

Welcome to the River Jewelwing Mini-Museum.

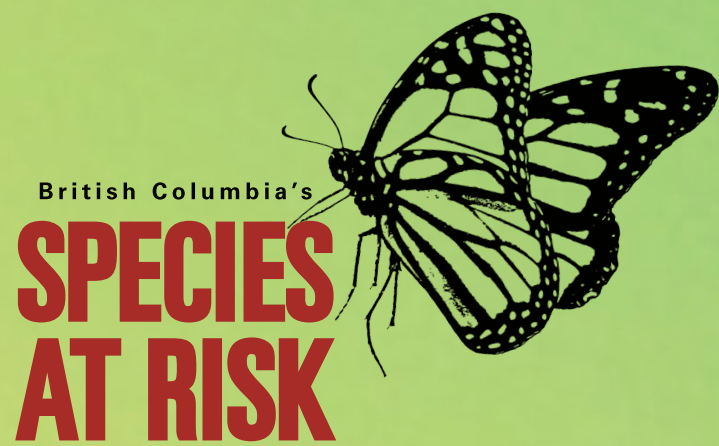
My name is Joel, and I'm the curator of entomology at the Royal BC Museum. I study insects and spiders.

There are thousands of different insect and spider species in British Columbia, and every one is unique. We have nearly half a million insects and spiders in our collection, including more than fifty thousand dragonflies and damselflies. Today I want to introduce you to a special damselfly, the River Jewelwing, which gets its name from its river habitat and its glittering appearance.

We can learn a lot about insects by looking at their bodies and studying how they live. We might find out that they can do something that no other animal can. Maybe they live in a special place. Maybe they're very rare.



DR. JOEL GIBSON,
CURATOR OF ENTOMOLOGY
AT THE ROYAL BC MUSEUM



A Travelling Exhibition

Presented by



ROYAL BC MUSEUM

River Jewelwing

Glittering predator



Fun with **Form** and **Function**

All dragonflies and damselflies are predators: they eat other insects to survive. Adults snatch flying insects out of the air using their basket-like legs. Their larvae live underwater, where they eat small swimming animals—even fish!

Adult River Jewelwings have special adaptations that allow them to grab and eat insects while flying. Huge eyes let them see everything around them. Extra-spiny legs are good for catching tiny flies like mosquitoes.

River Jewelwing larvae have long legs to help them move along stream bottoms. They also have a labium, a sort of lower jaw that springs out to capture aquatic creatures.

River Jewelwings live in two worlds

As larvae, these insects live, eat and grow underwater. This stage can last for two or three years. When they're ready to change into adults, they crawl out of the water onto shoreline plants.

The adults fly around near rivers and streams, eating prey and looking for mates. They emerge from the water between June and September and live for three or four weeks.

Jewelwing damselflies have complicated mating behaviour. Males perform displays to impress females. The displays, which include fluttering, tail-raising, wing-clapping and skimming the surface of the water, show that the male has chosen and defended a high-quality egg-laying site.

After mating, the female crawls under the water's surface and spends up to 30 minutes laying eggs on submerged plants.



Widespread, but rare

River Jewelwings live in all 10 Canadian provinces and in the Northwest Territories. Their presence in BC was confirmed only in 1998, when a small number were seen in near Trail. Since then, they have been found at 100 Mile House in the Cariboo and in the far northeast of the province, including in the Peace River watershed.

Why are River Jewelwings limited to certain locations?

River Jewelwings need streams that are large enough to support underwater plants but not large enough to have strong currents. All damselflies need vegetation surrounding the river to support the insects that they feed on. Most importantly, damselflies are sensitive to pollutants released into rivers. Rivers that meet their needs are more common in the lowland plains of the far northeast than elsewhere in BC.

