

EPEORUS NYMPH

Ephemeroptera: Heptageniidae

Bug of the Month



At first glance, one may mistake this aquatic insect for one belonging to the order Plecoptera (stoneflies) due to the characteristic two tails (or cerci) of stoneflies. However, this insect is a mayfly in the genus *Epeorus*, which belongs to the family Heptageniidae, known as the “flat headed” or “cookie-headed” mayflies. *Epeorus* is among the few genera of mayflies that have only two cerci. Heptageniidae hosts over 100 species in North America, where *Epeorus* contains 19 of these species. Insects within Heptageniidae are commonly characterized as scrapers and grazers that consume algae and detritus. *Epeorus* mayflies are known for their morphological

adaptations which allow them to tightly cling to rocks within swift currents—these adaptations can cause them to be poor swimmers; should they be dislodged, they face a higher risk of predation. So, one could say that they literally cling to rocks for dear life!

The genus *Epeorus* is commonly found in fast-flowing, pristine headwater streams east of the Rocky Mountains. The presence of this genus is a strong indicator of good water quality! Flyfishers may associate the genus *Epeorus*, with commonly tied flies such as Quill Gordons, Pink Ladies, and Gray-Winged Summer Quills.

As *Epeorus* nymphs develop toward adulthood, their wing pads will progressively darken. Once the nymph is fully developed, the adult stage of *Epeorus* will typically emerge in late spring as a winged non-reproductive adult known as a “subimago” or “duns.” After several minutes to days, *Epeorus* will undergo another molt, becoming a fully reproductive adult, known as an “imago” or “spinner”. Following mating, female *Epeorus* will deposit a few eggs at a time by tapping its abdomen on the water’s surface, signifying that the next generation of *Epeorus* is underway.

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