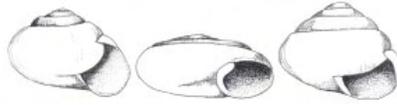


Order Identification Guide

Common Name (*Scientific Name*)

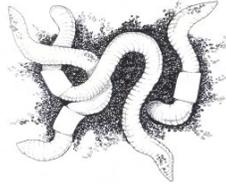
Description

Snails (*Gastropoda*)



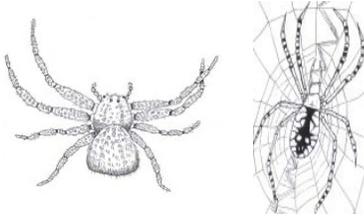
have a spiral shell (except for slugs) and a soft body without segments or exoskeleton; may have tooth-like projections over the mouth of the shell to keep out predators; a millimeter long or as long as your finger

Earthworms (*Oligochaeta*)



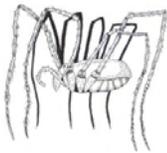
have no legs and lack an obvious head and tail, but note the wide fleshy band called the clitellum located near the front of the animal; obvious segments (bands); most earthworms are not native to North America

Spiders (*Araneae*)



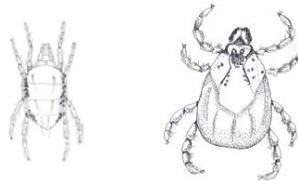
have eight legs and two body segments joined at a thin waist; abdomen does not have segments; most have eight eyes; most use silk to catch food, for shelter, or to protect their eggs; only two are dangerously venomous

Daddy-long-legs (*Opiliones*)



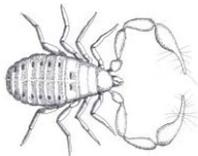
most have eight long, jointed legs and appear to have a single round or oval body part; they are NOT venomous; they do not spin webs and are not found in webs; most are found on trees, walls, the ground, or in leaf litter

Mites/Ticks (*Acari*)



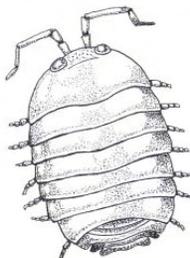
have eight rather short legs (some parasitic forms have lost some or all of their legs); heads are small but sucking mouthparts can be obvious; small to microscopic; they may be parasites or free-living; some are orange or red

Pseudoscorpions (*Pseudoscorpiones*)



look like scorpions without the stinger; 8 walking legs and large, claw-like pedipalps; small, living in the leaf litter or rotting trees; with spiders and centipedes they are the top predators in leaf litter; over-winter in silk cocoons

Pillbugs (*Isopoda*)



look like short, oblong millipedes, but only seven pairs of legs; have antennae; may have feelers at the end of the abdomen; some can roll into a ball, some cannot; live in moist places in the leaf litter or under objects

Common Name (*Scientific Name*)

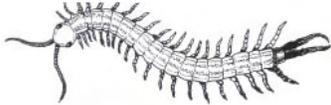
Millipedes (*Diplopoda*)



Description

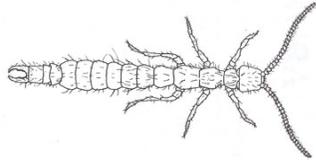
are long, worm-like animals with 15 or more body segments and two pairs of legs on most segments; none have as many as a thousand legs; the body is either flattened or sausage-shaped; most feed on dead matter

Centipedes (*Chilopoda*)



are long, worm-like animals with 15 or more body segments and only one pair of legs on each segment; usually have long antennae and venomous jaws; harmless in the US; they are major predators

Japygid (*Diplura*)



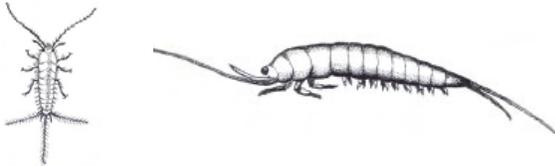
blind and colourless, subdivided into a head, a thorax with three pairs of walking legs and a long segmented body. The ten-segmented abdomen ends with pincher-like cerci to capture prey.

Springtails (*Collembola*)



are tiny, jumping creatures that live in soil, decaying logs, and leaf mold (they jump by releasing a forked structure on their abdomen); color varies from white to red to mottled; hard to see because of small size

Bristletails/Silverfish (*Thysanura*)



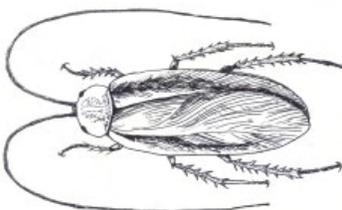
are small, but not tiny, wingless insects that live in people's homes, soil, under rocks, and in leaf mold; a few can jump and all can move quickly; they have long thin antennae and two to three thin thread-like "tails"

Grasshoppers/Crickets/Mantids (*Orthoptera*)



front wing is thin and narrow; broad hind wings fold fan-like under front wings (young have only wing buds); color varies; chewing mouthparts; large hind legs for jumping; front legs of mantids modified to grab and hold

Cockroaches (*Blattodea*)

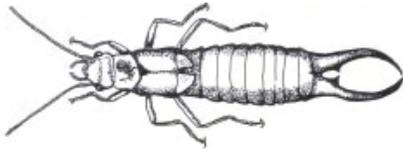


have an oval, flattened body and long, hair-like antennae; have slender front and hind legs and are often fast runners; some have wings, but others are wingless; in some species the hind wings fold under leathery front wings

Common Name (*Scientific Name*)

Description

Earwigs (*Dermaptera*)



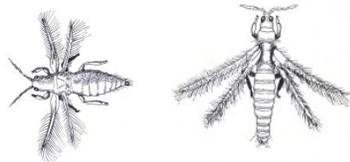
have long, slender bodies with a pincer-like structure, called cerci, on their abdomen; adults usually have four wings; when at rest, the membranous hind wings fold under the short and leathery front wings

Booklice/Barklice (*Psocoptera*)



small and soft-bodied; rarely longer than 5mm; heads are big with eyes far back on head; long antennae; there are no cerci (feelers) on the abdomen; if wings are present, there are four, held rooflike over their body when at rest

Thrips (*Thysanoptera*)



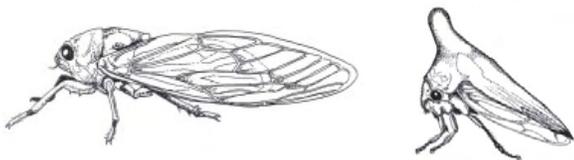
slender, pale to blackish, with short antennae; 5mm longer or less; four wings, when present, have fringe all the way around them; sucking mouthparts are slightly “off-center”; often found on flowers

Stink/Assassin/Ambush Bugs (*Hemiptera*)



body is broad or long and narrow; front wings are half leathery and half membranous and expose a triangle of back where they fold across the abdomen, forming a V, Y, or X on the back; have piercing-sucking mouthparts

Leafhoppers/Cicadas/Aphids (*Homoptera*)



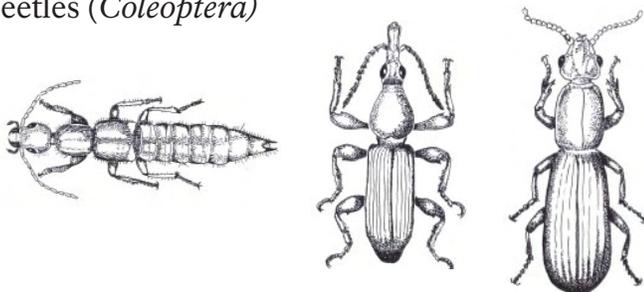
are closely related to the Hemiptera; have either four wings, or like some aphids, have no wings; at rest wings are held roof-like over body; antennae are often short and bristle-like; mouth begins at bottom of head, between legs

Lacewings (*Neuroptera*)



are soft-bodied insects with four membranous wings that have many veins; wings are held roof-like over the body when at rest; antennae are usually long and have many segments; adults are usually weak fliers

Beetles (*Coleoptera*)



membranous hind wings fold beneath hardened front wings; front wings form the letter T on their backs when folded; have chewing mouthparts; antennae come in a variety of shapes, often like “stacked balls” or with fringe

Common Name (*Scientific Name*)

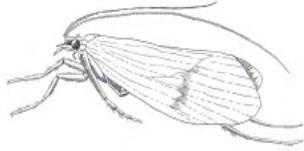
Description

Beetle Larvae/Grubs (*Coleoptera Larvae*)



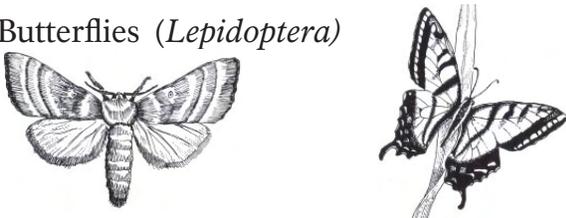
generally have a visible and obvious head and three pair of obvious legs; some actively crawl about, others are fairly still, found under bark, in the soil, or in plant tissue.

Caddisflies (*Trichoptera*)



are usually small, dull-colored, moth-like insects with four wings that are held roof-like over their backs; wings are covered with scales; antennae are very long; young live in water where many build little cases to live in

Moths/Butterflies (*Lepidoptera*)



have four wings, covered with scales that form often colorful patterns and come off like dust when handled; mouthparts form a coiled tube; butterflies have club-tipped antennae; moths may have feathery antennae

Caterpillars (*Lepidoptera Larvae*)



usually have an obvious head and three pairs of true legs; also have up to five pairs of prolegs in the middle and/or at the end; prolegs “look like hairy suction cups”; if more than 5 pairs of prolegs, it’s a sawfly, a type of wasp larvae

Flies/Mosquitoes/Gnats (*Diptera*)



are usually small and soft-bodied; have two clear front wings; hind wings reduced to two tiny knobbed structures called halteres that help flies keep their balance while flying; most have very large eyes, taking up most of the head

Fly Larvae/Maggots (*Diptera Larvae*)



usually have no obvious head and it may be hard to tell the front end from the back end; usually have no obvious legs, though may have small hooks; usually whitish

Ants/Bees/Wasps (*Hymenoptera*)



have four clear wings with few veins; most ants have no wings; abdomen usually is narrowly attached to thorax by a thin “waist”; often have a stinger (or egg laying tube) at the tip of the abdomen; have chewing mouthparts