

Backyard Briefs

A weekly column

By Judy Jessop, Nature Conservancy Volunteer

Dragonflies do not have a pupal stage (like butterflies), in which to spend time dormant while transforming from an aquatic insect with gills, to one that will breathe air and fly in the world above water. As a result dragonflies spend some time maturing after they come out of their final molt. The newly emerged dragonfly will be a bit awkward, the wings look glossy and fragile and it lacks the vibrant colors seen in more mature adult dragonflies. The newly emerged insect will spend some time away from the water while maturing (a few days to a couple of weeks, depending on the type of dragonfly). During this period the wings and body harden and the color of the eyes and body enhance.

When fully emerged in this new world the dragonfly is well equipped to survive. The huge eyes cover most of the head and 80% of the brain is devoted to analyzing visual information. It has special jaws well adapted for biting, the lower jaw can be extended from under the head, faster than most prey can respond, resulting in a fatal bite to the victim. The dragonfly's six legs are located near the head to aid in perching and catching prey and they have two pairs of wings that operate independently.

Dragonflies eat whatever suitable insect is abundant. They are known to hunt in groups whenever insects, such as termites, mayflies and gnats swarm. All dragonflies have healthy appetites, but females developing eggs are intensive feeders. Males are territorial, often patrolling for invaders throughout the day.

When mating, some dragonflies perch while others mate in flight. Competition during mating is often fierce. Some males will guard the female until she is ready to lay her eggs, while others guarantee that the female uses their sperm by remaining attached to her until she has laid at least some of her eggs. Other species of dragonflies are equipped with a "scoop" that removes the sperm of a rival male from the female's body before he transfers his own sperm to her. Once the eggs reach their watery home the next generation of dragonflies develops.

There are many other unusual things about dragonflies, for example recent evidence that they migrate. This has attracted people to observe and study them as a hobby—but that is another story I look forward to sharing with you soon.