



Klamath Network Featured Creature

August 2008

Pacific Spiketail (*Cordulegaster dorsalis*)

FIELD NOTES:

General Description:

Pacific spiketail nymphs are hairy, stout, and have large jaws (technically called a *labium*, with *labial palps*) that resembles a spoon – except that the spoons have a serrated, jagged edge for catching prey. The nymphs reach a length of about 45-50 mm (about 2 inches).

The adult is large, with an abdomen up to 85 mm long (about 3 1/3 inches!) and an even larger wingspan up to 105 mm (about 4 inches). The abdomen is distinctive – black with yellow spots, and the midsection is black with angled yellow bands. Their eyes are a brilliant blue, almost touching each other on the back of the head.

Habitat:

The nymphs of this large dragonfly can be found in the bottom of streams that have sandy or silty substrates, especially in small woodland streams. The adults are often observed cruising up and down these streams – but are such strong flyers that they could even be spotted in your backyard – potentially miles from any aquatic habitat.

Behavior and Feeding:

The nymphs reside in silty stream bottoms, letting sand particles settle on their hairs. These hairs keep the sand from collecting on their skin, but give the added benefit of actually camouflaging the insect. This helps the nymph to ambush the other, unsuspecting aquatic insects that it feeds upon.

When disturbed, the nymph will escape predators (mostly fish) by uptaking water into its abdominal cavity, and squirting it out under high pressure (kind of like a jet engine).



Behavior and Feeding cont:

The adults will cruise the skies, searching out prey, especially common flies, and yes, those pesky mosquitoes. The adults are so agile and fast, that much of their diet is still unknown... A visual predator, their eyes give them almost a 360° field of vision. Which is why sneaking up on them is very, very difficult.

Reproduction and Development:

The nymphs will live and develop in the aquatic stage for as long as 2 or 3 years, constantly shedding their skin as they grow (up to 14 times!) When they have reached their biggest stage as nymphs, and are ready for adulthood, they crawl out of the stream and shed their skin, emerging as an adult. The adult lifestage then will feed and mate, before dying in an unknown period of time – although other dragonflies last as long as 4 months, and will even hibernate in winter.

Distribution:

The Pacific spiketail, as indicated by its name, is endemic to the states bordering the Pacific Ocean, but can also be found as far inland as Utah and Colorado. In the southwest, there is a different subspecies (*C. d. deserticola*). Other members of the genus *Cordulegaster* can be found throughout the continental United States, but are scarce in the Midwest.

Where to see it in the Klamath Parks:

There is potential to see this strong flyer in any of the Klamath parks – but we've seen it in the middle of towns – so start by looking in your backyard!

More Information:

Looking for odonates (dragonflies and damselflies) is starting to become similar to birdwatching – check out: <http://www.odesforbeginners.com/>