Hunting spiketail dragonflies in Virginia

There are three genera in Family Cordulegastridae (Spiketails) worldwide: *Anotogaster*; *Cordulegaster*; and *Neallogaster*. Only <u>Genus *Cordulegaster*</u> is found in the United States of America.

Four species of *Cordulegaster* are found in the Commonwealth of Virginia: Brown Spiketail (*C. bilineata*); Tiger Spiketail (*C. erronea*); Twin-spotted Spiketail (*C. maculata*); and Arrowhead Spiketail (*C. obliqua*).

It's all about habitat, habitat, habitat.

In the world of <u>odonates</u>, there are habitat generalists and habitat specialists. Spiketail dragonflies are habitat specialists.

Dennis Paulson's description of the habitat for each species of spiketail found in Virginia is shown in the following list. Notice the list is generic, meaning, specific names are not given. As you read the descriptions, look for commonalities among the habitats.

1. Cordulegaster sp.

Habitat: Small to midsized rocky streams with good current and muddy pools, typically in forest. Occasionally seen patrolling on larger rivers. Source Credit: Paulson, Dennis (2011-12-19). <u>Dragonflies and Damselflies of the East</u> (Princeton Field Guides) (Kindle Locations 7058-7059). Princeton University Press. Kindle Edition.

2. Cordulegaster sp.

Habitat: Small woodland streams. Source Credit: Paulson, Dennis.

<u>Dragonflies and Damselflies of the East</u> (Princeton Field Guides) (Kindle Location 7145). Princeton University Press. Kindle Edition.

3. Cordulegaster sp.

Habitat: Small swift streams and soft-bottomed muddy seeps in forest, also streams reduced to series of small pools during drier weather. As in some other spiketails, skunk cabbage often present. Source Credit: Paulson, Dennis. <u>Dragonflies and Damselflies of the East</u> (Princeton Field Guides) (Kindle Locations 7081-7082). Princeton University Press. Kindle Edition.

4. Cordulegaster sp.

Habitat: Small forest streams and seeps, often with skunk cabbage and interrupted fern. Source Credit: Paulson, Dennis.

Dragonflies and Damselflies of the East (Princeton Field Guides) (Kindle Locations 7028-7029). Princeton University Press. Kindle Edition.

Commonalities

Did you notice the habitats for all four species of spiketails found in Virginia have two characteristics in common?

small streams, sometimes seep-fed located in the forest/woodlands

When we say small streams, we mean *small* — *much smaller* than you might think! Although Twin-spotted Spiketail *can be found* along mid-size streams (often near the confluence of a smaller stream with a mid-size stream) we think Twin-spotted are more common on small streams.

Answer Key

The following list shows the species of spiketail that matches each of Dennis

Paulson's habitat descriptions.

- 1. Twin-spotted Spiketail (Cordulegaster maculata)
- 2. Brown Spiketail (Cordulegaster bilineata)
- 3. Arrowhead Spiketail (Cordulegaster obliqua)
- 4. Tiger Spiketail (Cordulegaster erronea)

The common name for each species is hyperlinked to a page in <u>Walter Sanford's Photoblog</u> featuring *many photographs* of that species. The scientific name for each species is linked to Mike Boatwright's "<u>Spiketails</u>" gallery of photographs on Facebook; click on each photo to see the identity of the spiketail species.

The spiketail species in the preceding lists are shown in chronological order of emergence in Virginia, with Twin-spotted being the earliest and Tiger being the latest. There is some overlap of adult flight periods for some species. Online, interactive <u>Odonate Calendars</u> help you know when to be on the lookout for each species.

I found a small woodland stream. Where should I look for spiketails?

If you're planning to hunt for spiketails during the 2022 odonate season, the time is now to start scouting **small streams in the forest** such as the one shown in the following photo.

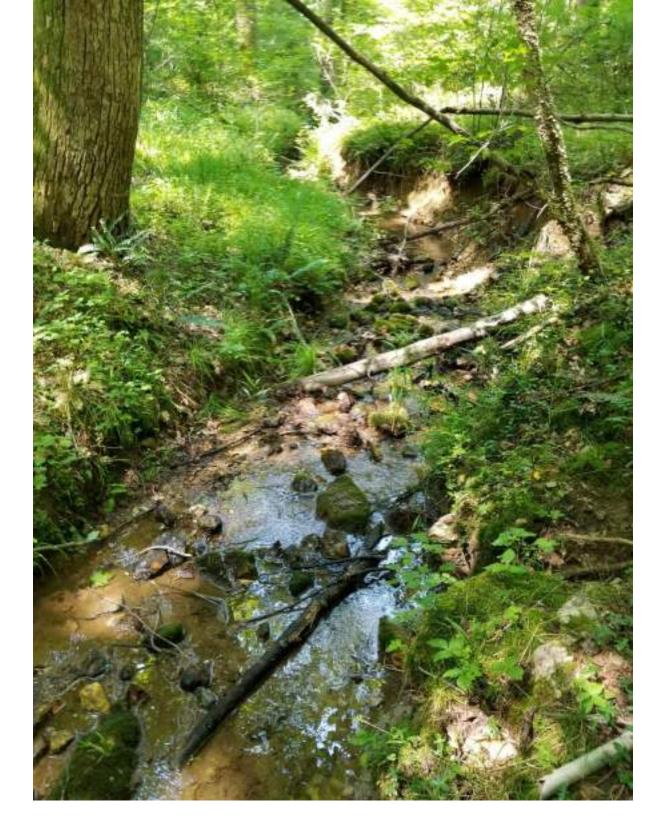


Photo used with written permission from Mike Boatwright.

Our advice: Focus on finding the right habitat first, rather than finding a particular species of spiketail. Revisit the same small stream(s) periodically throughout the entire odonate season to see which species prefer the stream(s). Be peristent — persistence pays when hunting spiketails!

Twin-spotted Spiketail and Brown Spiketail can be found perching either in fields or along trails located near the small streams from which they emerge. In our experience, Brown Spiketail spends the most time perching of all species of spiketails found in Virginia.

Arrowhead Spiketail and Tiger Spiketail fly long patrols back-and-forth along the stream channel itself, approximately six inches (6") above the water level. Arrowhead Spiketail stops to perch at the end points of its patrol, often in a sunny clearing or field. On the other hand, we think it's safe to say Tiger Spiketail perches infrequently.

Do other types of odonates live in the same habitat?

Seeps and small seep-fed streams in the forest are perfect places to look for <u>Gray Petaltail dragonfly</u> (*Tachopteryx thoreyi*), another habitat specialist found in Virginia, as well as spiketails such as Arrowhead and Tiger.



Photo used with written permission from Mike Boatwright.

Related Resources

World Odonata List (hyperlinked from Odonata Central)

Habitat for Tiger Spiketail dragonfly (featuring an embedded video that shows ideal habitat for *C. erronea*: A clean, seep-fed small stream in the forest.

Habitat for Tiger Spiketail dragonfly (a photo-illustrated blog post featuring a

different location)

<u>It's all about habitat, habitat, habitat.</u> (a photo-illustrated blog post related to seep-fed streams)

<u>Collecting odonate exuviae</u> (Spiketail exuviae are rare treasures! If you see one then *please collect it.*)

Editor's Note: My good friend and odonate hunting buddy <u>Mike Boatwright</u> and I collaborated to share some of the wisdom gleaned from our experiences hunting spiketail dragonflies in Virginia. Thanks, Mike — couldn't have done it without you!

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Tags: <u>Cordulegaster bilineata</u>, <u>Cordulegaster erronea</u>, <u>Cordulegaster maculata</u>, <u>Cordulegaster obliqua</u>, <u>Family Cordulegastridae</u> (<u>Spiketails</u>), <u>Family Petaluridae</u> (<u>Petaltails</u>), <u>Gray Petaltail dragonfly</u>, <u>habitat specialist</u>, <u>Tachopteryx thoreyi</u>

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