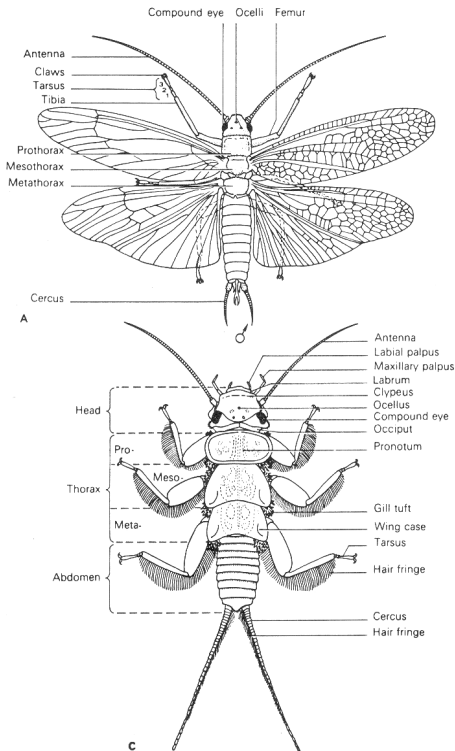


Creature Feature: Fall 2006

By W. Scott Douglas

Stoneflies

Stoneflies are some of the larger and perhaps more easily recognized inhabitants of the Cooks Creek. These colorful and active insects are surprisingly varied in their appearance and function in the benthic ecosystem. The larger, more colorful stonefly naiads are often predatory, but there are many other smaller species that feed on leaf litter and algae. Like



all insects, stoneflies undergo metamorphosis, a change in form from young to adult. The young stonefly, regardless of species is called a *naiad*. The naiad lives in the stream bottom for 12-24 months, or even for several years in some species before emerging. Emerging stonefly naiads climb out on rocks or woody stems and the dried up split skins or *exuviae*, can often be found still clinging to rocks. The adult stonefly is a dull, short lived creature that is rarely seen unless you know where to look, like around street or spot lights that stay on all night. Although some stoneflies are known from lakes and ponds, most stoneflies are found in clean, cool running water. Some stoneflies specialize in intermittent streams; those streams that only run for part of the year. In some headwater streams, highly specialized stoneflies are the most diverse members of the benthic community. All stoneflies are particularly sensitive to changes in water quality and their presence indicates high water quality. If you want to find some stonefly naiads, pick up large flat rocks in swift running water and

look for them on the underside. Stoneflies are easily recognized by having a flattened aspect to their bodies, and two *cerci* or “tails” at the end of the abdomen. For larger naiads, disturb the gravel under the rocks so that the insects are swept by the current into a waiting net.