

Minibeasts

Minibeast is a convenient, though not scientifically precise word invented recently to mean insects and other small invertebrates (animals without backbones).

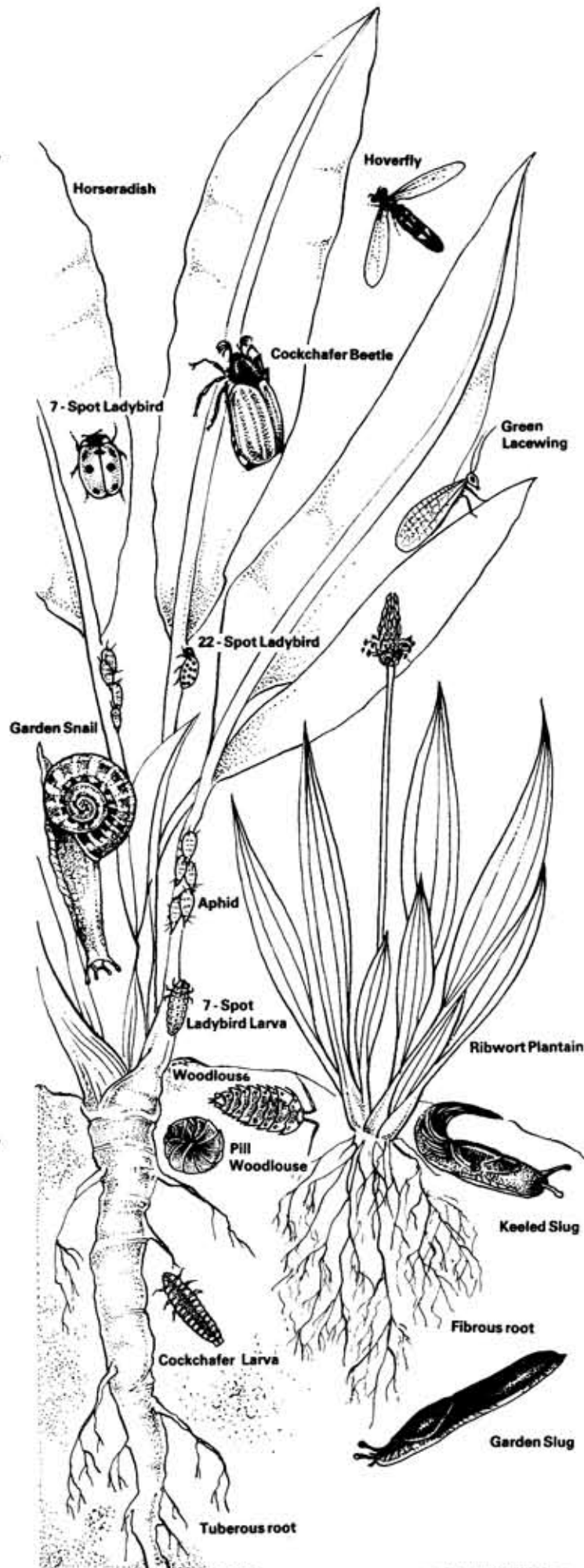
In many groups — spiders, small moths, flies and beetles for instance there are so many that only experts can readily identify them all. However, even if we cannot do more than place an animal into a broad grouping, that will allow us to learn much about it from reference books.

Some orders of insects undergo complete metamorphosis. Eggs hatch to larvae, larvae change to pupae, and from the pupae emerge butterflies, bees, wasps and beetles. Some pupae have a protective silken cocoon, spun by the larvae. Ants' eggs are actually cocoons, with pupae inside. An insect's 'skin' is an external skeleton. As it cannot grow, it is shed several times as the larvae develops.

Minibeasts are everywhere in the soil feeding on plant material, such as worms, slugs and root feeders including crane fly and cockchafer larvae. Others like centipedes, ground beetles and Devils-Coach-Horse beetles hunt the plant feeders. Many ants, beetles and wasps build underground nests but find food above ground.

On the soil surface are many others including wolf spiders which run after their prey, and woodlice, which eat dead plants. Minibeasts active by night spend the day under plants or stones. These include earwigs, slugs, snails and some moths. Many live among the stems, eating leaves, like grasshoppers or hunting other minibeasts, like ants and wasps. Ichneumons are parasites. They mainly lay their eggs inside caterpillars. Ichneumons larvae feed on the caterpillars insides, but only kill it when they are fully grown.

Many plants develop growths, such as the swellings on creeping thistle stems. These are 'galls'. Small creatures, usually larvae of wasps and flies, produce substances which cause plants to form abnormal growths, within which the creature feeds. In springs the 'cuckoo spit insect' (frog hopper larvae) sucks plant juices, and are themselves eaten by ladybirds and their larvae, lacewing larvae and many hoverfly larvae. Aphids excrete sugary 'honeydew'. Ants, wasps and adult ichneumons drink this. Flowers and seeds attract other insects like the seed feeding *Lychnis* moth caterpillar.



Flying insects — among them bees, butterflies, hoverflies and many beetles — take pollen or nectar. Spiders hunt these flower visitors. Highest still are flying insects, moving between flowers or between homes and feeding places, or searching for mates. These are food, day and night, for birds and bats.

