

## **Creature Feature: Fall 2011**

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### **Fishing Spiders and Long-Jawed Orb Weavers**

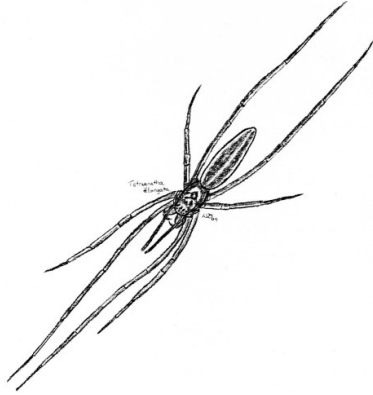
Nothing seems to stir up our primal fears more than spiders. In honor of our fall issue, I researched two of the more common and important spiders to the riparian ecosystem of our creek: fishing spiders and long-jawed orb weavers. The former group has some of our largest spiders in the region; the latter group has the largest fangs – the perfect pair to feed our Halloween nightmares.



Let's start with large and hairy. Despite their appearance, fishing spiders are not wolf spiders, but they are closely related. And no, they aren't related to tarantulas. Fishing spiders are members of the family Pisauridae, of which we have a number of representatives. The largest of these is *Dolomedes tenebrosus*, the hairy, brown and black spider that hangs out under rocks and logs and often finds its way into our basements and crawl spaces. Its body is often an inch long or more, and the female can have a leg span of 3 inches. While these guys are certainly large enough to deliver a painful bite, they are not poisonous.

Like their wolf spider cousins, fishing spiders are ambush predators. Unlike wolf spiders though, fishing spiders are capable of catching minnows and aquatic insects by clinging to vegetation that overhangs the water. *D. tenebrosus* is large enough to be able to capture and eat small frogs! If threatened, fishing spiders can actually dive into the water, breathing from the air bubbles that are held by their ample body hair. Another escape tactic is to simply run across the surface of the water, using the long hairs on their legs to spread their weight out over the surface tension of the water like a water strider. Another of the unique characteristics of these fascinating spiders is their maternal behavior. Like many ambush predators, they carry their egg sac around with them. When the eggs are ready to hatch, the female makes a "nursery" by folding some leaves and binding them with silk. The egg sac is placed inside this web and the female guards it until the spiderlings hatch. Like Charlotte's babies, the spiderlings are capable of fending for themselves once

they eat up the egg shells and silk and venture out of the nursery for a meal. Because of this behavior, some scientists call these arachnids “nursery-web” spiders.



Another important creek side predator is the long-jawed orb weaver, family Tetragnathidae, of which we have several species. These spiders can have almost as large a leg span as fishing spiders, but their bodies are long, slender and lightly colored, making them much less intimidating at first glance. However, they do tend to build their webs in colonies, and many of them can be found under a single overhanging branch. Since they are long-legged, a bunch of these guys running over your arms and torso when branch ducking around the shoreline can be a bit disconcerting. On closer examination, they have disproportionately large jaws and fangs, which give them a very nasty appearance. They are not aggressive however, and do not bite humans. They do catch a large number of aquatic insects, draping their webs in great numbers along streams where there are large hatches.