Colorado Insects of Interest

Silverfish

Scientific Name: *Lepisma saccharina* Linneaus (common silverfish), *Ctenolepisma lineata* Fabricius (fourlined silverfish), *Thermobia domestica* Packard (firebrat)

Order: Thysanura (Silverfish and Firebrats)
Family: Lepismatidae

Identification and Descriptive Features:
Members of this order (Thysanura) are wingless insects with a flattened, elongate body and long thin antennae. The body tapers from the terminal end extend three long filaments that are often bristly. General coloration is silver or grayish but they are covered with fine scales and some species have extensive patterning of the body. They are fast moving and quickly move to avoid light.

Distribution in Colorado: No silverfish appear to be native to Colorado and their present distribution is almost entirely due to human-assisted movements. The common silverfish and the firebrat are extremely common household pests throughout North America. The fourlined silverfish is recorded in Colorado from Mesa County.

Life History and Habits: Silverfish are omnivores with chewing mouthparts. They are omnivores that chew on a wide range of materials and may feed on materials of both plant and animal origin but particularly favor starchy foods. Paper products are most commonly damaged by silverfish.

Members of the order Thysanura undergo a very simplified form of development, known as ametabolous metamorphosis. Following egg hatch immature forms resemble the adult differing only in size and sexual maturity. They molt repeatedly during their lifetime - usually a dozen or more times. The adult stage is typically reached within 4-6 months and they may live over two years, during which time thousands of eggs may be laid. Molting continues to occur even in the adult stage, unlike most insects.
Many silverfish are adapted to dry conditions and can acquire moisture through metabolism of their food. A species known as the firebrat (*Thermobia domestica*) is a species well-known to thrive in very warm areas such as around furnaces.

**Related Species:** Another order of wingless insects are the jumping bristletails of the order Microcoryphia. These have a general similarity of body shape to the silverfish but have a humped back and are capable of making a springlike jump. Several species of jumping bristletails are native to the state and are usually found on lichen covered rocks.

*Figure 3.* A jumping bristletail.