

Life Cycle

While most of us recognize adult dragonflies when we see them darting around in the air, many of us would not recognize the aquatic insects that grow into these amazing flyers. Dragonflies begin their life cycle as tiny eggs laid by the females in the water or on aquatic vegetation.

After a gestation period that can range from as little as one to more than eight weeks, nymphs (sometimes also called larvae or naiads) emerge. The nymphs live and grow in the water, and some species can reach up to 2 inches in length. As they grow, the larvae shed their exoskeletons (molt) several times. They eat small insects, worms, fish and other aquatic creatures. The nymph growth cycle is generally the longest phase of a dragonfly's life, lasting from one month up to six years.



When they are ready, nymphs crawl out of the water and morph into adult dragonflies. The body and wings are soft for several days and they are especially vulnerable

to predators at this stage. With a few exceptions adult dragonflies live for only two to eight weeks!

Identifying Dragonflies

Learning to identify dragonflies and damselflies can be challenging. They tend to be moving quickly. To complicate things further, males and females in the same species often have quite different appearances. Studying a dragonfly while it is perched will often help you distinguish the details you'll need to determine the species. The overall size of the dragonfly and the coloring of the different body parts are key factors in identification.

One tip

If the dragonfly flies off just as you were getting a good look, stop and wait for a minute or two. Often dragonflies return to the same perch over and over again.

Interesting Behaviors

Odonata primarily eat other insects, including large quantities of mosquitoes. If you watch dragonflies as they patrol, you'll soon observe that they are catching their prey on the fly. Damselflies have a different feeding approach; they often grab insects from vegetation.

Male dragonflies are often very territorial and protective of their mate. They will fly in tandem, holding onto the female just behind her head, until she completes the egg laying process.

With their unique four wing structure, dragonflies are agile fliers that can fly forward, backward, and sideways, as well as hovering and gliding.

Like some butterflies, some species of dragonflies migrate long distances. The generation that starts out on the migration will be replaced by a later generation before the return trip.

Want to Learn More?

Once you start observing dragonflies, you'll probably notice that they seem to be "everywhere" around us here in Southwest Florida. If you'd like to learn more about them, here are a few reference sources:

- Dragonflies and Damselflies of the East (Princeton Field Guides), by Dennis Paulson
- Stokes Beginner's Guide to Dragonflies, by Blair Nikula and Jackie Sones
- Dragonflies thru Binoculars, by Sidney Dunkle
- Dragonflies and Damselflies of Georgia and the Southeast, by Giff Benton
- Web site: www.odanatacentral.com - includes species descriptions, geographic species checklists, and photos

Photo by Bill Dunson of nymphs and male Eastern Pondhawk
all other photos by Eva Furner
at Wildflower Preserve

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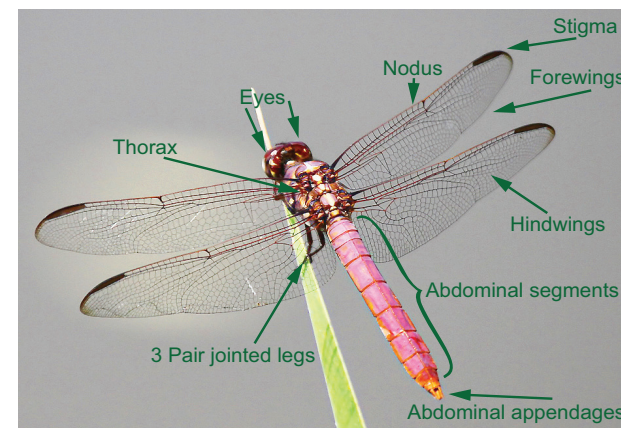


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WILDFLOWER PRESERVE

Dragonflies

Dragonflies and damselflies regularly patrol the ponds, creeks and meadows of Wildflower Preserve. In this brochure you'll find an introduction to these fascinating creatures as well as descriptions of eight common species that you may observe on your walks at the preserve.



Basic Anatomy

The diagram above shows the major body parts of these insects, which make up the "Odonata" scientific order. They have large complex eyes which allow them to see in almost every direction simultaneously. There are four wings and six legs. The shapes of the forewings and hindwings differ in dragonflies, but are similar in damselflies. When perched on a leaf or stem, dragonflies generally hold their wings spread wide, while damselflies hold their wings either together above their body or partially spread.

The wings and legs are connected to the body at the thorax. The abdomen is divided into ten hinged segments. The shapes and the number of abdominal appendages differ for males and females and for various species. Although dragonflies and damselflies are in separate scientific families, we will at times refer to them collectively in this brochure as "dragonflies".

Common Species Found At Wildflower Preserve



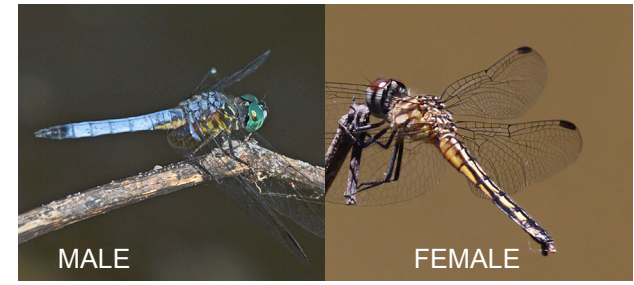
Green Darner

At 3" in length, the Green Darner is one of the largest dragonfly species we see regularly at Wildflower. The brightly colored males, with blue thorax and green abdomen, are regularly seen flying over the ponds and sparring with other males. The females, with green thorax and red abdomen, are less often seen, but can be spotted flying in tandem with the males during the egg laying process.



Eastern Pondhawk

The Eastern Pondhawk is a medium-sized dragonfly of about 1.7". Males and females are remarkably different in coloration. The male has green eyes, with a powdery blue body and white abdominal appendages. The female is brighter, with green eyes, green thorax and green and black striped abdomen. Young males initially look like females and change color gradually as they mature.



Blue Dasher

At first glance, the male Blue Dasher can be confused with the Eastern Pondhawk. However, the Blue Dasher is somewhat smaller, at 1.4" and there are several color differences visible with inspection. While both species have green eyes, the male Blue Dasher's thorax has brown and yellow striping, and the blue abdomen has a black tip. The female Blue Dasher isn't blue at all, her eyes are reddish brown, the thorax has brown and yellow striping and the abdomen is dark with yellow streaks.



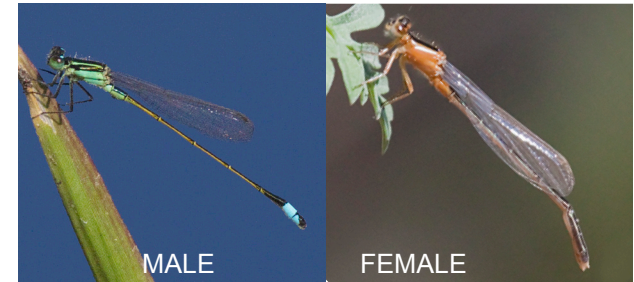
Eastern Amberwing

With a length of 0.9", the Eastern Amberwing, is one of our smallest dragonflies. The male has a golden brown body with amber wings. The female is similar, but her wings are clear with gold or dark spots. They are sometimes mistaken for wasps.



Black Saddlebags

When you see the Black Saddlebags in flight, the dark patches on the hindwings give the impression of "saddlebags" attached to this dragonfly's abdomen. Males and females have similar coloration. This 2.1" dragonfly patrols over water and fields, and seldom lands.



Rambur's Forktail

The Rambur's Forktail is a damselfly rather than a dragonfly. Note that the wings are held together over the body when perched and that the abdomen is very slender; both common characteristics for damselflies. With their slender profile, damselflies are hard to spot after they land. The male is green and black with blue at the tip of the abdomen. Some females have similar coloration to males while other females appear in shades of yellow, orange, or red. Both sexes are about 1.2" long.



Roseate Skimmer

The male Roseate Skimmer has a rose-colored abdomen and a deeper pink/lavender thorax. The female has a brown abdomen and a brown thorax with whitish streaking. Roseate Skimmers are about 2" long. They often hunt in meadows and fields.



Scarlet Skimmer

The Scarlet Skimmer is 1.6" long and is a native species of Asia that has been introduced in Florida and Hawaii. The male is a brilliant red. Females are golden in color, with a black streak running down the abdomen.

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