

# Odonates and You!

## What Is An Odonate?

Dragonflies and damselflies belong to the insect order Odonata. We call them odonates or odes for short.

## Where Do They Live?

Ponds, lakes, streams with clean water, plants for emerging and perching and nearby habitats where adults hunt for food.

## What Do They Eat?

Nymphs eat insect larvae, small fish, tadpoles; adults eat mosquitoes and other flying insects.



LARRY FEDERMAN

*Halloween Pennant, male*

**Odonate habitat is threatened by pollution and development. They need your help to protect the places they live.**

## Did you know?

- Dragonflies can fly up to 30 miles per hour!
- Dragonflies can have as many as 60,000 lenses in their compound eyes.
- Dragonflies have lived on earth for more than 300 million years.
- The biggest living odonate is a damselfly. Its wingspan is 7 ½ inches.
- Dragonflies eat 10 to 15% of its weight each day. That would be about 300 mosquitoes and other insects.

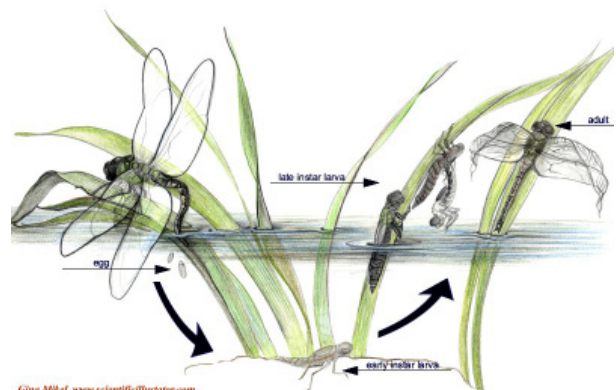


LARRY FEDERMAN

*Eastern Forktail laying eggs*

## Their “Lifecycle”:

- Odonates lay their eggs in the water, in pond mud or on the stems of plants along wetland shores.
- Eggs hatch and grow into nymphs which live in the pond for between 40 days and 5 years depending on the species.
- To emerge as adults, the nymph climbs onto the stem of a plant and pulls itself free from its skin-like shell.
- The newly emerged adults, called teneral, are soft and pale with glossy wings. Their full color will develop within a few days.
- They will remain on the plant until their wings are fully expanded and ready for flight.





*Spangled Skimmer, male*

### Why Protect Odonates?

Odonates are **indicator species**. They tell scientists about the health of a habitat. If there are not many dragonflies and damselflies in a pond, lake or stream, scientists will know it is not healthy. By keeping track of the populations of dragonflies and damselflies we can keep track of pollution and other impacts.

Odonates are **food** for birds, fish and even other dragonflies!

Odonates eat insects such as mosquito larvae and are an important part of the **food chain**.

**Many people observe dragonflies because of their beauty.**

### How Can You Help?

*Use alternatives to pesticides*—Pesticides can wash into ponds and streams. This can hurt nymphs and the species they rely on for food.

*Tread lightly*—Dragonfly and damselfly nymphs shed their skins along ponds. Walk carefully along pond edges to avoid crushing these youngsters.

*Prevent erosion*—Plant native shrubs and tall grasses along the edges of ponds and streams. The plants will hold onto the soil and keep it from washing into the water where it can suffocate eggs, nymphs and other creatures.

*Create habitat*—Dragonflies and damselflies need native plants along the edges of ponds where they live. Planting these or allowing them to grow instead of mowing up to the water's edge will provide the habitat they need.

*Eliminate invasive species*—Invasive species are plants that out-compete native plants. They limit the health of the habitat since many species are needed to provide the resources animals need to survive. To learn more about invasive species go to <http://www.dec.ny.gov/animals/265.html>.

*To Fertilize or Not to Fertilize*—Before adding fertilizer to your lawn test it to see if it needs it. Fertilizers, like pesticides, can wash into waterways causing pollution. If you use fertilizer at all, use it sparingly.

**Get involved!** Audubon New York participates in the New York State Dragonfly and Damselfly Survey, collecting and identifying odonates throughout the state.

To find out more go to <http://www.dec.ny.gov/animals/31061.html>.



*Russet-tipped Clubtail, male*

