Dragonflies of the Ottawa-Gatineau Region

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Species Profiles 15 and 16

The Beaverpond and Spiny Baskettails (*Epitheca canis*) and (*Epitheca spinigera*)

Family: Corduliidae

Immature Male Spiny Baskettail. *This species and its close relative, the Beaverpond Baskettail, are small dragonflies that are relatively common in the right habitats.*

The warm weather has arrived, and with it our first dragonflies of the season. Some of the earliest dragonflies to emerge in the spring are the emeralds (Family Corduliidae), in particular a group known as the baskettails. They do not migrate here from further south, as does the Common Green Darner, but emerge as larvae (usually called nymphs) from local ponds and transform into winged predators close to where their life cycle began. The first baskettails appear in mid-May, usually after a warm spell which triggers the final stage of metamorphosis.

Baskettails (genus *Epitheca*) are named for the large egg mass the female carries at the tip of the abdomen, as if in a basket, after mating with a male. She may fly for some time with her "basket" of eggs, looking for a suitable place in the water in which to deposit them. Once she finds such a place, she descends to the water's surface and brings the tip of her abdomen, still containing the egg mass, into contact with the water. As she flies, she pulls the mass along, and a long string of eggs is deposited onto the emergent vegetation.

Immature Female Beaverpond Baskettail. *The pair of appendages at the tip of the abdomen, called cerci, identify this as a female. The cerci of the Beaverpond Baskettail are shorter than those of the Spiny Baskettail, though size can be difficult to judge.*

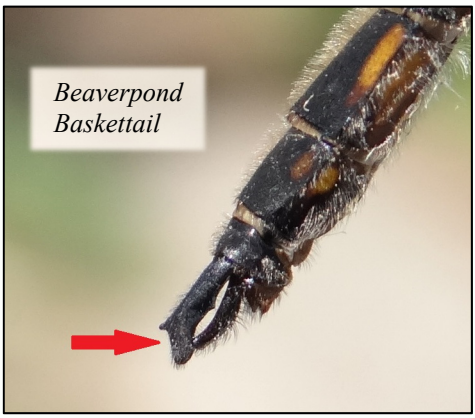
Baskettails can be distinguished from all other local dragonflies by the thick, black abdomen with yellowish-orange stripes along the sides. In males, the abdomen is narrower at the top and bottom, giving it the shape of a spindle. Their eyes are reddish-brown on top and grey at the bottom when they emerge, and become green or bluish-green at maturity. While most species in the emerald family have a beautiful green metallic thorax, the baskettails have a brown thorax which is covered in golden hairs, giving it a fuzzy appearance.

Mature Male Beaverpond Baskettail*. This front-view image shows the brilliant green eyes that gave the emerald family its name.*

There are four species of baskettail in our region, and the two most common species are also the most similar in appearance. Fortunately, they are not so identical that they must be examined in the hand to be identified; a close look or detailed photograph from the appropriate angles of a perching baskettail should be sufficient to identify it to species. However, as members of the emerald family, they spend most of their time in flight, either hunting for food or mates, so sometimes the only way you can get a good look at them is by catching them!

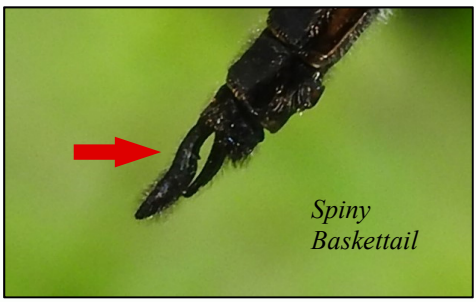
The upper clasper of Beaverpond Baskettail is very angular compared to the other baskettail species, with the tip pointing down at a sharp angle and a small dorsal tooth projecting upward at the corner. A second smaller tooth protrudes downward from the center of the appendage.

*A side view is best to identify males as the distinct shape of the claspers can be seen. In the **male Beaverpond Baskettail**, the tip points downward at a sharp angle.*



In comparison, the upper clasper of the Spiny Baskettail is sinuous, like the shape of a tilde or sideways "S" where the end turns upward. A single sharp tooth protrudes downward from the upper clasper close to the base.

*The upper clasper of the **male Spiny Baskettail** curves upward at the end. Note the single tooth-like projection in the middle of the first curve.*



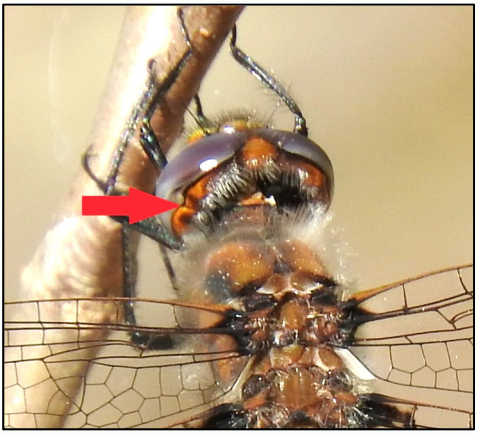
ID Hints

- Dull brown thorax covered in golden hairs
- Black abdomen with yellowish-orange stripes running down the sides; the abdomen is thick and straight in females and spindle-shaped in males
- Very small black patch at the base of the hindwings
- Reddish-brown eyes in freshly emerged individuals
- Green or bluish-green eyes in mature individuals
- Perch hanging from vegetation with the abdomen pointing down at a 45° angle
- The wings in some individuals may have an amber tint
- The upper clasper of the male Beaverpond Baskettail angles downward
- The upper clasper of the male Spiny Baskettail is a sinuous curve pointing upward

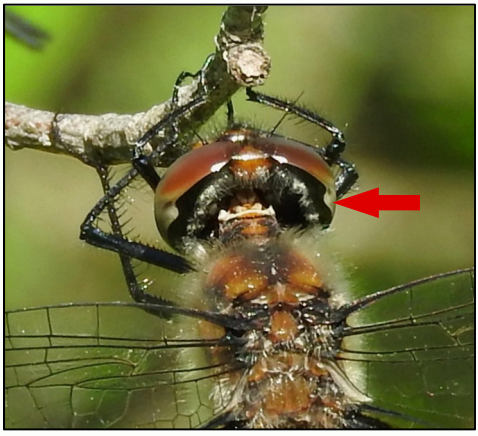
Females are more difficult to identify as both species have a pair of appendages extending from the tip of the abdomen. The terminal appendages of the Spiny Baskettail are long and close together, while those of the Beaverpond Baskettail are short and close together. Size and distance can be difficult to judge if only one species is present, so a better way to identify one is to catch it and look on the underside of its body to examine the shape of the genital plates – which are distinctive in each species.

***Mature Female Spiny Baskettail**. The appendages are longer than those of the Beaverpond Baskettail. They do not always flare out at an angle; she may have been opening and closing them in reaction to being caught.*

There is one other way of distinguishing between the Spiny and Beaverpond Baskettails that doesn't rely on magnified views of the dragonfly's naughty bits, and in this case a view from behind is the best way to identify both males and females. The colour of the back of the eyes is a seldom-described but useful field mark, particularly if you manage to photograph the insect from behind: in Spiny Baskettails the colour is black, while in Beaverpond Baskettails it is yellow, as shown in the photos below.



*Note the yellow area behind the eyes in this **Beaverpond Baskettail**. Though this is a relatively small structure between the eye and a ring of short, golden hairs, it stands out in photographs.*



*The area behind the eyes of the **Spiny Baskettail** is black. This is a relatively easy field mark to see in photos and in the field with a good look through binoculars.*

When and Where to Look for Beaverpond and Spiny Baskettails

Both baskettail species breed in lakes, ponds and bog ponds in wooded habitats, with the Beaverpond Baskettail preferring open water with more emergent vegetation. Both males and females cruise over open water, but they are easier to find patrolling sunny woodland openings, along trails, or flying over grassy spaces near the water. Unlike some other dragonflies that hunt for food on the wing, they often perch on tree branches and plant stems at an angle, allowing good views or photographs. They start appearing in good numbers in mid-May, and fly through the month of June. Any dragonfly you encounter flying over open areas in Greenbelt trails near water in late spring is likely to be either a baskettail or one of its close relatives. Both species can form large swarms where food is abundant, particularly later in the day, with other species accompanying them.

The Beaverpond Baskettail has a slightly earlier season than the Spiny Baskettail, which can fly into early July. Although the *Checklist of the Dragonflies and Damselflies of Ottawa-Gatineau (2008 Update)* (Bracken and Lewis 2008) lists the Beaverpond Baskettail as common and widespread and the Spiny Baskettail as uncommon, I have seen both species fairly regularly during their flight season. In recent years, I have found more Spiny Baskettails than Beaverpond Baskettails in my usual west-end haunts! The South March Highlands is a great place to see Beaverpond Baskettails, while Roger's Pond in Marlborough Forest usually has both species.

Although Bracken and Lewis describe Spiny Baskettails as rare at Mud Lake in their 2010 *Annotated List of the Odonata of the Britannia Conservation Area and Environs (Ottawa, Ontario),* they have become more common in recent years. I photographed many Spiny Baskettails hanging from the trees in May 2016 and on May 14, 2022, I witnessed a mass emergence of these dragonflies on both the north and south shores of the lake. An estimate of around 50 different individuals in various stages of transformation from nymph to teneral to immature adult were present. After such an emergence, the tenerals spend some time hanging up in trees or patrolling sunny openings before dispersing. However, either species can pop up anywhere where there is water; I've seen them at stormwater ponds, at NCC parking lots and on trails along Shirley's Bay.

When dragonflies emerge from the larval shell (attached to the leaf), they are usually translucent with only a small amount of colour in their bodies. The wings are milky white and gradually become transparent. This side angle clearly shows the shape of the claspers.

Possible Confusables

The Common Baskettail is the most similar species to the Beaverpond and Spiny Baskettails. However, the black patches at the base of the hindwings are much larger in this species, giving it a similar look to the saddlebags of southern Ontario while flying. This field mark is variable, however, and can be smaller in individuals found in other parts of its range. It tends to fly later into the season than the Spiny and Beaverpond Baskettails, so a baskettail seen in mid-July or early August is probably a Common Baskettail.

← Common Baskettail. *Note the large dark hindspot at the base of the hindwings.*

The Prince Baskettail has similar markings along the abdomen, but is much larger than the other baskettails and its abdomen looks proportionately longer and more slender in appearance. The dark patches on the wings are more elaborate; the black spots at the base, tip and center of its wings are noticeable in flight as it glides high beyond the reach of a net. This species also has a later flight season than the other baskettails, with some individuals persisting into early September! It is also much less likely to perch, in my experience, though when it does it hangs vertically and tends to curl the tip of its abdomen.

Prince Baskettail. → *Note the dark markings at the base, center, and tip of the wings. This is the only baskettail to perch vertically with its abdomen curled.*

Literature Cited

Bracken, B., and C. Lewis. 2008. A Checklist of the Dragonflies and Damselflies of Ottawa-Gatineau. Trail & Landscape 42(3): 115-131.

Bracken, B., and C. Lewis. 2010. Annotated List of the Odonata of the Britannia Conservation Area and Environs (Ottawa, Ontario). Trail & Landscape 44(1): 26-39.