

Springtails

Barb Ogg, UNL Extension Educator

[352]

Springtails (order Collembola) are tiny, jumping insects sometimes found in moist indoor areas like kitchen sinks, bathtubs and the soil of houseplants. They may be found floating on surface water of drains. They are most common outdoors in the spring and early summer, but can be found year-round in moist, indoor environments. In the wintertime, one species, called the snow flea, is active when temperatures are too cold for other insects to be active. Because they jump when disturbed, springtails are sometimes confused with fleas. However, springtails do not bite humans or pets, nor do they spread diseases. They are a nuisance, but one that is almost always associated with high moisture situations.

Springtails do not fly and are wingless. They have a variety of body shapes; some are long and slender and others are more rounded. Many species are gray, but others are beautifully colored — white, blue, yellow, orange, metallic green, lavender and red.

Springtails get their name from their ability to jump several inches by using a forked, tail-like structure, tucked under the abdomen when the insect is at rest. When disturbed, this appendage acts like a spring, propelling the insect forward.

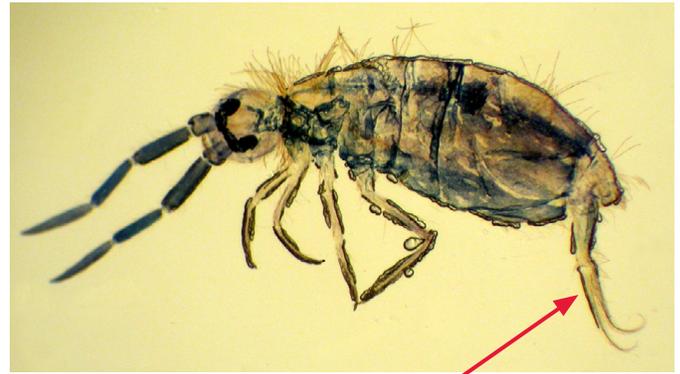
In the United States and Canada, about 700 species of springtails have been identified, and there are, undoubtedly, more species yet undiscovered.

Outdoors, springtails are abundant in moist areas of grassy or wooded areas, vegetable gardens in leaf litter, damp soil, rotting logs and mulch. There can be thousands to millions of springtails in a cubic meter of soil, but, because they are so small, most people are unfamiliar with them. They feed on decaying plant material, fungi and bacteria. They are extremely common in compost bins.

Damage

Most of the time, springtails are harmless scavengers and feed on decaying organic matter. They are sometimes associated with commercial mushroom production and can be a pest. Morel mushroom hunters often find them inside their prized morels. To remove them, slice morels in half lengthwise and soak them in salt water for a few minutes before preparing.

Continued on next page



Springtails have a tail-like appendage which can propel them forward (highly magnified).

Wyatt Anderson, UNL Entomology student



Springtails on overwatered soil (magnified).

Jim Kalisch, UNL Department of Entomology



Springtails on a sticky trap (approximate size).

Jim Kalisch, UNL Department of Entomology

Know how. Know now.

Rarely, springtails may damage plants by chewing on leaves and roots of tender seedlings. Feeding damage appears as rounded pits on young leaves or roots, or irregular holes in thin leaves. Fast growing plants can usually outgrow injury and suffer little damage.

Springtails are sometimes found in overwatered potted plants and may feed on fungi and decaying organic matter in the soil.

Springtails may drown in swimming pools and can be found floating on the water. This may be annoying, but it isn't a significant problem. They do not bite people or pets.

Occasionally, springtails can be found floating on sewer drains or sump pumps. If possible, drain the water. If this isn't possible, squirt a very small amount of dishwashing liquid to break the surface tension. This will probably drown the insects. Insecticides should never be sprayed on — or dumped down — drains.

Large springtail populations can sometimes be a nuisance in homes and greenhouses, especially in damp areas. Their continued presence indoors is an indicator of constant moisture.

Management

The primary factor in managing springtails is to reduce moisture and excessive organic matter in those locations where springtails become a problem, especially in gardens, greenhouses and next to foundations. Seal cracks and entry points in homes. Pesticides are a stop-gap measure at best and won't provide long-term control.

Reduce Habitat — To reduce springtail habitat near homes, remove mulch and moist leaves close to the foundation. Dry out damp locations. Remove landscape

plants near the house if the area is always damp. Reduce watering of landscape plants and let the soil dry out a little between irrigation. Where springtails are a problem in gardens, provide good drainage, reduce organic soil amendments and irrigation.

Indoors, reduce humidity in infested areas with a fan or a dehumidifier. Repair moisture leaks. If springtails are found in sinks and bathtubs, simply wash the insects down the drain. Don't pour or spray insecticides down drains.

Reduce springtails in potted plants by reducing frequency of watering, allowing the soil to dry out between waterings. Don't allow water to stand in saucers underneath potted plants. If the problem is severe, consider repotting the plant with a sterile potting mix.

Exclusion and Sanitation — Springtails are so small they can enter houses through tiny cracks and crevices around doors and windows, utility pipes, vents or window screens. Seal places where the springtails can enter the house. Indoors, vacuum springtails as needed.

Swimming Pools — The pool filter system will remove springtails in the pool or you can remove them manually with a pool skimmer. Remove lush vegetation and mulch around the edge of the pool to reduce springtail habitat.

Chemical Control — Experts generally don't recommend managing springtails indoors with insecticides. Applications are usually no more effective than vacuuming. Pyrethroid insecticides can be used to treat foundation walls on the outside of buildings, but pesticides will provide only temporary relief if the conditions favorable for springtail development are not corrected.

Snow Fleas

Despite its name, the snow flea is not a flea and it does not bite or feed on animals.

It is a small, dark-blue springtail (*Hypogastrura nivicola*). Researchers have found snow fleas produce a unique antifreeze-like compound in their body which allows them to be active when it's too cold for other springtails and insects to be active. During sunny days in the winter, people sometimes find snow fleas on concrete slabs near homes or other locations in the landscape.



Magnified view of snow fleas, *Hypogastrura nivicola*.

Vicki Jedlicka, UNL Extension in Lancaster County