



Malachius aeneus ×2



M. bipustulatus ×2



Anthocomus fasciatus ×5



Endomychus coccineus ×3

- ▲ **Malachius aeneus** Melyridae. A predatory beetle frequenting flowers in spring, especially in woods. Elytra rather soft. Male has outgrowths near base of antennae, used for holding female. S & C. ▲ **M. bipustulatus**, also with antennal swellings in male, hunts other insects among flowers and grasses. 5-8.
- ▲ **Anthocomus fasciatus**. Elytra soft, ground colour black or greenish black. Knees of front legs brownish. Summer, predatory in grass and on various trees, and also in thatched roofs, from which red larvae often get into houses. S & C.
- ▲ **Endomychus coccineus** Endomychidae. Often mistaken for a ladybird, but much flatter and with longer antennae. A fungus-eater living under bark of dead or dying trees, especially beech. 4-6.

LADYBIRDS Coccinellidae. Small, domed, and usually hemispherical, although some species are oblong. Head sunk into pronotum. Legs short and retractable: tarsi 4-segmented but 3rd segment very small and concealed in bilobed 2nd segment. Usually brightly coloured and distasteful, but colour pattern is notoriously variable. Mostly carnivorous. Often hibernates in large masses. Larvae (p. 295) also carnivorous: pupates openly on plants.

- ▲ **Epilachna chrysomelina**. 6 black spots on each elytron, varying and often merging to form heavy black network. Vegetarian on gourd family: sometimes a pest of melons. All year in Mediterranean region. ▲ **Subcoccinella 24-punctata** eats all kinds of plants: a carnation pest in France. Very variable. Summer.
- ▲ **Coccidula scutellata** hunts aphids on various plants in marshy places. 7-8.
- ▲ **Scymnus frontalis** Elytra may lack red spots. Front of pronotum often reddish in male, always black in female. Dense vegetation in dry places. 5-7. S & C.
- ▲ **Hippodamia 13-punctata**. More oval than many species. 4-9 in low marshy areas. Possibly extinct in B.
- ▲ **7-spot Ladybird Coccinella 7-punctata**. The ladybird, abundant everywhere 3-10.
- ▲ **Eyed Ladybird Anatis ocellata**. Usually on or near conifers. 6-7. ▲ **Psyllobora 22-punctata** feeds largely on mildews. 4-8 in low vegetation and shrubs of all kinds.
- ▲ **2-Spot Ladybird Adalia bipunctata**. Abundant everywhere 3-10. Black legs. Elytra very variable: black ground colour, especially common in north, helps heat absorption in smoky and cloudy regions. ▲ **10-Spot Ladybird A. 10-punctata** is similarly variable but has yellowish legs. 3-10.
- ▲ **Propylea 14-punctata**. Elytra range from almost all yellow to almost all black, with black spots merging together: always a black line along the junction of the elytra. Common on shrubs 4-9. ▲ **Cream-spot Ladybird Calvia 14-guttata** occurs mainly on shrubs and small trees. 4-9.

LARDER BEETLES Dermestidae. Mostly sombre-coloured scavengers, clothed with scales or hairs. Clubbed antennae can be hidden under body. Many are cosmopolitan pests of stored foods and fabrics. Larvae are bristly and known as 'woolly bears'.

- ▲ **Larder or Bacon Beetle Dermestes lardarius**. Larvae and adults eat carrion in the wild and dried meats in store. All year, but hibernates in the wild. ▲ **Hide Beetle D. maculatus** feeds on hides and furs as well as stored foods.
- ▲ **Attagenus pelloi**. Visits flowers 3-9; also common in houses. Larvae in birds' nests, furs, carpets, stored grain, etc. Sometimes called the fur beetle.
- ▲ **Varied Carpet Beetle Anthrenus verbasci**. Pattern varies. Adults eat pollen and nectar 3-9. Larvae (p. 295) eat dried material in birds' nests and buildings and also damage woollens and insect collections.
- ▲ **Khapra Beetle Trogoderma granarium**. Adult does not feed, but larva is serious pest of stored grain and cereal products everywhere. All year in heated buildings. **T. angustum**, much narrower than most other *Trogoderma* species, is a native of Chile now established in Germany and Sweden. A pest in insect collections.

LADYBIRDS and LARDER BEETLES



Epilachna chrysomelina ×2



Subcoccinella 24-punctata ×5



Coccidula scutellata ×5



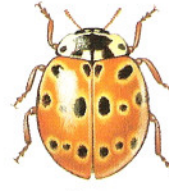
Scymnus frontalis ×5



Hippodamia 13-punctata ×3



7-spot Ladybird ×3



Eyed Ladybird ×2



Psyllobora 22-punctata ×3



2-spot Ladybird ×3



with varieties



10-spot Ladybird ×3



with varieties



Propylea 14-punctata ×3



Cream-spot Ladybird ×3



Larder Beetle ×2



Hide Beetle ×2



Attagenus pelloi ×3



Varied Carpet Beetle ×5

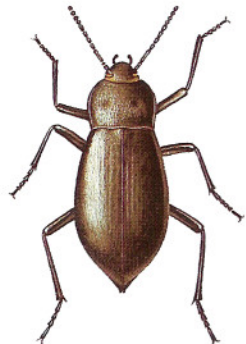


Khapra Beetle ×4



T. angustum ×4

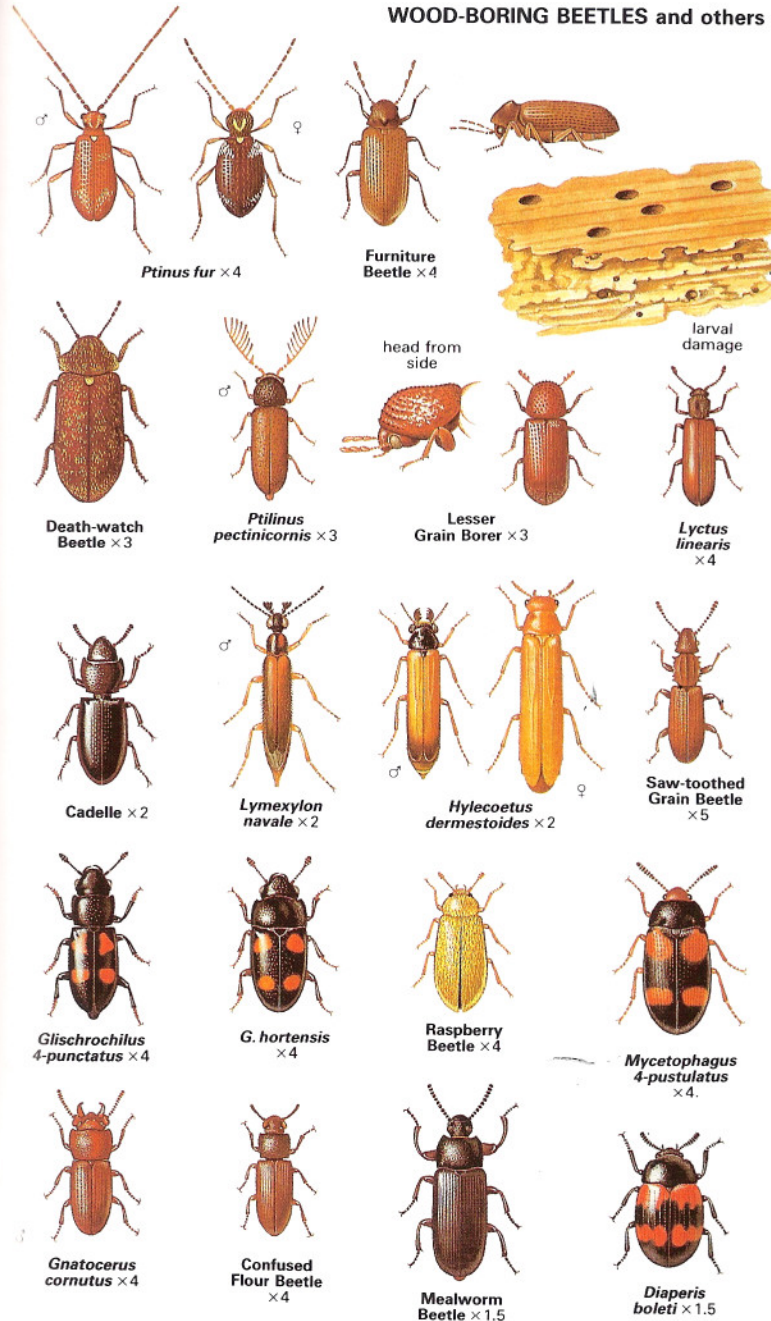
- ▲ **Ptinus fur** Ptinidae. One of the 'spider beetles', so called for the rounded bodies of many of the females: sexes differ markedly in shape. Colour and pattern vary. Scavenges and breeds in dry organic matter indoors and out, often damaging museum specimens and other stored materials. *P. tectus* is more common in B, where it breeds in foodstuffs.
- ▲ **Furniture Beetle** *Anobium punctatum* Anobiidae. Dark brown to yellowish and very downy. Antenna with unusual and very characteristic 1-sided club. Abundant indoors and out, 5-7. Larva is the woodworm, tunnelling in dead coniferous and broad-leaved timber and causing serious damage. Escape holes of adults 1.5-2 mm across.
- ▲ **Death-watch Beetle** *Xestobium rufillosum*. Hairy and, as in all the family, the head is more or less hidden from above. Breeds in old trees and building timbers - usually oak and other hardwoods, especially where damp. Tunnelling larvae cause immense damage to old buildings, but less common than furniture beetle. Adults appear in spring and make tapping noises to attract mates. Exit holes 3-4 mm across.
- ▲ **Ptilinus pectinicornis**. Antennae are simply toothed in female. 5-8, often indoors. Breeds in dry hardwoods.
- ▲ **Lesser Grain Borer** *Rhizopertha dominica* Bostrychidae. Pimpli pronotum forms hood over head. Antenna with 3-segmented club. Adult and larvae feed on grain of various kinds, commonly infesting granaries and flour mills.
- ▲ **Lyctus linearis** Lyctidae. One of the powder post beetles. Antennae with 2-segmented club. Breeds in old hardwoods, indoors and out, and reduces them to a very fine dust. 4-7.
- ▲ **Cadelle** *Tenebroides mauritanicus* Trogossitidae. Dark brown to black. Found mainly in food stores and bakeries, where adult and larva prey on other insects. Sometimes out of doors, under loose bark, in warmer areas.
- ▲ **Lymexylon navale** Lymexylidae. Soft, furry elytra. Female slightly larger and lacks feathery palps. 5-8, around dead and dying deciduous trees in which it breeds. Occasionally damages oak timbers. S & C.
- ▲ **Hylecoetus dermestoides**. Only male has feathery palps. 5-6 around dead and dying trees, usually deciduous species. Like previous species, larva has horny spine at end.
- ▲ **Saw-toothed Grain Beetle** *Oryzaephilus surinamensis*. Silvanidae. 6 blunt teeth on each side of thorax. Usually in grain stores and warehouses, feeding on larvae of other insects, including grain weevils.
- ▲ **Glischrochilus 4-punctatus** Nitidulidae. Smooth and shiny: rear edge of thorax narrower than elytra. Clubbed antennae. 3-11 around conifers. Breeds under bark and in bark beetle galleries. ▲ *G. hortensis* is stouter, with sides of thorax more or less continuous with elytra. 5 tarsal segments. Feeds on oozing sap and over-ripe fruit 5-10.
- ▲ **Raspberry Beetle** *Byturus tomentosus* Byturidae. Clothed with fine hair. 5-7, gnawing raspberry buds and laying eggs in them. Larvae feed in the growing fruit.
- ▲ **Mycetophagus 4-pustulatus** Mycetophagidae. Superficially like *Glischrochilus*, but flatter and with 3-4 tarsal segments: pronotum semicircular. 4-9, usually on bracket fungi on deciduous trees: occasionally on dung.
- ▲ **Gnatoceerus cornutus** Tenebrionidae. Female lacks horns, which are outgrowths from jaws. Feeds on flour in grain stores, flour mills, etc. Also under loose bark.
- ▲ **Confused Flour Beetle** *Tribolium confusum*. Confined to flour mills, granaries, and food stores. Feeds on flour and other cereal products.

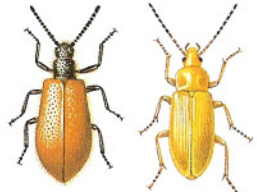


Churchyard Beetle
× 1.5

- ▲ **Mealworm Beetle** *Tenebrio molitor*. Seen mainly in granaries, etc, where it damages grain and cereal products, but also breeds readily in old birds' nests in house roofs. Larva (p. 295) is the mealworm, widely sold in pet shops for feeding birds and other small animals. Occasionally out of doors, usually under bark, in summer.
- ▲ **Diaperis boleti**. Shiny black with yellow or orange markings. Strongly domed. Feeds on fungi, mainly in woodland.
- ▲ **Churchyard Beetle** *Blaps mucronata*. A flightless, ground-living beetle of caves, cellars, stables, and other damp, dark places. Strongly nocturnal, like most members of the family. Scavenges on vegetable matter and emits a foul smell when alarmed.

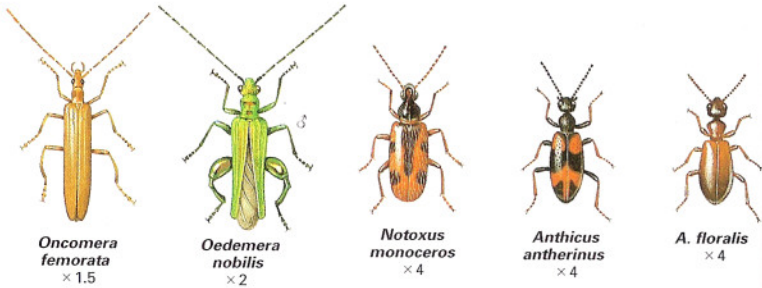
WOOD-BORING BEETLES and others





Lagria hirta × 2
Cteniopus sulphureus × 2

- ▲ *Lagria hirta* Tenebrionidae. Soft-bodied and rather sluggish. Head and thorax black or brown. 5-7, on flowers, usually in dry habitats. Larvae eat decaying matter in turf and leaf litter.
- ▲ *Cteniopus sulphureus*. Soft-bodied. Head and thorax often almost black. 5-7 on flowers, usually on sand dunes and in other dry, sunny places. Larvae live at base of plants.



Oncomera femorata × 1.5
Oedemera nobilis × 2
Notoxus monoceros × 4
Anthicus antherinus × 4
A. floralis × 4

- ▲ *Oncomera femorata* Oedemeridae. Elytra and body soft. Pollen-feeding on various shrubs, including ivy, 4-10. Larvae feed in decaying wood. S & C.
- ▲ *Oedemera nobilis*. Female is thinner and lacks swollen hind femora. Elytra pointed and gaping. Pollen feeding: common on a wide range of flowers 4-8.

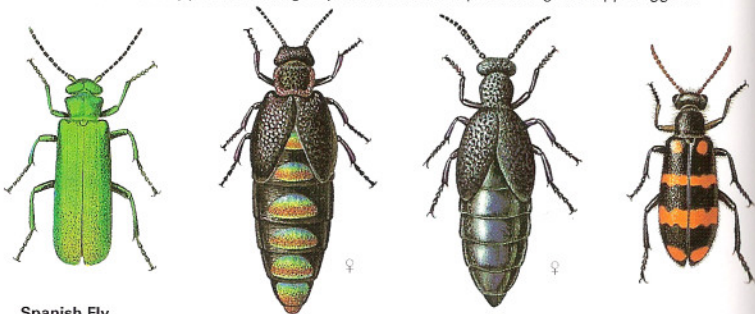


Notoxus
head and thorax

- ▲ *Notoxus monoceros* Anthicidae. An agile, ant-like beetle with a thoracic horn projecting over head. Elytra often black with just a pale triangle at tip. Among debris and turf on sandy ground: often on flowers.
- ▲ *Anthicus antherinus*. Very agile. Usually on compost heaps and other vegetable debris or manure heaps. 5-10. ▲ *A. floralis* is very ant-like: whole body often dark. In manure and vegetable refuse. 5-10.

- ▲ *Spanish Fly* *Lytta vesicatoria* Meloidae. One of the blister beetles, so called because they emit blistering fluids when alarmed. 5-8, chewing the leaves of various trees and giving out a strong mousy odour. Larvae in nests of solitary bees. S & C.
- ▲ *Meloe variegatus*. One of the oil beetles, releasing a smelly, oily fluid when alarmed. Flightless, with short elytra overlapping at the front. 4-7 in grassy places, chewing leaves of various plants. Larva lives in nests of solitary bees. S & C. ▲ *M. proscarabaeus* is bluish black and, like all oil beetles, very variable in size. Male has kinked antennae. 4-7. ▲ *M. violaceus* is similar but more finely punctured on head and thorax. Habits are like those of *M. variegatus*. Male oil beetles are always smaller than females.

Mylabris polymorpha. Pale markings vary in shape and may be orange or yellow. On flowers in sunny places, feeding on pollen. 6-9. Larvae parasitise grasshopper eggs. S.



Spanish Fly × 1.25
Meloe variegatus × 1.25
M. proscarabaeus × 1.25
Mylabris polymorpha × 1.25

LONGHORN BEETLES

LONGHORN BEETLES Cerambycidae. A family of more than 20,000 beetles, mostly with very long antennae arising from prominent tubercles. Antennae usually longer in males than in females. Body usually distinctly elongate and often rather flattened, but size is very variable and reflects the quality of the larval food. Elytra may be much broader than thorax. Tarsi appear to have only 4 segments, with 3rd segment bilobed and almost completely enclosing the tiny 4th segment. Tarsal segments much broader in males than in females.

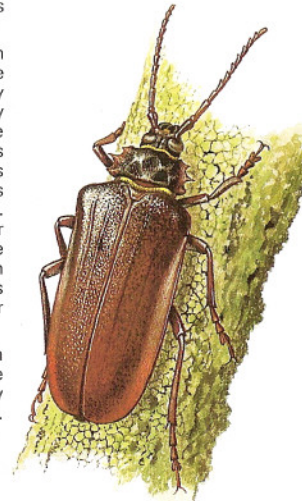
Many species are very colourful, often with marked differences between the sexes, but there are also many sombre species. Most are fully winged and fly, by night or day, with a ghostly rising and falling motion. A few are fast and noisy. They feed on flowers, particularly the pollen, and leaves, although some species take little food in the adult state. Many can stridulate loudly by rubbing their thoracic plates together. They do this mainly when alarmed, and especially when handled.

The larvae are almost all wood-feeders, attacking both living and dead timber. Several species cause severe damage to forest and plantation trees. They are usually elongate, pale coloured, and flattened – especially those species that live just under the bark. The jaws are powerful, but legs are very short or absent. Wood is not a very nutritious food and larval life is consequently rather long – usually two or three years and sometimes much longer in dry, seasoned timber. Pupation takes place in an enlarged feeding tunnel or in a chamber hollowed out just under the bark. The larvae often go on growing after their trees have been felled and used for building, and with today's worldwide trade in timber the adults often emerge far from their native homes.

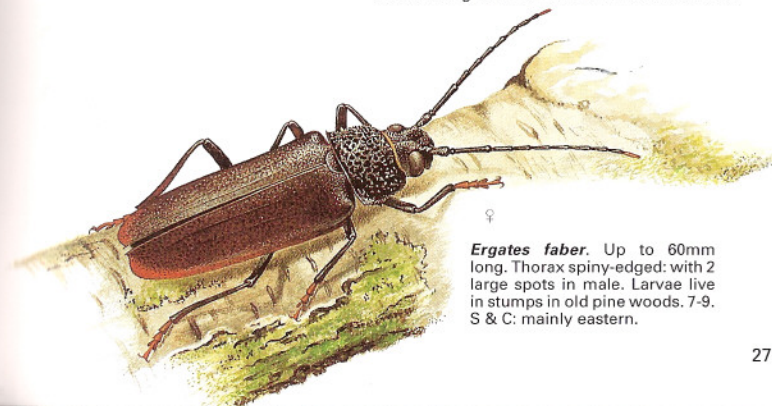
Several hundred longhorn species live in Europe, with about 70 species native to Britain. Most live in the woodlands. Their habits are all rather similar and only minimal descriptions are given on the following pages. The habitats given are essentially those of the larvae.



A typical longhorn larva, showing the tapering body and very short legs.



▲ **Tanner Beetle** *Prionus coriarius*. One of Europe's stoutest longhorns. Larvae live in tree roots. 6-9.

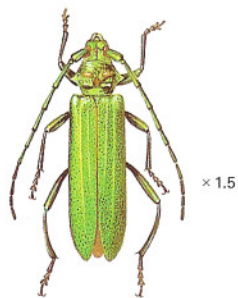


Ergates faber. Up to 60mm long. Thorax spiny-edged: with 2 large spots in male. Larvae live in stumps in old pine woods. 7-9. S & C: mainly eastern.

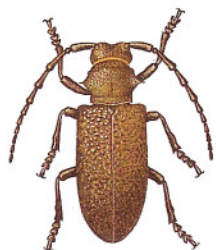
Monochamus galloprovincialis. Antennae reddish brown. U-shaped hairy patch on scutellum. On pines. 6-9. Mainly S, but also plantations in C.

Morimus funereus. Flightless. Found on stumps and old trunks of deciduous trees, especially oak and beech. 5-6. S.

△ **Monochamus sartor.** Antennae black: banded with white in female. Scutellum entirely hairy. On dead and dying conifers: damages structural timbers. 6-8. C: mainly in upland regions.



▲ **Musk Beetle. Aromia moschata.** Sometimes coppery or blue. Emits musk-like secretion. Deciduous trees, especially willows. 6-8.



△ **Lamia textor.** A lethargic species found around willows and poplars: a pest of osier beds. 5-10.



△ **House Longhorn. Hylotrupes bajulus.** Breeds in dry coniferous timber, often destroying telegraph poles and house timbers. 6-8.



△ **Saperda carcharias.** Roots, trunks, and branches of young poplars: often a pest. 7-9.

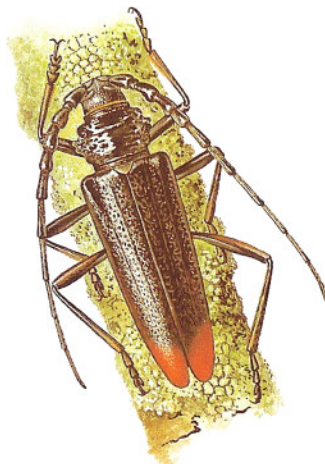


△ **Oberea oculata.** Elytra strongly concave at apex. Larvae in young willow shoots. 5-8.

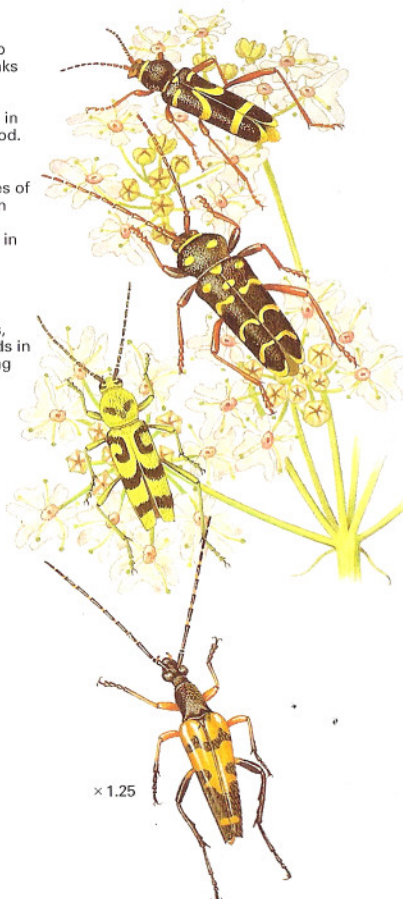
▲ **Wasp Beetle Clytra arietis.** A superb wasp mimic, scuttling over tree trunks in sunshine with antennae waving. Pronotum very round. Common in gardens and hedgerows 5-7. Larvae in fence posts and other dead hardwood.

△ **Plagionotus arcuatus.** Sides of thorax strongly rounded. On dead oaks and beeches in sunshine. 5-7. Often breeds in structural timbers.

Chlorophorus varius. Sun-loving: often on flowers, especially umbellifers. Breeds in various hardwoods, including vines. 6-7. Mainly southern.

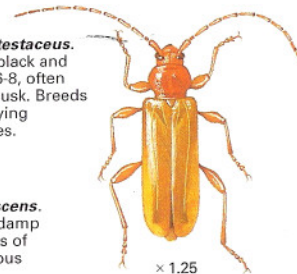


Cerambyx cerdo. One of Europe's largest beetles – up to 55 mm long. Flies around oaks, 6-8, mainly in evening. Larvae damage standing oak timber. S & C, occasionally imported into B in timber. C. scopoli is smaller and blacker.

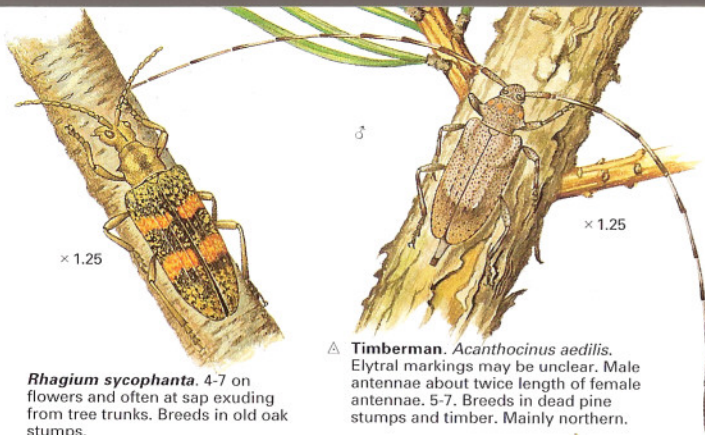


▲ **Strangalia maculata.** Elytra strongly tapered. Thorax almost bell-shaped. One of several similar species: pattern varies but base of each antennal segment always yellow. On flowers 6-8. Larvae in rotting deciduous trees stumps.

△ **Phymatodes testaceus.** Head may be black and elytra bluish. 6-8, often swarming at dusk. Breeds in dead and dying deciduous trees.



△ **Agapanthia villosoviridescens.** On flowers in hedges and damp places, 5-7. Breeds in stems of thistles and other herbaceous plants. N & C.

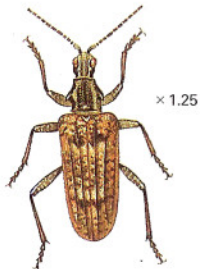


Rhagium sycophanta. 4-7 on flowers and often at sap exuding from tree trunks. Breeds in old oak stumps.

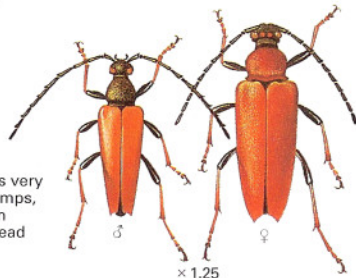
♂ **Timberman**. *Acanthocinus aedilis*. Elytral markings may be unclear. Male antennae about twice length of female antennae. 5-7. Breeds in dead pine stumps and timber. Mainly northern.

△ *Rhagium inquisitor*. Ground colour may be yellower. 5-7 in coniferous woodlands. Larvae under bark of conifers and some other trees.

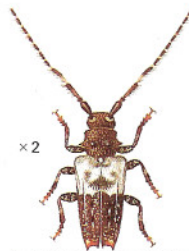
▲ *Rhagium mordax*. More slender than *sycophanta*. 5-7, usually on flowers. Larvae under bark of stumps and fallen trees, both broad-leaved and coniferous.



△ *Leptura rubra*. Sexes very different. On tree stumps, trunks, and flowers in summer. Larvae in dead coniferous timber.



♂s *Leptura 6-guttata*. 5-7 on umbellifer flowers in and around woods. Larvae in dead broad-leaved timber.

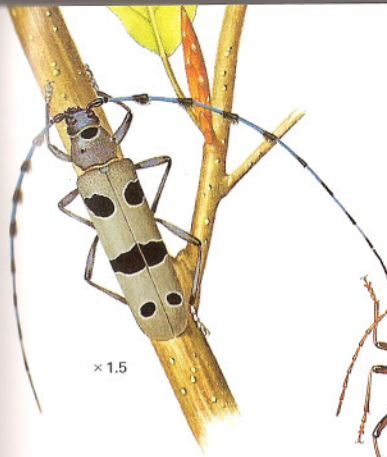


▲ *Pogonocherus hispidulus*. 2 teeth at tip of each elytron distinguish from similar species. Spring and autumn on deciduous trees and shrubs.



→ *Spondylis buprestoides*. Rather cylindrical, with short antennae and large jaws. 6-9 in pine forests.

→ *Rhamnusium bicolor*. A large spine on each side of thorax. Elytra generally bluish with a violet sheen, but sometimes almost black. 5-8. Deciduous trees, often in towns. S & C.



Stenocorus cursor. Sexes very different. 5-7 on flowers or swarming round rotting pine and spruce stumps. N & C.

× 1.5

Rosalia alpina. Pattern variable. 6-9, mainly in upland woods. Larvae mostly in beech. S & C: a rare species, legally protected in many areas.



Gaurotes virginea. 5-7, mainly on flowers in montane woodland. Breeds mainly in pine. N & C.

× 1.5

▲ *Anaglyptus mysticus*. Basal third of elytra may be black. 5-7 in woodland, especially on flowers of hawthorn and other shrubs. Breeds in tree stumps.

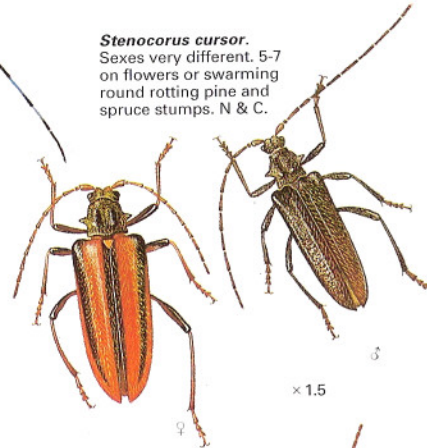


× 1.5 *Callidium aeneum*. 4-7 in forests of spruce and other conifers. Breeds in dead stumps and trunks. N.

Necydalis major. Elytra very short. 5-7, often swarming on trees. Breeds in old deciduous trees, including pear, birch, and poplar. N & C.

▲ *Molorchus minor*. Elytra short. The femora are noticeably swollen apically. 5-7 on flowers, especially near conifers. Breeds in stumps.

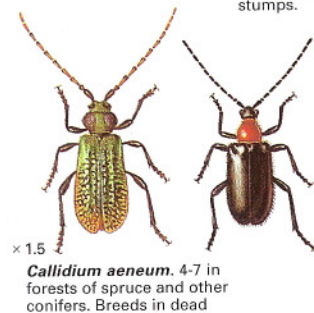
LONGHORN BEETLES



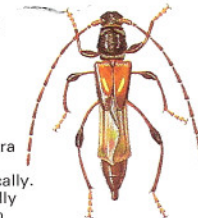
× 1.5



× 1.5



× 2



× 1.5