

BFL: ACID RAIN STUDY

Prey Field Guide

Snails

Description: Snails are gastropods with hard, external shells. The shells of the land snails that we are interested in can be as small as 1–2 mm or they can be relatively large (>30 mm).

Where found: In forested areas, snails usually live in low vegetation, leaf litter, or woody debris (Hotopp 2002).

Diet: Land snails generally eat living or dead plant material. Some snails are carnivorous and eat earthworms, leeches, or other snails (Baker 1939).

Reproduction: Land snails are hermaphroditic (both sexes represented in each individual), but it takes two individuals to mate. Most land snails lay eggs in the spring or early summer in moist sheltered places. It can take 3–4 weeks for the eggs to hatch, and up to two years for the snails to reach maturity.

Importance: Snails and slugs may represent up to 8% of the animal biomass of boreal forests (Hawkins, et al. 1997). Snails are eaten by many animals, including: shrews, moles, mice, squirrels, and birds.

Notes: Snails can serve as intermediate hosts for a number of parasites. We recommend that you do not handle them with your bare hands.



Snail

Slugs

Description: Slugs are gastropods that lack external shells, although some species do have small internal shells. They can be relatively small (<10 mm) or very large (>100 mm).



Slug

Where found: Often found under loose bark, stones, sticks, leaves, or any other forest debris.

Diet: Slugs generally eat living or dead plant material.

Reproduction: Slugs are hermaphroditic (both sexes represented in each individual), but it takes two individuals to mate. Eggs may hatch in a few weeks or they may overwinter.

Importance: Snails and slugs may represent up to 8% of the animal biomass of boreal forests (Hawkins, et al. 1997). Salamanders and newts eat small forest slugs (Baker 1939).

Notes: Slugs can serve as intermediate hosts for a number of parasites. We recommend that you do not handle them with your bare hands.

Myriapods

Description: Centipedes and millipedes are myriapods. Centipedes usually have a slightly flattened body and one pair of legs per body segment. Millipedes usually have a more cylindrical body and two pairs of legs per body segment. Millipedes often curl up into a tight spiral for protection (don't confuse this with a snail shell).



Centipede

Where found: Often found under bark, stones, sticks, leaves, or other forest debris. Also found in soil and rotting wood.



Millipede

Diet: Centipedes are predaceous on insects, etc. Most millipedes eat plants or decaying plant material.

Reproduction: Eggs are laid in or on the soil. The young go through several molts, increasing the number of body segments and pairs of legs with each molt. It can take many years to complete development. (Sanders 1999)

Notes: Some centipedes can inflict a painful bite. Millipedes don't bite, but many can produce a noxious fluid from stink glands located along the sides of the body.

Isopods

Description: Isopods (or sowbugs or pillbugs as they are commonly called) are generally gray or black, relatively flat, and rather small (<20 mm). Pillbugs can roll themselves into tight balls when disturbed.



Isopods (sowbugs or pillbugs)

Where found: Often found under bark, stones, logs, or other forest debris or in rotting wood.

Diet: Isopods are scavengers, eating both plant and animal matter.

Reproduction: The eggs are carried by the female in a brood pouch for three to four weeks. The young look like miniature versions of the adults.

Earthworms

Description: Usually reddish or pinkish colored with distinct segments. Can be very small or very large.

Where found: Often found underground, but they come to the surface to feed (especially at night). Earthworms require fairly moist conditions.



Earthworm

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Diet: Feed on decaying organic matter.

Reproduction: Some species of earthworms are hermaphroditic (both sexes represented in each individual), but it takes two individuals to mate. Some species reproduce uniparentally, with no sexual fertilization by another individual (Tomlin 1980).

Notes: Earthworms are an important food source for many animals (birds, moles, toads, etc.). They are also valuable for their role in circulating and aerating the soil.

References

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