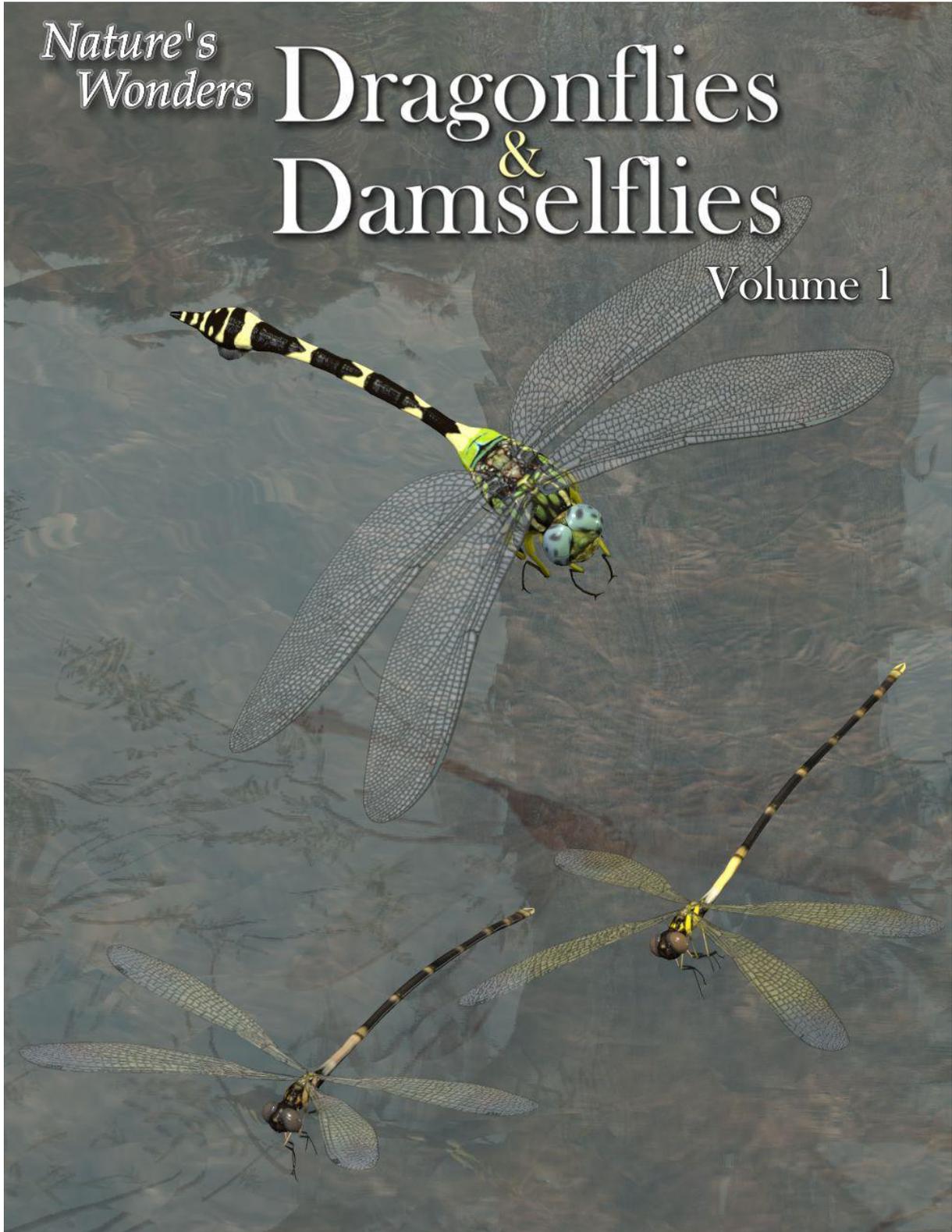


*Nature's
Wonders*

Dragonflies & Damselflies

Volume 1



A 3D Model set by Ken Gilliland

Nature's Wonders

Dragonflies & Damselflies

of the World Volume I

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Nature's Wonders

Dragonflies & Damselflies

of the World Volume I

Introduction

Dragonflies and Damselflies are among the most ancient insects on the planet. While these insects make the top 5 in beloved bugs along with ladybugs and butterflies, dragon and damselflies are efficient and ruthless killers. Their order, *Odonata*, which means the “toothed one” in Greek, refers to dismembering their prey adeptly with their mandibles and eating them while still in the air.

This add-on set has 4 species of dragonflies and 4 species of damselflies that are found throughout the world. Some of the species included in this volume set themselves apart by uniqueness such as the Australian Tiger with its clubbed tail and tail fins or the Mangrove Darner; a damselfly which is larger than most dragonflies. Not all dragonflies and Damselflies have clear wings. This set includes the 12-spot Skimmer (with 3 black and 2 white patches on each wing), the Banded Demoiselle (with black spots on the ends of the wings) and the Ebony Jewelwing (with smokey-black wings). All and all, you'll find each of the species represented is more than just another dragonfly or damselfly.

Overview and Use

The set is located within the **Animals : Nature's Wonder** folder. Here is where you will find a number of folders, such as **Manuals**, **Resources** and **Fauna Libraries**. Let's look at what is contained in these folders:

- **Fauna Libraries:** This folder holds the actual species and poses for the "premade" fauna. The fauna for this set can be found in the following folder(s):
 - **Insects/Damselflies of the World**
 - **Insects/Dragonflies of the World**
- **Manuals:** Contains a link to the online manual for the set.
- **Props:** Contains any props that might be included in the set
- **Resources:** Items in this folder are for creating and customizing your fauna included in the set
 - **... Based Models:** This folder has the blank, untextured model(s) used in this set. These models are primarily for users who wish to experiment with poses or customize their own species. When using physical renderers such as Iray and Superfly, SubD should be turned to at least “3”. For DAZ Studios 3Delight renders, the SubD must be turned from the “High Resolution” setting to the “Base” setting (otherwise some areas will render incorrectly transparent).

Loading a Damselfly or Dragonfly using Poser

1. For this example, we'll create the Scarlet Meadowhawk.
2. Load Poser, select the FIGURES library and go to the "Animals", "Nature's Wonders" and then the Nature's Wonders Fauna Libraries Insect folder.
3. Go to the Dragonflies of the World folder and select the Firefly or Superfly sub-folder.
4. Select the Scarlet Meadowhawk (or a dragonfly of your choice) and load it by clicking the mouse.

Loading a Damselfly or Dragonfly in DAZ Studio

1. For this example, we'll create the Scarlet Meadowhawk.
2. Load DAZ Studio and go to the "Animals", "Nature's Wonders" and then the Nature's Wonders Fauna Libraries Insects folder.
3. Go to the Dragonflies of the World folder and select the Firefly or Superfly sub-folder.
4. Select the Scarlet Meadowhawk (or a dragonfly of your choice) and load it by clicking the mouse.

While the Dragonfly and Damselfly base models share many similar UV coordinates **their mapping is not interchangeable**. There are significant differences in the wing and some mapped hair materials. Applying a damselfly texture to the dragonfly model or vice-versa, will create mismatched areas.

Sizing & Poser Issues

An issue that can appear when rendering in Poser, with only a dragonfly or damselfly (no other items) in the scene, is that it will produce a default square shadow. It is a known bug within Poser. To correct this issue, include a second larger item off-screen and the shadows will render correctly.

Emperor *Anax imperator*

Type: Dragonfly

Range: This dragonfly is found throughout Africa and through most of Europe, the Arabian Peninsula, and south-western and central Asia. Since 2000, its range has expanded in Europe, both northwards and to higher altitudes.

Habitat and Ecology: They breed in a variety of aquatic habitats from large ponds to dykes, but they require a plentiful supply of vegetation in the water.



Size: Total Length: 78 mm (3.1 inches); abdomen: 60-65 mm (2.36 to 2.56 inches); hindwing: 106 mm (4.2 inches).

Description: After moulting from their larval stage, both sexes, when they first emerge, appear pale green with brown markings. The legs are brown with a yellow like base. Wings are born black but grow yellow-brown with age. Males have a sky blue abdomen marked with a diagnostic black dorsal stripe and an apple green thorax. The thorax and head of a male is green and their prominent eyes are blue. Females have similar markings but they are mainly green.

Rarity and Status: This dragonfly has a wide distribution and is not threatened.

Australian Tiger

Ictinogomphus australis

Type: Dragonfly

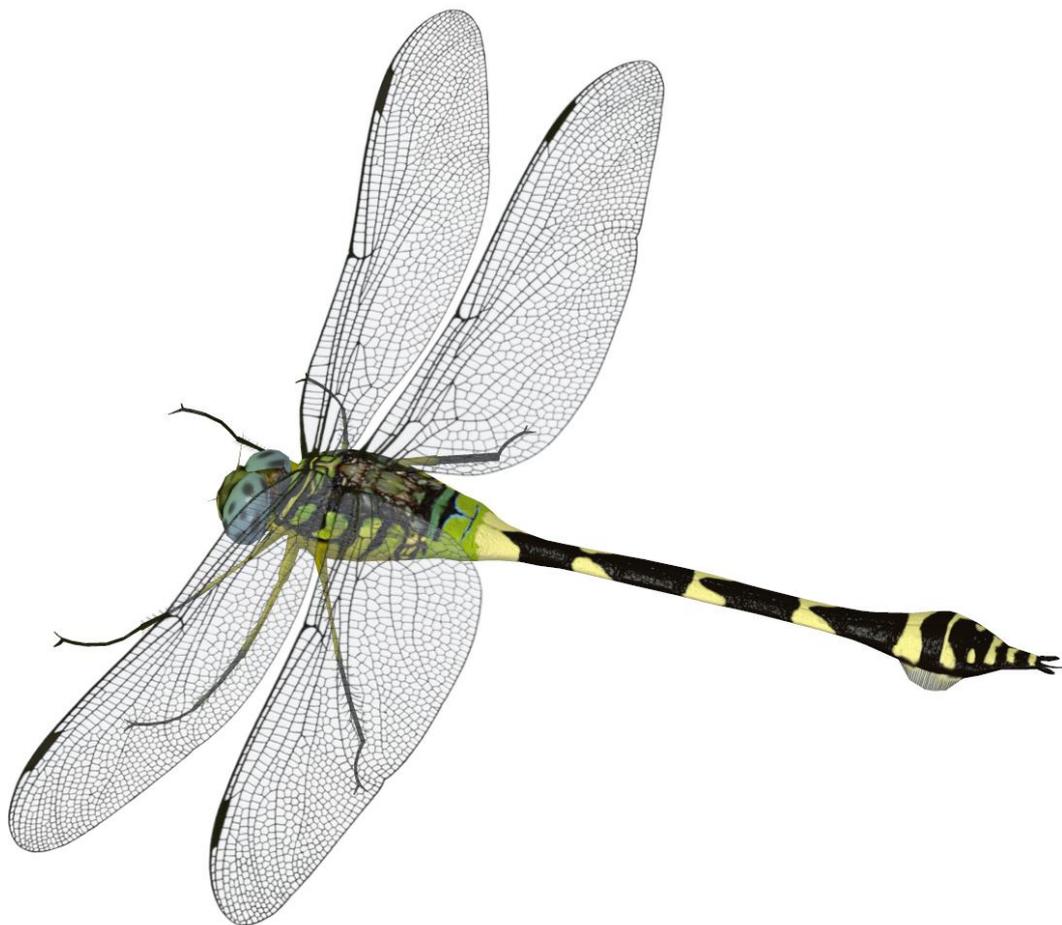
Range: Occurs in Australia; their range arcs from about Broome, Western Australia along the north of the continent to Point Hicks on the south-east corner.

Habitat and Ecology: It is found near rivers, lagoons, lakes and ponds.

Size: Total Length: 70 mm (2.76 inches); abdomen: 55-60 mm (2.17 to 2.36 inches); hindwing: 100 mm (3.94 inches).

Description: They have clear wings and are yellow and black in color. The males are identified from females by two curved flaps below segment eight of the abdomen.

Rarity and Status: This taxon has not yet been assessed by the IUCN Red List for rarity or endangerment.



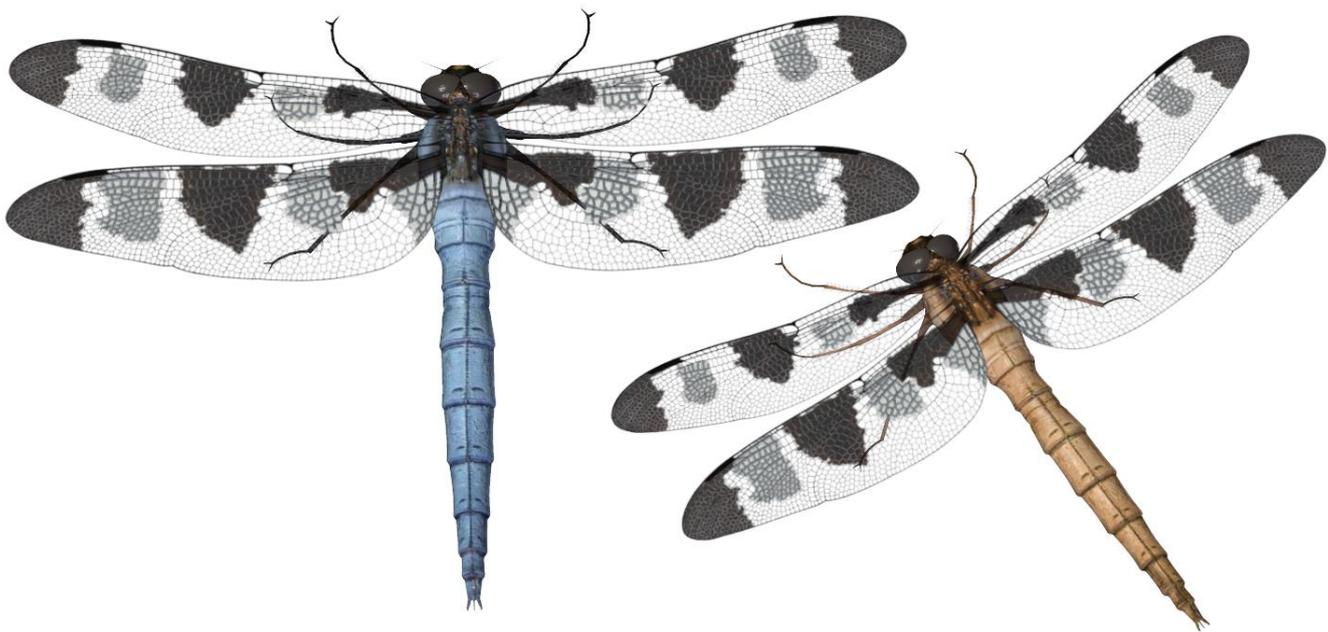
Twelve-spotted Skimmer *Libellula pulchella*

Type: Dragonfly

Range: Occurs in North America; contiguous U.S. and Southern Canada.

Habitat and Ecology: It is found near rivers, lagoons, lakes and ponds.

Size: Total Length: 50 mm (2 inches); abdomen: 33-36 mm (1.3-1.42 inches); hindwing: 100 mm (3.94 inches).



Description: Each wing has three brown spots. In adult males, additional white spots form between the brown ones and at the bases of the hindwings; it is sometimes called the ten-spot skimmer for the number of these white spots. Females are tan in color.

Rarity and Status: This dragonfly has a wide distribution and is not threatened.

Swordbearer Emperor

Anax gladiator

Type: Dragonfly

Range: Africa; found throughout Central and Southern Africa.

Habitat and Ecology: This species inhabits streams and small rivers, rather than standing water. Water flow can be fast but there are always calm sections.

Size: Total Length: 80 mm (3.15 inches); abdomen: 65 mm (2.36 to 2.56 inches); hindwing: 106 mm (4.2 inches).

Description: They have an unmarked forehead, reddish femora contrasting with the black tibiae and a broader cerci (hence the Swordbearer (*gladiator*) naming). The speratus is entirely orange to red with the frons and thorax remaining green.

Rarity and Status: This dragonfly has a wide distribution and is not threatened.



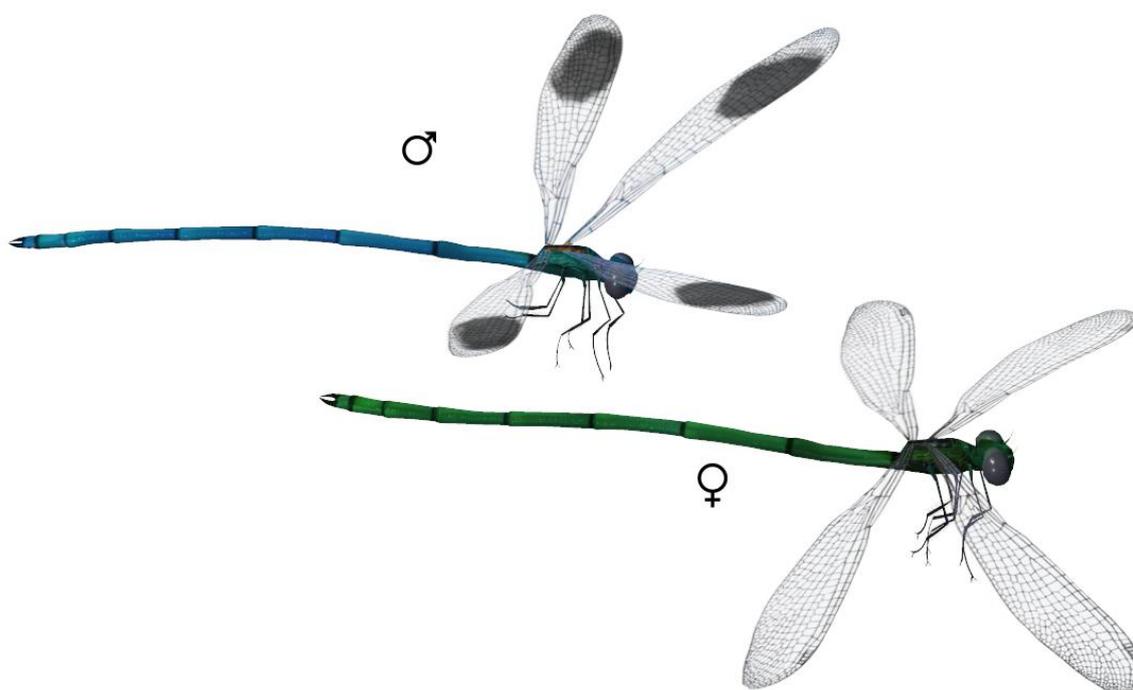
Banded Demoiselle

Calopteryx splendens

Type: Damselfly

Range: Europe; a common species throughout much of Europe but is absent from the South of France and Iberia (where it's replaced by *Calopteryx xanthostoma*) and from most of Scandinavia.

Habitat and Ecology: This species has a preference for fairly wide, slow-flowing and sunny streams and rivers with a reasonably good water quality.



Size: Total Length: 49-51 mm (1.93 to 3 inches); abdomen: 33-40 mm (1.3 to 1.57 inches); hindwing: 27-36 mm (1 to 1.4 inches).

Description: The species' most distinctive features include the yellowish-white underside of the last three segments of the male's abdomen, the dark spot which runs through his wings and which extends from the node almost all the way through to the wing tip. Females are larger, have an all-green body and clear wings with a white pseudoptero stigma (edge of the outer wings).

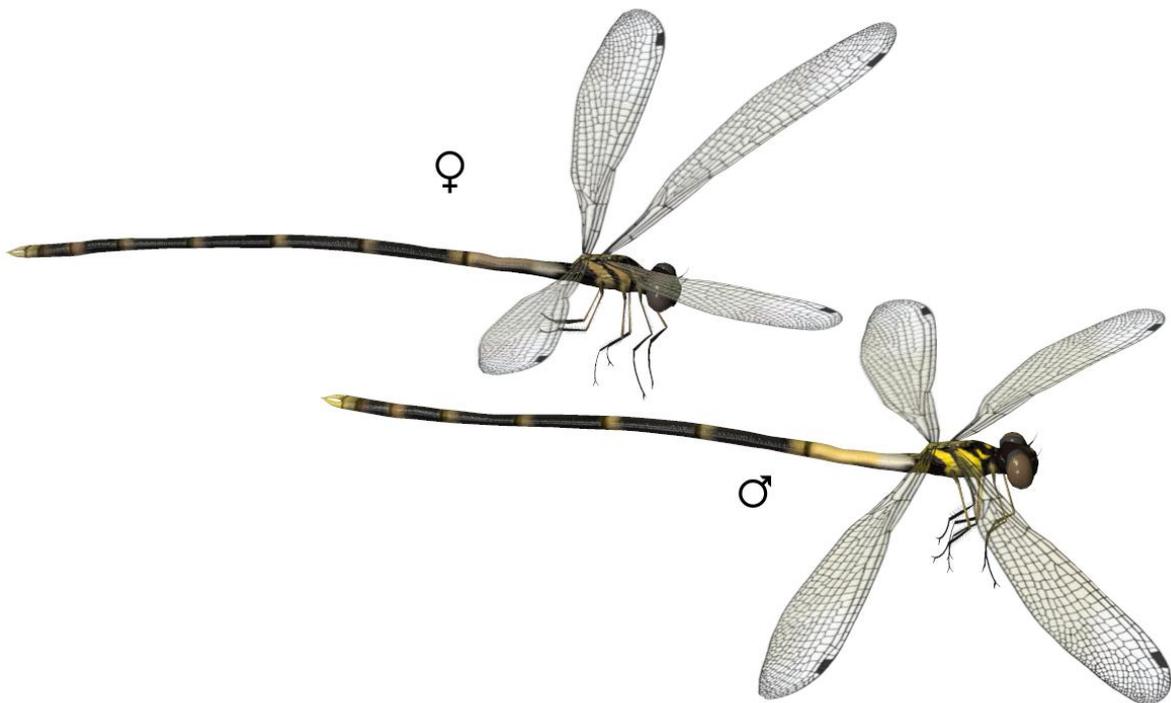
Rarity and Status: This damselfly has a wide distribution and is not threatened.

Orange Threadtail *Nososticta solida*

Type: Damselfly

Range: Australia; Orange threadtails are found in eastern Australian States: Queensland, New South Wales, Australian Capital Territory and Victoria.

Habitat and Ecology: Orange threadtails can be found near semi-shaded running water, and usually rest on plants at the water's edge. They may be seen all year round. In Victoria, they occur at lower altitudes during summer, though further north they can be seen in spring and autumn.



Size: Total Length: 35 mm (1.4 inches); abdomen: 27-29 mm (1 to 1.14 inches); hindwing: 29-31 mm (1.14 to 1.22 inches).

Description: The male threadtails have an orange-yellow thorax with black patterns. Their abdomen is narrow, black in color with yellow strips. There is a yellowish tint to the wing membranes where they join at the thorax. Females are the same size as the males. They are pale brown in color with the same black patterns the males have on the thorax and abdomen.

Rarity and Status: It is locally common and not threatened.

Mangrove Darner

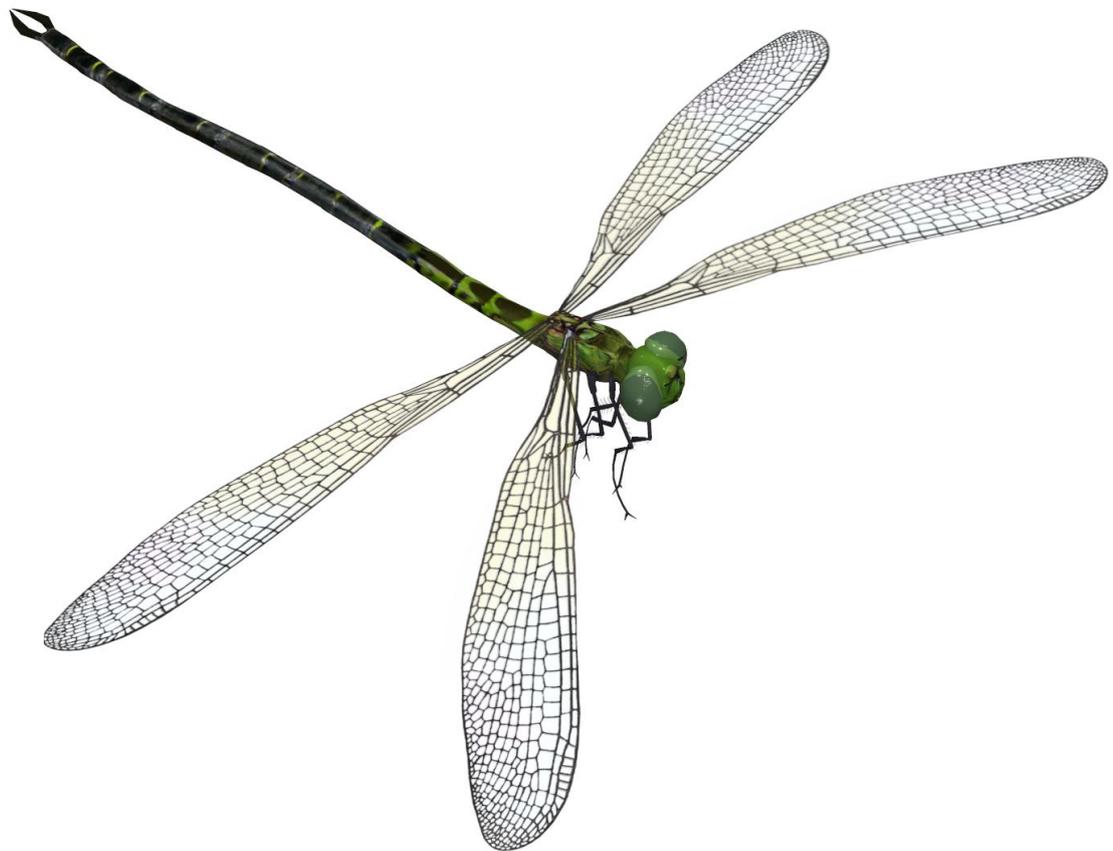
Coryphaeschna viriditas

Type: Damselfly

Range: North America; found in the Southeastern U.S., Mexico and Central America.

Habitat and Ecology: This species is associated with coastal mangroves and is suspected to use small freshwater pools for breeding. It is also found in small streams and tropical forest ponds.

Size: Total Length: 76-83 mm (3-3.26 inches); abdomen: 50-57 mm (2 to 2.24 inches); hindwing: 50 mm (2 inches).



Description: This damselfly is easily as large as the bigger dragonflies. The male's thorax is completely green and his abdomen is brown with green patterns on each segment. The forehead is also green with a black mark in the shape of "T". In the female, the thorax is brown and the abdomen is dark brown with slight brownish green patterns. This species is distinguished from *Coryphaeschna adnexa* by its larger size.

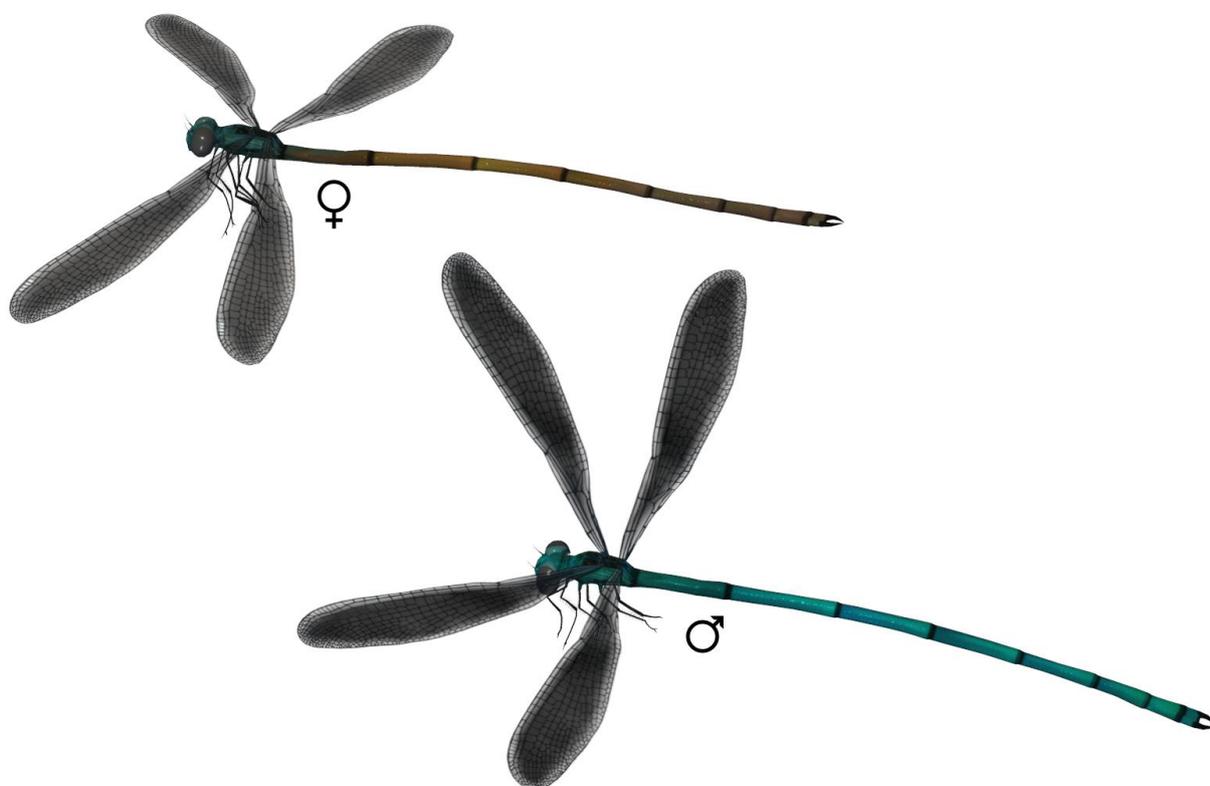
Rarity and Status: It is locally common and not threatened.

Ebony Jewelwing *Calopteryx maculata*

Type: Damselfly

Range: North America; found in the eastern U.S. and southeastern Canada, ranging west to the Great Plains.

Habitat and Ecology: Occurs near cleaner and faster-moving streams that run through sun-dappled forest openings. It is sometimes found in meadows near forests, but always close to water. This damselfly species can be seen almost year-round in some regions



Size: Total Length: 39-57 mm (1.5 to 2.2 inches); abdomen: 30-47 mm (1.2 to 1.8 inches); hindwing: 25-37 mm (1 to 1.45 inches).

Description: This damselfly is larger than most dragonflies. The male has a metallic blue-green body and black wings. The female is duller brown with smoky wings that have white spots near the tips. The naiad is pale brown with darker markings.

They are short-lived, usually only living as a flying adult for about two weeks.

Rarity and Status: It is locally common and not threatened.

Special Thanks to:

.. to my beta tester, FlintHawk

Sources:

Wikipedia (<https://www.wikipedia.org/>)

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Discover Life (<http://www.discoverlife.org/mp/20q?guide=Anisoptera>)

Odonata Central (<http://www.odonatacentral.org/>)

Odonata of India (<http://www.indianodonata.org/>)

The Dragonfly Website (<http://dragonflywebsite.com/>)

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