

Caddisflies

Order: Trichoptera



- ▶ Type of Metamorphosis: Aquatic Complete
- ▶ Caddisflies are most closely related to butterflies and moths and resemble them in both the larval and adult forms. Larva have six legs with hooked claws. Many larvae build protective cases from organic matter, pebbles, and twigs. Some larvae are free-living and spin nets to catch and filter their food. Some species are predatory, while some are more plant-based feeders and filterers. Adults are identified by wings that are held roof-like over the body.
- ▶ Caddisflies have consistent emergence all Summer and Fall locally, some even in the middle of winter. They are one of the most consistent species found in our area.

Caddis Ecology

Movement Groups

- ▶ Clingers- Have evolved flattened bodies in order to cling to rocks or other structures in rushing waters
- ▶ Sprawlers- occupies habitat on top of fine sandy and silty sediment

Functional Feeding Groups

- ▶ Filterer- builds a net to filter out food particles from water
- ▶ Gatherer- gathers or collects food and stores it or eats immediately
- ▶ Scraper- scrapes rocks or plant matter for nutrients and food
- ▶ Shredder- shreds plant detritus, an important part of the ecosystem
- ▶ Predator- hunts other invertebrates for food, also uses a net in some free-living species

IDENTIFYING FEATURES

Larvae

- ▶ Looks similar to a caterpillar
- ▶ Housed in a protective case
- ▶ Six legs near head
- ▶ Anal gills (sometimes)

Adults

- ▶ Wing's held roof-like (think A-frame or tent-like) over the body
- ▶ Looks similar to a small moth
- ▶ Light hair on the wings
- ▶ Smaller species usually found in groups; larger more solitary

FAMILY: BRACHYCENTRIDAE



Common Name(s): Grannom, Mother's Day Caddis, Apple Caddis

Key ID Feature for Adults: Small size, huge numbers when hatching

Key ID Features for Larvae: Cases are small and usually in a perfect square or tapered cone shape

Ecology: Clingers

Feeding Group: Filterer/Gatherer/Shredder

Life Cycle: Univoltine

Immature Size: $\leq 17\text{mm}$

Immature Color: Creamy white to lime green body, brown head and legs

Adult Size: 6-12m

Adult Color: Brownish-grey, sometimes with a green body- lighter brown in color when first emerging

Additional Info: Sensitive to pollution; needs very clean water

Approximate Local Emergence: April-August

FAMILY: GLOSSOSOMATIDAE



Photo Credits: Thedragonflywoman.com

Common Name(s): Saddle-Case Makers, Little Black Caddis

Key ID Feature for Adults: Small in size, mottled wing

Key ID Features for Larvae: Oval, pebble casing; looks like small bean-shapes made of rocks attached to larger rocks

Ecology: Clinger

Feeding Group: Scraper

Life Cycle: Multivoltine

Immature Size: $\leq 8\text{mm}$

Immature Color: Creamy body with brown head & legs

Adult Size: 6-10mm

Adult Color: Mottled greyish-brown

Additional Info: Clinger; builds a “turtle-shell-like” case on the sides of rocks and builds a bigger one every time they grow

Approximate Local Emergence: April-October

FAMILY: HYDROPSYCHIDAE



Common Name(s): Net-spinning Caddis, Spotted Sedge

Key ID Feature for Adults: Medium-sized, antennae about the same length as body, mottled wing

Key ID Features for Larvae: No case, large, tufted gills, 3 dark plates on dorsal thoracic segments

Ecology: Clinger/Net-Spinner

Feeding Group: Filters through a web/Predatory

Life Cycle: Univoltine

Immature Size: ≤15mm

Immature Color: Creamy white to lime green body, brown head and legs

Adult Size: 10-14mm

Adult Color: Brownish-grey with mottling of the wings

Additional Info: Moderately sensitive to pollution, spin a net to filter out their food or prey on smaller arthropods

Approximate Local Emergence: May-October

FAMILY: LIMNEPHILIDAE



Common Name(s): October Caddis, Snow Sedge, Silver-Marked Sedge, Fall Caddis

Key ID Feature for Adults: Largest caddis in the area, straw or grey-colored, silvery stripe on wing

Key ID Features for Larvae: Large rock or stick casing; dorsal hump on first abdominal segment (see middle photo)

Ecology: Sprawler

Feeding Group: Shredder/Gatherer

Life Cycle: Univoltine

Immature Size: $\leq 33\text{mm}$

Immature Color: Creamy white body, brown head and legs

Adult Size: 20-30mm

Adult Color: Grey to Straw Yellow, varies depending on genus, orange or straw-colored legs

Additional Info: Moderately sensitive to pollution, *Psychoglypha* emerges in the winter

Approximate Local Emergence: September-February

FAMILY: RHYACOPHILIDAE



Common Name(s): Green Rock Worm, Free-living Caddis

Key ID Feature for Adults: Small, similar to Brachycentridae, but with a more rounded wing

Key ID Features for Larvae: Glowing green color, no case, no thoracic plates, only first segment darkened

Ecology: Clinger/Sprawler

Feeding Group: Predatory/Gatherer

Life Cycle: Univoltine

Immature Size: ≤ 23 mm

Immature Color: Bright green

Adult Size: 8-16mm

Adult Color: Green to brown

Additional Info: Sensitive to pollution

Approximate Local Emergence: May-October