

## Look what came down in the rain

February 2006

A long time ago, after some heavy rain (remember rain?) I went joyfully splashing in the puddles. Then I stopped to look at a blue-grey scum that had collected on several pools. I could just make out that it was composed of thousands of minute beasts, the size of grains of sand, but had to go and get my magnifying glass before I could see any details.

Even then it was hard to make out more than that they were soft, velvety 'grubs' with short stubby legs and a pair of short feelers out front. The drawing is based on a photo I found on the Internet, but my specimens seem to be very similar. They belong to a group of small, but numerous, animals called the Collembola, or Springtails. They have six legs, but are no longer considered to be "true" insects.

The name springtail refers to a peculiar structure found under the belly of many species. This can be hooked back against the belly under tension, and then released: enabling the springtail to jump when disturbed.

A bit of reading suggested that my puddle-scum were one of the soft grey *Hypogastrura* species. These are small, plump hexapods that have only simple eyes, and their springtail is a short spike that lets them make only small springs. They feed on the fungi and bacteria found in rotting organic matter at the soil surface. I have since seen them crawling over toadstools in the paddock. Contrary to human expectations: the boys are pink and the girls are blue-grey (larger and more numerous).

Other springtails can be larger and harder bodied, more like true insects. They live in the soil, in leaf litter, rotten logs, grass and in trees under the bark. Some are even found in the nests of ants and termites. A few species are pests, e.g. to mushroom farmers and the introduced "lucerne flea", but in most ecosystems they play an important, but often overlooked, role as scavengers.

My springtails would have been washed out of the leaf litter by the rain and then been trapped, helpless, in the surface tension of the puddles. Some enterprising ants were walking over the mat, collecting "those of the largest kind".

Photo: Ants collecting springtails floating on a puddle.

Drawing: *Hypogastrura* sp. – the little beast on my puddle, the bottom drawing shows its small "spring".

