



IOWA DEPARTMENT OF NATURAL RESOURCES

Wildlife Diversity News

Conservation and Recreation

Dragonfly Diversity



Male and Female Common Green Darner, photos by Ryan Rasmussen

If you've spent any time at all around water, you've seen a dragonfly. Most of the time, we don't give them a second thought, other than hoping they eat lots of mosquitoes and stay away from our faces! Fortunately we don't have to worry about them stinging or biting us and although they do eat mosquitoes, they don't stop there!

Dragonflies as a group have been around for millions of years. Three hundred million-year-old fossils of distant relatives of modern dragonflies have been found with wingspans over 2 feet wide! That is a big insect...a big predaceous insect! I'm kind of glad they aren't around anymore. Our largest dragonflies today have wingspans less than 6 inches wide. Dragonflies are found on every continent except Antarctica. Approximately 3000 species are found in a variety of habitats

from the tropics all the way up to the Arctic Circle. Dragonflies are a very successful insect group!



The life cycle of dragonflies is a fascinating process. Males find a receptive female and they lock together in a posture called “in wheel” where the male keeps all other males away while mating occurs. The female then deposits her eggs on aquatic vegetation or woody debris by constantly dipping her abdomen into the water, often with the male still hovering nearby. After the eggs hatch, dragonfly larvae or nymphs live amongst aquatic vegetation and debris hiding and ambushing prey while trying not to become prey! The nymphs have a really interesting method of capturing prey. Their lower jaws have evolved into a sinister looking toothed apparatus that can rapidly snap out

to grab prey then retract back to the mouth of the dragonfly nymph; very much like the terrifying alien from the Aliens movies!

Nymphs eat a variety of aquatic invertebrates, tadpoles, and small fishes while molting several times before they are large enough to climb onto a plant stem and emerge as an adult dragonfly.

We have approximately 63 species of dragonflies in Iowa that are found in nearly every kind of water body. Some species are found in small ponds and wetlands, while others prefer larger lakes or rivers. They are found in a variety of colors and patterns depending on each species, with some colored blue and some red, some with spots and some iridescent. Some rare species called Snaketails are found only in the high-quality streams of northeast Iowa while another group called Skimmers are found nearly everywhere! Most adult dragonflies spend a few weeks

feeding and breeding around their respective water bodies before they die and the process begins again. A few species like our Common Green Darner will actually migrate several hundred miles in the fall and spring! Our dragonflies are voracious, eating nearly any kind of flying insect, including mosquitoes.



Male Common Whitetail

Some of our larger species eat other dragonflies, while birds, fishes, amphibians, reptiles, mammals and insects all eat their share of dragonflies.



Male Halloween Pennant

Dragonflies can be easily enjoyed by carefully observing them while walking around ponds, lakes, rivers, and wetlands in Iowa. They are strong fliers and difficult to capture, but close observation with binoculars is one of the best ways to get a good look. With the help of a

great variety of books and websites, anyone can become more proficient with dragonfly ID. Dragonflies are an ancient, fascinating group of insects that are an important part of our natural heritage!

To learn more about Iowa's Dragonflies check out this link:

Iowa's Dragonflies