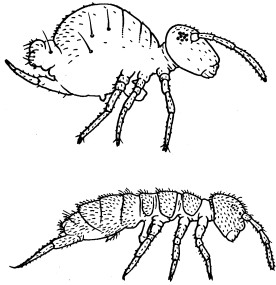


## Springtails



**Springtails** or collembolans are small, soft-bodied invertebrates related to insects. They are commonly found in leaf litter and decaying plant material. Springtails are primarily detritivores feeding on fine particles, spores and microbes. In the spring large numbers of purplish individuals can

sometimes be observed floating on the surface of puddles, ponds and even in damp gutters. These are mating swarms and will disperse on their own.

These animals belong to the class Collembola, an ancient group that dates back to the Devonian Period, some 400 million years ago. Although they have six legs they are not considered insects, in part because of their internalized mouthparts and the presence of a furcula, a long apical leg-like process at the end of the abdomen that they use to jump.

Springtails are small distinctive creatures. Their name comes from their ability to jump by using the furcula as a spring. These animals are generally tiny, with most species less than 1/8 inch long.

For the most part springtails have little obvious impact on our lives. A few species are considered crop pests in other parts of the world, damaging tubers and new growth. Yet other species show some promise in controlling fungal problems in greenhouses. Overall, springtails provide important ecosystem services, helping to enrich the soil, breakdown plant materials, and move important fungi. They are also one of the most abundant of all animals, with estimates of 100,000 individuals per cubic meter of topsoil.

Springtails can also be indicators of problems in homes. They are very susceptible to drying out and require moist conditions. Large or even small numbers of springtails indoors is a strong indication of a plumbing leak and dryrot somewhere in their vicinity, often in a wall, beneath a floor or a leaking roof.

### Springtails as parasites.

There are persistent claims of springtails as human skin parasites. The origins of this idea are unclear. However, a publication in 2004 claimed to demonstrate the presence of Collembola in human skin scrapings. The authors' claims were based on digitally manipulated images and have been shown to be baseless. Nonetheless, the belief persists.

One of the distinctive features of all springtails is their internalized mouths. Their actual mouth is retracted inside the head. They have to feed by sucking materials into the head. This means that they cannot chew or otherwise manipulate materials. It would be physically impossible for them to feed on or in the human skin.



Entomybryid springtail. Photo courtesy of Alex Wild; myrmecos.net.