

## Insects, Spiders, and Other Land Arthropods - Common Classes and Orders

There are many species of insects and spiders in Alaska. Rather than trying to key insects down to the species, we are going to only key them down to order.

**Phylum Arthropoda** - "Jointed Legs" Arthropods are animals with a hard exoskeleton, a segmented body, and jointed legs. It includes insects, spiders, centipedes, crabs, shrimp, barnacles, and many others. In numbers and diversity of habits, this could be the most successful group of animals on Earth.

**Class Crustacea** - Crustaceans are mostly aquatic, but there are a few land dwelling forms.

- Order Isopoda - Pillbugs, sowbugs, potato bugs, roly-polies, whatever you call them they all have seven pairs of legs and a simple oval body. Marine varieties can be a foot long.

**Class Diplopoda** - Millipedes. Diplopoda means two legs. Millipedes and centipedes have far more than that, but millipedes have two pair of legs on each segment where centipedes have only one pair per segment. Millipede means "thousand legs", which is few too many.

**Class Chilopoda** - Centipedes. Centipede means "hundred legs", which is still too many. Most centipedes have poison fangs and can bite. They also run backward as fast as they can forward.

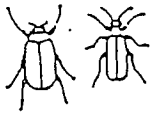
**Class Arachnida** - Spiders, ticks, daddy-long-legs, scorpions. No jaws, no antennae. But, they do have fang tipped chelicerae that are often venomous.

- Order Araneae - Spiders. Two body parts, eight legs.
- Order Phalangida - Daddy-long-legs or harvestmen. One body part, eight legs
- Order Acarina - Mites and ticks. One body part with a sort of head. Complex life cycle.

**Class Insecta** - Six legs, three body parts, usually four wings with some important exceptions.

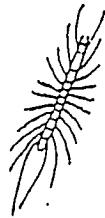
- Order Ephemeroptera - Mayflies. Finely veined wings, curled up abdomen with tail filaments. Aquatic young.
- ⊙ Order Odonata - Dragon and damselflies. Long tail-like abdomen, four lacy wings. Dragonflies rest with wings spread, damselflies rest with wings folded. Aquatic young.
- ⊙ Order Orthoptera - Roaches, mantises and grasshoppers. Straight wings with larger hind wings than fore. Strong back legs. Young look like tiny adults.
- Order Plecoptera - Stoneflies. Wings fold flat over back. Aquatic young.
- ⊙ Order Hemiptera - True bugs, water striders, boatmen, stinkbugs. Wings form X on back. Young small wingless adults.
- ⊙ Order Homoptera - Cicadas, aphids, leafhoppers, spittlebugs. Wings form tent like shape when folded.
- Order Neuroptera - Lacewings, hellgramites. Lacy wings, many with big pincers.
- ⊙ Order Coleoptera - Beetles. Forewings adapted into hard wing covers (elytra). Young called grubs.
- Order Trichoptera - Caddisflies. Adults look like clumsy versions of moths, but with hairy wings. Aquatic young that form cases.
- ⊙ Order Lepidoptera - Large scale covered wings. Butterflies, moths, and skippers. Caterpillars for young.
- ⊙ Order Diptera - Flies and mosquitoes. Two obvious wings, hind wings reduced to knob shaped halteres. Young are maggots.
- ⊙ Order Hymenoptera - Ants, bees, and wasps. Social insects. Stingers on bees and wasps.

BEETLES

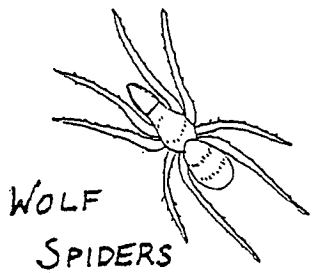


WASPS  
BEES  
ANTS

CENTIPEDES

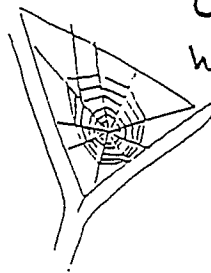


GRASS HOPPERS



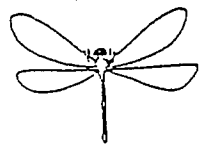
WOLF  
SPIDERS

TRUE  
BUGS



ORB  
WEAVERS

FLIES  
DRAGON



FLIES

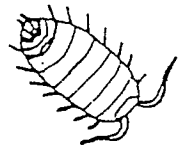


LONG  
JAW  
SPIDERS

I DON'T KNOW

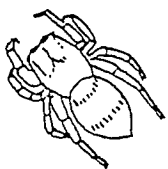


BUT ISN'T IT NEAT!

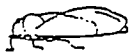


PILLBUGS

SPIDERS  
JUMPING

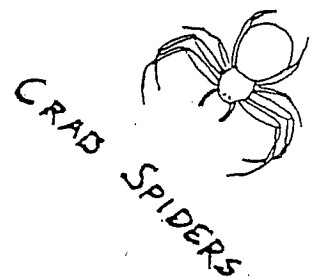


LEAF HOPPERS



CICADAS

MITES



CRAB SPIDERS



BUTTERFLIES



TICKS



MILLIPEDES

DADDY-  
LONG-  
LEGS

