

Nature Notes

Springtails, amazing athletes



The next time you are out for a walk, ski, or snowshoe in the Nature Park in late winter or early spring, keep your eyes open for millions of tiny black dots in the snow, especially in old footsteps or ski tracks. If you look closely and see some of these tiny specks jumping you are looking at springtails.

Springtails are sometimes called snow fleas even though they are not fleas and indeed are not even insects but instead belong to a group called the hexapods which includes both insects and more primitive groups. Fossil evidence of Springtails has been found in rocks 400,000,000 years old making them one of the very early land animals. There are 7000 known species of Collembola including several hundred found in British Columbia.



Hypogastrura nivicola—the snow flea (Photograph with permission of Franz Janssens and Bev Wigney)

Springtails are amazing athletes, capable of jumping many times their body length thanks to a springloaded device called a furcula which is attached to the back end of the animal and held in the “loaded” position by a tiny catch. When the catch is released, the furcula rapidly is forced downwards and thus the animal is propelled up and forwards hence the name “snowfleas”. Springtails lack wings so neither they nor their predators (some mites and beetles) know exactly where they will land their leaps.

Most springtails make a living by eating fungi and bacteria in rotting vegetation. They perform mass migrations up from the ground to the snow surface on warmer days in late winter or spring and hence become visible by the millions. Their sooty black colour helps to warm them on the sunny days when we usually see them out and about. They might perform these migrations to enable a shuffling of their gene pool or perhaps as a means of migration.

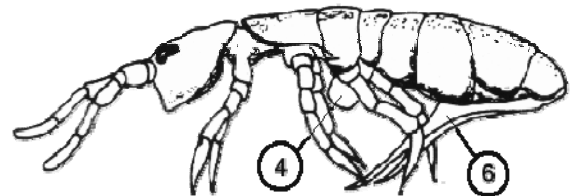


Diagram showing the furcula of a Springtail (Number 6 is the furcula).
With permission of John Meyer

Visit www.rockies.net/kimberley/naturepark for a hard copy or more information about Nature Park events.