head, St Andrews, marram litter.
Typhochrestus digitatus: Tentsmuir Point (also NO40).
Walckenaeria acuminata: Widespread.
Walckenaeria antica: Widespread, especially on coast.
Walckenaeria cuspidata: Widespread in wet sites.
Walckenaeria nodosa: Tentsmuir Point.
Walckenaeria nudipalpis: Widespread, wet ground.
Walckenaeria unicornis: Fife Ness.
Walckenaeria vigilax: At wet sites.

Tetragnathidae - orb-web spiders

Metellina menegi: Widespread and abundant, especially in spring.
Metellina merianae: Widespread in damp places.
Metellina segmentata: Widespread and abundant, especially in autumn.
Pachygnatha clercki: Widespread.
Pachygnatha degeeri: Abundant and widespread.
Tetragnatha extensa: Widespread in herbaceous vegetation.
Tetragnatha montana: Widespread.

Araneidae - orb-web spiders

Araneus diadematus: Widespread in gardens and scrub.
 [Araneus marmoreus: Flisk Wood, probably in error.]
Araneus quadratus: On coastal dunes and at Cullaloe reserve.
Araneus sturmi: Tentsmuir; as Atea sturmi.
Araniella cucurbitina: Widespread.
Cyclosa conica: One record, W Fife, NT08.
Hypsosinga albobittata: Tentsmuir.
Larinoides cornutus: Eden Estuary, Torry Bay, coastal grass.
Nuctenea umbratica: Woodland.
Zygiella atrica: Widespread, on bushes.
Zygiella x-notata: Widespread around buildings.

Lycosidae - wolf-spiders

Active, diurnal hunters, the most conspicuous spiders on open ground.

Alopecosa pulverulenta: Widespread, grassland.
Alopecosa barbipes: A few mainly coastal sites.
Arctosa perita: Tideline and dunes.
 [Pardosa agricola: NT 08]
Pardosa amentata: Widespread including gardens.
 [Pardosa hortensis: One record, needs confirmation.]
Pardosa saltans: In woodland; as *P.lugubris*.
Pardosa monticola: Widespread on coast.

Pardosa nigriceps: Widespread.
Pardosa palustris: Widespread in rough grass.
Pardosa prativaga: Dumbarnie Links and Tentsmuir Point.
Pardosa pullata: Widespread including gardens.
Pardosa purbeckensis: Coastal marshes; (as *Pardosa agrestis*).
Pirata piraticus: Marshes and bogs.
Trochosa ruricola: Local in damp sites.
Trochosa terricola: Widespread.
Xerolycosa miniata: Coastal.

Agelenidae

Mostly large house spiders.

Tegenaria agrestis: Torry Bay, on landfill.
Tegenaria atrica: One record at Tayport.
Tegenaria domestica: In buildings.
Tegenaria gigantea: Along with *T. saeva* the largest of the house spiders. A few scattered records.
Tegenaria saeva: Local in houses.
Textrix denticulata: Widespread in and around buildings and on coastal rocks.

Hahniidae

Small spiders making sheet webs at ground level.

Antistea elegans: In marshes.
Hahnina helveola: Shown in Fife on map in Locket, G.H. et al. (1974): British spiders, vol.3. Ray Society; no details known.
Hahnina montana: Carlingnose.
Hahnina nava: Earlshall Muir.

Dictynidae

Cryphoeca silvicola: Widespread in woodland.
Dictyna arundinacea: Widespread in grassland.

Amaurobiidae

Amaurobius fenestralis: Widespread, especially under bark, sometimes indoors.
Amaurobius ferox: On buildings and walls.
Amaurobius similis: Widespread, especially in and around buildings.

Liocranidae

Agroeca proxima: Widespread.
Phrurolithus festivus: Two old records.
Scotina gracilipes: Heathland, including Tentsmuir.

Clubionidae

Nocturnal hunters spending day in silken cell.

Cheiracanthium erraticum: Tentsmuir Point only.
Clubiona brevipes: One old record
Clubiona comta: A few coastal sites and Bankhead Moss.
Clubiona diversa: Widespread amongst grass.
Clubiona lutescens: Widespread.
Clubiona neglecta: On dunes and grassland.
Clubiona pallidula: Tentsmuir.
Clubiona phragmitis: Coastal grass.
Clubiona reclusa: Marshes etc.
Clubiona terrestris: A few coastal records.
Clubiona trivialis: Two records.

Gnaphosidae

Hunting spiders.

Drassodes lapidosus: Moorland and coastal grass.
Drassodes cupreus: Moorland and coastal grass.
Drassyllus pusillus: A few coastal sites.
Haplodrassus signifer: Widespread, especially on dunes.
Micaria pulicaria: Widespread.
Scotophaeus blackwalli: Newburn, Torry Bay.
Zelotes electus: On dunes.

Zoridae

Zora spinimana. Widespread.

Philodromidae

Philodromus aureolus: Widespread: scrub and gardens.
Philodromus cespitum: Tentsmuir Point, Buddo Ness, Drumeldrie.
Tibellus maritimus: On dunes and grassland.
Tibellus oblongus: Mainly coastal grass, local inland.

Thomisidae - crab-spiders

Feed by waiting and pouncing on insects, mainly on vegetation.

Ozyptila atomaria: A few coastal sites.
Ozyptila trux: Widespread in grassland.
Xysticus cristatus: Widespread in grassland.
Xysticus erraticus: Tentsmuir Point only.

Salticidae - jumping spiders

Aelurillus v-insignitus: Pettycur, first found there 1895, still there 1999; one of only two sites in Scotland.
Euophrys erratica: I of May and Fife Ness.
Heliophanus cupreus: Aberdour (1893), Dalgety Bay (2000).
Heliophanus flavipes: Tentsmuir Point only.
Salticus scenicus: Zebra spider; Widespread around buildings.
Talavera aequipes: Tentsmuir Point and Dumbarnie Links. (As *Euophrys aequipes*.)

Opiliones - harvestmen

Predators and scavengers in all terrestrial habitats. 16 species recorded out of 23 in Britain. Names follow Hillyard & Sankey (1989): *Harvestmen*, Synopses of the British Fauna (NS) no.4 , Brill.

Nemastomatidae

Nemastoma bimaculatum: Widespread in leaf litter.
Mitostoma chrysomelas: Scarce.

Phalangiidae

Lacinius ehippiatus: Widespread on dunes; also Brownie Wood, Gauldrie.
Lophopilio palpinalis: Widespread, mainly in woodland.
Megabunus diadema: Widespread.
Mitopus morio: Widespread, especially abundant on moorland.
Oligolophus hansenii: Widespread, especially in woods and gardens.
Oligolophus tridens: Widespread.
Opilio parietinus: Local.
Opilio saxatilis: An old record at Leven; more recently at Fife Ness.
Paroligolophus agrestis: Widespread in many habitats.
Phalangium opilio: A few coastal records.

Rilaena triangularis: Locally, in woodland and scrub.

Leiobunidae

Leiobunum blackwalli: Kilmany.

Leiobunum rotundum: Widespread

Nelima gothica: Dumbarnie Links, 1 of May, Cullaloe Reserve, Torry Bay; a nationally scarce species.

Pseudoscorpiones - false scorpions

Small, elusive predators in leaf-litter, bird nests and in stored foodstuffs. Little studied in Fife, with 7 out of 25 British species recorded. Names follow Legg & Jones (1988): *Pseudoscorpions*, Synopses of the British Fauna (NS) no.40, Brill.

Chthonius ischnocheles: Widespread in leaf litter.

Chthonius orthodactylus: Dalgety Bay, 1907.

Chthonius tetrachelatus: A few old coastal records.

Neobisium carcinooides: Widespread, especially in leaf-litter; formerly *N.muscorum*.

Cheiridium museorum: Local, in bird nests, barns etc.

Pselaphochernes dubius: Three old coastal records.

Dactylochelifera latreillei: A few old coastal records.

Acari - mites and ticks

A vast assemblage of terrestrial and aquatic invertebrates, many very small. They have been little studied in Fife and no attempt has been made to search all the specialist literature.

Hydracarina - water mites

Predatory mites, many very colourful, preying upon crustaceans, insects etc. in fresh waters. Very poorly recorded in Fife with only 21 out of about 320 British species.

*: Old records using names not in the *Coded checklist of animals occurring in fresh water in the British Isles* (Maitland, P.S., 1977, ITE, Edinburgh).

Hydrodromidae

Hydrodroma despiciens: R Eden.

Sperchonidae

Sperchon setiger: R Eden.

Sperchon squamosus: Dumbarnie Links, in slow-flowing ditch.

Sperchonopsis verrucosa: R Eden.

Lebertiidae

Pilolebertia insignis: L Glow.

Pilolebertia porosa: R Eden.

Limnesiidae

Limnesia fulgida: R Eden.

* *Limnesia histrionica* Herm: Otterstone L.

Limnesia maculata: Lindores L.

Hygrobatidae

Hygrobates fluviatilis: R Eden.

Pentatax figuralis: Dunduff L.

Parasitax ypsilophora: R Eden.

Pionidae

Piona carnea: Kilconquhar L.
* *Piona circularis* Piers: Dunduff L.
Piona conglobata: Lindores L.
Piona discrepans: Lindores L.
Piona paucipora: Lindores L.
* *Piona rotunda* Kram: Lindores L.
* *Piona rufa* (Koch): Burntisland Res.
P. variabilis: Widespread.

Aturidae

Brachypoda versicolor: Lindores L.

Mideidae

Midea orbiculata: R Eden.

Halacaridae - sea mites

Nine species were recorded from rock pools in St Andrews Bay and one offshore by Laverack, M.S. & Blackler, M. (1974): *Fauna and flora of St Andrews Bay*, Scottish Academic Press.

Copidognathus fabricii
Copidognathus oculatus
[*Isobactrus ungulatus*; as *Rhombognathus magnirostris*, needs confirmation.]
Lohmanella falcata: Shallow water offshore.
Metarhombognathus armatus
Rhombognathides pascens
Rhombognathides seahami
Rhombognathus notops
Simognathus minutus
Thalassarachna basteri

Ixodoidea - ticks

Temporary, blood-sucking parasites of birds and mammals; several other species are likely to be present.

Ixodes caledonicus: On birds, 1 of May.
Ixodes hexagonus: Dumbarrie Links [mainly on hedgehogs and carnivores].
Ixodes ricinus: On most birds and mammals, Tentsmuir, 1 of May.
Ixodes trianguliceps: Newburn, on bank vole.

Mesostigmata

Parasitidae

Predatory mites, in spite of the name; mainly in leaf-litter etc., but some frequently carried by insects. Older records from Hyatt (1980): Mites of the subfamily Parasitinae . . . *Bulletin of the British Museum (Natural History) (Zoology)* 38 (5): 237-378.

Parasitellus fucorum: 'Fife'; [carried by bumble bees].
Pergamasus crassipes: Dumbarrie Links.
Pergamasus longicornis: Dumbarrie Links.
Pergamasus robustus: Dumbarrie Links.
Pergamasus septentrionalis: Dumbarrie Links.
Poecilochirus carabi: On burying beetles, Dumbarrie Links, 1 of May.
Vulgarogamarus kraepelini: 1 of May.
Vulgarogamarus remberti: On rabbits; as *Eugamasus remberti*.

Dermanyssidae

Hirstionyssus oryctolagi: On rabbits.

Phytoseiidae

Phytoseiulus persimilis: A predator, native to S America, used for control of red spider mites in greenhouses.

Varroidae

Varroa jacobsoni: A destructive parasite on the larvae of honey bees, first recorded in Britain 1992; reached Fife (St Andrews) 1998.

Cryptostigmata

Oribatidae

Nanhermannia nana: One record.

Astigmata

Acaridae

Acarus siro: Flour Mites; I of May, (as *Aleurobius farinae*).

Listrophoridae - fur mites

Tiny mites that cling to individual hairs on mammals.

Listrophorus gibbus: On brown hares and rabbits.

Listrophorus leuckarti: On bank voles.

Psoroptidae

Otodectes cynotis: Ears of cats and rabbits, causing otodectic mange.

Psoroptes ovis: Causes sheep-scab.

Sarcoptidae

Notoedres cati: Causes mange in cats.

Prostigmata

Trombiculidae

Neotrombicula autumnalis: Harvest-mite (berry bug); larvae on rabbits etc. and a pest on people in autumn.

Trombidiidae

Trombidium holosericeum: Red velvet mite. Widespread.

Demodicidae

Demodex canis: Causes red mange in dogs.

Tetrapodilina

Eriophyidae - gall-mites

A large group of mites causing distinctive galls in many species of trees and herbs. Galls take many forms: swellings, pimples on leaves, erineum (patches of crowded, fleshy hairs on leaves). Names follow Redfern, M. & Shirley, P. 2002: British plant galls, Field Studies Council.

Acalitus brevitarsus: On alder leaves.

Acalitus rudis: On leaves of birch, Bankhead Moss.

Aceria fagineus: On beech leaves.

Aceria fraxinivorus: On ash.

Aceria geranii: On *Geranium sanguineum*, Kincaig. (As *Phytoptus geranii*.)

Aceria itenenus: On leaves of willow, Fleecefaulds.

Aceria macrorhynchus: On sycamore leaves, widespread.

Aceria nervisequus: On beech leaves.

Aceria pseudoplatani: Erineum on sycamore.

Aculus laevis: On *Salix caprea*, Lundin Wood.

Aculus tetanothrix: On leaves of willow, Keils Den.

Cecidophyes gallii: Galled leaves of cleavers, Galium aparine, widespread.

Eriophyes exilis: Pimple galls on leaves of lime, *Tilia x vulgaris*.

Eriophyes inangulis: On alder leaves.

Eriophyes laevis: On alder leaves.

Eriophyes leiosoma: Erineum on leaves of *Tilia x vulgaris*, Newburn, Kirkcaldy.

Phanacis centaureae: On leaves of *Centaurea scabiosa*. [Kincaig, Trail, (1890), un-named]

Phyllocoptes goniothorax: On leaves of hawthorn.

Tetranychidae

Bryobia praetiosa: On herbaceous plants, sometimes swarming on buildings.

Cheyletidae

Cheyletiella parasitivorax: On rabbits and dogs, predators on other mites.

Family?

Haemodipsus ventricosus: On rabbits.

Tardigrada – water-bears

Microscopic animals ubiquitous in moss (on which most species feed), with a few species on the sea-shore. Poorly recorded in Fife. Names follow Morgan and King (1976) – *British tardigrades*, Synopses of the British fauna (NS), no.9.

Macrobotus dispar: Camilla Loch.

Macrobotus hufelandii: L Gelly.

Hypsibius angustatus: Thornton, in moss.

Hypsibius chilensis.

Hypsibius scoticus: Thornton.

Milnesium tardigradum: Dumbarnie Links, in the moss *Tortula muralis*.