

Invertebrates associated with Ash

Compiled by Buglife entomologist Alan Stubbs

INFORMATION SOURCE

The above analysis is based on current authoritative literature. The Phytophagous Insect Date Base, available on the Biological Records Centre (CEH) website, lists nearly 100 species associated with ash.

INVERTEBRATE GROUP	ASH ONLY	ASH IMPORTANT	ASH SIGNIFICANT	TOTAL
Mites (galls)	4	-	-	4
Aphids (galls)	2	-	-	2
Plant Lice	4	-	-	4
Scales	-	2	-	2
Het Bugs	3	2	6	11
Sawflies	1	1	-	1
Macro-moths	4	5	-	9
Micro-moths	4	3	-	7
Flies (mainly galls)	5	-	-	5
	—	—	—	—
TOTAL	27	12	6	45

Definitions

- Ash only. Sole foodplant =extinct if ash becomes extinct (in a district or nationally)
- Ash important Ash the main foodplant or only 1 or 2 other options *if present* in a district
- Ash significant Ash one of a limited number of alternatives so unlikely to face extinction in a district. Invertebrate populations would decline in abundance in woods/districts where ash is currently the predominant tree species.

MITES

Aceria epiphyllus (Eriophyoidea). Gall on a leaflet comprising a slight swelling alongside the main vein, hairy inside and with an opening below; occasionally elsewhere on a leaflet.

Aceria fraxinicola (Eriophyoidea). Gall comprising a rounded pimple or pointed tubercle, 2- m3 mm across and 1.5 mm high, usually with an opening on the underside.

Aceria fraxinivora (Eriophyoidea). Cauliflower gall, comprising modified growth from a bud or inflorescence 0.5- 2 cm across; green at first becoming brown or black, very conspicuous after leaf-fall. Widespread, common.

Aculus fraxini (Eriophyoidea). Gall comprising the margin of a leaflet narrowly and tightly rolled, hairy inside.

APHIDS

Prociphilus bumeliae (Pemphigidae). Gall comprising petiole and leaflets bunched together to form a leaf nest containing waxy woolly aphids. Seemingly rare.

Prociphilus fraxini (Pemphigidae). Gall comprising petiole and leaflets bunched together to form a leaf nest containing waxy woolly aphids. Seemingly rare.

PLANT LICE

Psyllopsis discreptans (Psyllidae). Widespread, commoner in the north.

Psyllopsis distinguenda (Psyllidae). Mainly southern, extending to Cheshire.

Psyllopsis fraxini (Psyllidae). Inside a gall formed of a rolled or folded margin of a leaflet, or the blade bulged upwards, containing psyllid larvae. Widespread, common.

Psyllopsis fraxinicola Inside a gall formed by a leaflet bulged upwards, often discoloured, containing psyllid larvae. (Psyllidae). Widespread, common.

SCALE INSECTS

Asrerodiopsis minus (Asterolecaniidae). Ash, oak.

Pseudichermes fraxini (Eriococcidae). Mainly ash; also lilac, aspen, rowan.

HET BUGS

Anthocoris minki (Cimicidae). Mainly ash, occasionally wych elm and maple. First recognised in Britain in 1954.

Anthocoris gallarum-ulmi (Cimicidae). Elm (as a predator of aphids causing leaf-galls, occasionally in aphid leaf-galls on ash, sloe, hawthorn and currant. Overwintering is as adults. The larval period mainly runs from early June to mid July; it is possible that a partial second generation may occur. Widespread.

Psallus flavellus (Miridae). Ash. Adult mid July. Widespread but not common.

Psallus lepidus (Miridae). Ash. Adult mid June- early September, possibly as 2 generations. A brachonid is a parasite of nymphs. Widespread. Common.

Orthotyus tenellus (Miridae). Ash especially, also oak and hazel, partly predaceous.. Adult late June- August. Feeds especially on catkins. Widespread but local.

Orthotyus nassatus (Miridae). Lime and oak, sometimes ash and willow. Adult mid July- August (or September). Widespread.

Pseusoloxops coccineus (Miridae). Ash only, especially large trees with plenty of fruits. Eggs overwinter. New generation adults appear in August. Parasitised by a brachonid. Mainly Midlands and south.

Orthops cervinus (Miridae). Common on lime, less frequent on ash, hazel, ivy. Adult late July- early September, probably as 2 generations.

Phytocoris tiliae (Miridae). Polyphagous on trees, especially ash, oak, lime and apple. Mainly predaceous, feeding on such as caterpillars, ladybird pupae and red spider mites, and are well camouflaged. Eggs overwinter on young wood of the host tree, and hatch the following early June to early August; adults can be found from the end of June to late October. Adults late July- October. Widespread.

Phytocoris populi (Miridae). Polyphagous on trees, such as ash, oak, alder. Adults and larvae are mainly predaceous, feeding on bark-lice and plant-lice on trunks and twigs, and are well camouflaged. Adults late July- October. Widespread.

SAWFLIES

Tomostethus nigrinus (Tenthrididae). Ash. Adult April- June. Mainly southern where locally common.

Macrophya punctumalbum (Tenthrididae). Ash and privet (also lilac PIDB).. Adult May- June. Widespread up to south Scotland, locally common in southern England.

MACRO-MOTHS

Goat moth Cossus cossus (Cossidae). Polyphagous, most usually elm, poplar, ash, willow. The larva feeds on the wood of trees, generally large stressed over mature ones. Very local and declined in many districts.

Ash Pug *Eupithecia innotata fraxinata* (Geometridae). Ash. Other forms/races of this moth feed on other foodplants. Widespread northwards to southern Scotland.

Dusky Thorn *Ennomos fuscantaria* (Geometridae). Ash; privet will be accepted in captivity. Larva early May- mid July. Adult late July- October. Widespread in England and Wales.

Lilac Beauty Apeira syringaria (Geometridae). Ash, privet, honeysuckle. Larva August- end of May. Adult late June- July.(sometimes a partial second generation in late august- mid September in the south. Local, northwards to southern Scotland.

Waved Umber Menophra abruptaria (Geometridae). Privet, lilac, but can occur in the absence of these options so ash is very likely a foodplant (accepted in captivity); treated as an ash species for present purposes. Larvae early June- mid September. Adult mid April- June. South-east, central and Midland England.

Barred Tooth-stripe Trichopteryx polycommata (Geometridae). Ash, privet (will eat honeysuckle in captivity). Adult mid March- April. Once widespread on the chalk and limestones of the south and south Midlands, it has drastically declined in range, now confined mainly to the coast of SE England and a few places in south central England.

A disjunct distribution, also with some localities in NW England, and in Scotland principally along the Great Glen.

Tawny Pinion *Lithophane semibrunnea* (Noctuidae). Ash. Larva May- July. Adult active October- November before hibernating, reappearing in the March- April. Widespread in England and Wales; only just reaches Scotland.

The Coronet *Craniophor ligustri* (Noctuidae). Ash, privit. Larva August- September. Adult June- July. Widespread but local.

Centre-barred Sallow *Atethmia centrago* (Noctuidae). Ash. Larva initially feeds on buds, then nocturnally on the leaves, descending to hide by day, near the base of the tree, under loose bark or in crevices in the bark; April- early June. Adult mid August- September. Widespread, locally common in England, more sporadic in Scotland.

Privit Hawkmoth *Sphinx ligustri* (Sphingidae). Ash, privit, and guelder rose; more rarely honeysuckle, snowberry and holly; in gardens also lilac. On ash, in particular it uses young saplings in woodland, sometimes the lower branches of big trees. Larva July- September. Adult June- July.

MICRO-MOTHS

Caloptilia cuculipenella (Gracillariidae). Ash and privit. Leaf-miner, initially forming an upper surface gallery displaying a whitish colour membrane, the cuticle then contracting so that the leaf curls upwards to largely conceal the mine; later the larvae leave the mine and form a neat cone of a leaf usually containing more than one larva, indeed a second cone may be made before completing growth (the larva has a transparent head with a black spot each side). A single generation a year; larvae July- early September, adults September- May. Widespread in the south and parts of northern England, scarce in Scotland and Wales.

Caloptilia syringella (Gracillariidae). Ash, privit, lilac (also a few other garden Oleraceae). Leaf-miner, initially forming a gallery on the underside, then forming a fully depth blotch mine with a brown or grey-green discolouration of the membrane, later forming leaf cones. Pupation is under a silk membrane of the underside of the host leaf. Two generations a year, larvae in June and August-September. Adult April-May, July. Widespread, common.

Zelleria hepariella (Yponomeutidae). Ash. Larva within a thick silken web, feeding on young leaves at the tip of a branch; June. Pupa in a dense white cocoon on a leaf; July. Adult August- April, hiding in yew, juniper and other shelter. Widespread in England and Wales, scarce in Scotland.

Prays fraxinella (Yponomeutidae). Ash. The egg is laid on the underside of a leaf and the larva is initially a leaf-miner before overwintering in the bark just below a bud; in the spring it mines a shoot or lives in a lightly spun shoot, causing the shoot to drop off in May. Adult June- July. ***Oecophora bractella*** (Oecophoridae). Polyphagous, saproxylic; oak, birch, ash, hazel, conifers. Dry dead branches at least 40 mm in diameter and trunks which have not fallen to the ground; trunks have to be large if on the ground. The larva lives in the bark, especially where honey fungus 'boot-straps'

are present, and exposure to warm sunny situations is preferable. Larva January-May, pupa April- June, adult late may- July. Very local in large ancient woods, core area in SW Midlands. Very widespread.

Pandemis corylana (Tortricidae). Polyphagous. Ash, hazel, dogwood, oak, *Prunus* species, *Rubus* species, etc. .The larva feeds in leaves spun together or in a folded leaf; May-July. Widespread, especially in the south, scarce in Scotland.

Archips crataegana (Tortricidae). Polyphagous; ash, oak, elm, lime, willows, orchard trees, etc. The larva makes a leaf-edge roll; April-May. Adult July- August.

Pseudargyrotoxa conwagana (Tortricidae). Ash and privet. Larva in the seeds of ash (in berries on privet); August- October. Adult May- July, flying in warm sunshine. Common wherever the foodplants grow,

Pammene suspectana (Tortricidae). Ash. Larva under bark. Very rarely recorded.

Euzophera pinguis (Tortricidae). Ash. Larva feeds on the inner bark, throwing out black frass from its burrow, probably taking 2 years to reach maturity. It can occur on certain trees in sufficient numbers to kill the tree. Pupation in burrow. Adult July August, emerging from pupa between 1900 and 2100 hours when it can be found drying their wings. Local in England south of Yorkshire.

FLIES

Contarinia marchali (Cecidomyiidae: gall midge). Ash fruit, and the seed within, are slightly swollen, becoming brown and cracked; containing several yellow jumping larvae, which leave to pupate in the soil in June- July. Widespread.

Dasyneura acrophila (Cecidomyiidae: gall midge). Gall comprising part of a leaflet being thickened and folded upward to form a leaflet-pod; containing white larvae in the spring and early summer. Widespread, common.

Dasyneura fraxini (Cecidomyiidae: gall midge). Gall comprising the underside of the main leaf vein (rachis or petiole) being swollen into a pouch, often several on a vein, with slit like openings on the upper side. Widespread, common.

Dasyneura fraxinea (Cecidomyiidae: gall midge). Gall on a leaflet, comprising an inconspicuous circular blister 6- 8 mm across, with an irregular rounded hole on the underside, often several on a leaflet. Each gall contains 1 white larva, leaving to pupate in the soil; the gall turns brownish after the larva has departed.

Paraphytomyza heringi (Agromyzidae). Ash. A leaf-miner, a linear mine frequently widening out almost into a blotch-mine; the larva leaves the mine to pupate. Mines in October. Surrey, Middx., Herts. (lit. 1972).

NEMATODE

Meloidogyne ardenensis (Meloidogynidae). Ash, privet, honeysuckle, elder; plus Vinca, Hepatica and Astilbe. Root gall, rounded or spindle-shaped, 2- 5 mm across.

SAPROXYLIC FAUNA

Oecophora bractella (Oecophoridae). Polyphagous, saproxylic; oak, birch, ash, hazel, pine, etc.. Dry dead branches at least 40 mm in diameter and trunks which have not fallen to the ground; trunks have to be large if on the ground. The larva lives in the bark, especially where honey fungus 'boot-straps' are present, and exposure to warm sunny situations is preferable. Larva January- May, pupa April- June, adult late may- July. Very local in large ancient woods, core area in SW Midlands.

Aeletes atormarius (Histeridae). Ash, beech, alder, willow. Most often in the burrows of the lesser stag beetle, *Dorcus parolopipedus* in moist crumbly heartwood. Mostly central England, recorded as far north as Yorkshire.

Nossidium pilosellum (Ptiliidae). Particularly in rotten stumps and damp fungus infected timber. Especially elm, beech. In recorded in *Polyporus squamosus* on ash and associations with apple and oak.

Gyrophana lucidula (Staphylinidae). In fungi on trees in wet woodland, including *Lentinus tigrinus* and *Gymnopilus junonius* on ash. Nationally Scarce.

Atheta subglabra (Staphylinidae). In rotten wood of ash and elm.

Eucnemis capucina (Eucmenidae). Mainly beech; also ash. Large in hard dead wood and under bark, mainly in old trees. **Windsor, New Forest, North Cotswolds. RDB1, BAP grouped statement.**

Limoniscus violaceus (Elateridae). Beech and ash. In hollow trees with a mixture of wood and leaf-mound, probable requiring the presence of bird's nests to raise the nitrogen Larvae predatory. levels. **Windsor and N Cotswolds; RDB1, BAP Priority Species.**

Ampedus rufipennis (Elateridae). Beech, ash, elm. Soft rotten heartwood. **RDB2, BAP grouped statement.**

Ischnodes sanguinicollis (Elateridae). Mainly ash and elm, also maple and beech. Generally under bird's nests. Mainly S and SE England. **Nationally Scarce.**

Procræus tibialis (Elateridae). Ash, oak, beech. Larvae in the decaying heartwood feeding on larvae of the weevils *Stereocorynes truncorum* and *Phloeophagus lignarius*. C and Central England, especially the Severn and Thames Basins.

Elater ferrugineus (Elateridae). Ash, elm, beech. In black wood-mould in interior of boughs and trunks. Larvae predatory. **Thames Basin and East Anglia. RDB1, BAP grouped statement.**

Lyctus linearis (Dermestidae). Ash, beech, oak. Nationally Scarce B.

Dorcatoma chrysomelina (Anobiidae). Oak; also ash. In red-rotten wood. Mainly southern and Midland England, except the SW and Wales.

Thanissimus formicarius (Cleridae). Ash, elm; also pine and oak. Pink larvae feed on the larvae of bark beetles. England, especially east and central.

Soronia grisea (Nitidulidae). Ash. Under dead bark.

Soronia punctatissima (Nitidulidae). Oak, alder. Only associated with ash in Ireland.

Epuraea rufomarginata (Nitidulidae). Ash, in the fungus *Daldinia concentrica*, among other dead wood associations.

Cryptophaus ruficornis (Cryptophagidae). Ash, in the fungus *Daldinia concentrica*, and burnt birch in the fungus *Daldinia vernicosa*. Nationally Scarce.

Tripax lacordairii (Erotylidae). Ash and elm, and in the saproxylic fungus *Pleurotus*. Mainly Thames and Hampshire basins, and Worcestershire. **RDB3**.

Biphyllus lunulatus. (Biphyllidae). In *Daldinia concentrica* fungus, mainly on ash. Widespread in England though rarer in the west. Rare in central Europe.

Lytta vesicatoria (Meloidae). Ash, privit.

Enicmus brevicornis (Lathriidae). Ash, beech, birch, sycamore. Associated with mouldy bark. Mainly southern and central England. [Nationally Scarce] . [Alexander, 2002]

Enicmus rugosus (Lathriidae). Mainly oak; also ash, beech, alder, pine. In slime mould on trees, often under bark. Mainly southern and central England. [Nationally Scarce] . [Alexander, 2002]

Mycetophagus atomarius (Mycetophagidae). In the fungus *Daldinia concentrica* on ash and *Hypoxylon fragiforme* on dead or dying beech. Widespread in lowland England, scarcer in the north and west. [Alexander, 2002]

Mordellochroa abdominalis (Mordellidae). Ash and other broad-leaved trees. In dry sapwood. Adults visit the flowers of hawthorn, hogweed and similar flowers. [Alexander, 2002]

Melandrya caraboides (Melandryidae). Especially ash and beech, also other trees. In soft white heart-wood of boughs, stumps and trunks. Widespread in England and Wales, rare in Scotland. [Nationally Scarce] . [Alexander, 2002]

Orchesia micans (Melandryidae). In large polypore fungi, especially fungus *Ionotus hispidus*, growing on dead ash; also *Ionotus radiatus* on alder, *Ionotus cuticularis* on beech and rarely *Fistulina hepatica* on oak. Widespread in England and Wales though scarce in the Sw and north,

Lissodema cursor (Salpingidae: narrow-waisted bark beetles). Ash. Under bark in dead and dying branch-tips high up; in pollard trees only after c. 14 years growth. Mainly S and SE England. [Alexander, 2002]

Corticeus bicolor (Tenebrionidae). Mainly associated with bark beetles on elm; more rare with *Daldinia concentrica* fungus on ash. Or under the bark of oak. Eastern Britain to the Welsh Marches. [Alexander, 2002]

Platyrhinus resinosus (Anthribidae). In the fungus *Daldinia concentrica* which usually grows on ash and *Hypoxylon fragiforme* on beech. In Scotland associated with birch, assumed to be using *Daldinia vernicosa*. [Alexander, 2002]

Platystomos albinus (Anthribidae). In the fungus *Daldinia*, No tree mentioned. [Alexander, 2002]

Acmaeops collaris (Cerambycidae). Oak; also ash, aspen. Larvae under bark in galleries of other beetles, feeding on the underside of the bark of decaying exposed roots and dead branches. [Alexander, 2002]

Tetrops starkii (Cerambycidae). Oak (GB), ash (continental Europe). Few records (RDBK). [Alexander, 2002]

Abdera biflexuosa (Melandryidae). Ash, also oak.

Hylastes opacus (Scolytidae: bark beetle). In dead pine; also elm and ash. [Alexander, 2002]

Hylesinus crenatus (Scolytidae: bark beetle). Mainly rather thick bark of dying ash; also oak, walnut, etc. [Alexander, 2002]

Scolytus scolytus (Scolytidae: bark beetle). Mainly elm; also other broad-leaved trees; ash PIDB.

RARE SPECIES

Barred Tooth-stripe Trichopteryx polycommata (Geometridae). Ash, privet (will eat honeysuckle in captivity). Adult mid March- April. Once widespread on the chalk and limestones of the south and south Midlands, it has **drastically declined in range**, now confined mainly to the coast of SE England and a few places in south central England. A disjunct distribution, also with some localities in NW England, and in Scotland principally along the Great Glen.

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Anthocoris minki (Cimicidae). Mainly ash, occasionally wych elm and maple. **First recognised in Britain in 1954.** CURRENT STATUS TO CHECK via Bernard Nau