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Achorul.s humi Folsom and Neanura muscorum Templeton oviposit late in the fall. The eggs of the last-named took 35 days to hatch at an average temperature of 60 F. This is a remarkably-long period compared with the 10 or 12 days required by the eggs of Achorules socialis under the same conditions; and in the insects' natural habitat incubation would doubtless have been even longer, for the young Neanura appeared in my bottles on the 8th January; and in their native wilds, sheltered from the intense frost only by the bark of a rotten log, it is scarcely likely that they would have hatched before spring.

On emergence from the egg, the young of a two millimeter adult are about one quarter of a millimeter long, and are invariably white, with—except in the blind species—conspicuous black eye spots. They are perfectly developed, but are not of quite the same proportions as the adults,—being somewhat shorter and thicker—and are wonderfully active runners and jumpers. Their growth seems to be slow, but it is scarcely safe to generalize on this point from the progress of the young in captivity, for they do not thrive under artificial conditions. Achorules socialis and Achorules packardi captured when well grown, have lived for six to eight months in my vials, and it was more than a year before senile decay carried off Xenylla marilima. But though I have seen the young of half a dozen species hatch out, not one of them ever survived longer than two or three weeks; and during this brief life I could never notice any marked change in their appearance.

Some species at least are sexually mature a good while before they attain their maximum size. Achorules social reaches a body length of two millimeters, but specimens only one and a quarter millimeters long lay eggs. The number of moults, so constant with many insects, is I suspect with them indefinite, for they seem to keep on shedding their skins and growing as long as they live. The largest sized specimens of several species that I am familiar with are found only in the spring. Apparently belonging to some brood of the year before, in spite of the almost sub-arctic cold of this district, they have continued to grow all winter in their shelters under the snow.

Their food seems to consist of organic matter of almost any kind. They have been found feeding on dead molluscs, fish and birds along the shore, but probably vegetable substances supply most of their nutriment. The mandibulate mouth-parts possessed by the majority are obviously designed for chewing. Some of the species I have had under observation fed on rotten wood, moss and lichens; others—notably the Arthropleona—would not eat at all in captivity.

No matter how small you are, trouble won't overlook you, and even the minute springtail has its enemies. Lubbock and some others refer to the presence of Protozoa in the internal organs of Collembola, and Imms found Nematodes in Anurida maritima. Nor are external parasites wanting. Of twelve or fifteen specimens of a small Sminthurus I collected last summer in the long grass of a beaver meadow, five had still smaller red mites firmly attached to them. This genus seems to be subject to attack by mites, for Lubbock mentions the same occurrence in connection with S. fusce (L.). Other likely enemies of the Order are the tiny spiders and chelifers, the thread-legged bugs and other predaceous creatures that one often finds in the collembolan habitats.

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