

Dragonflies

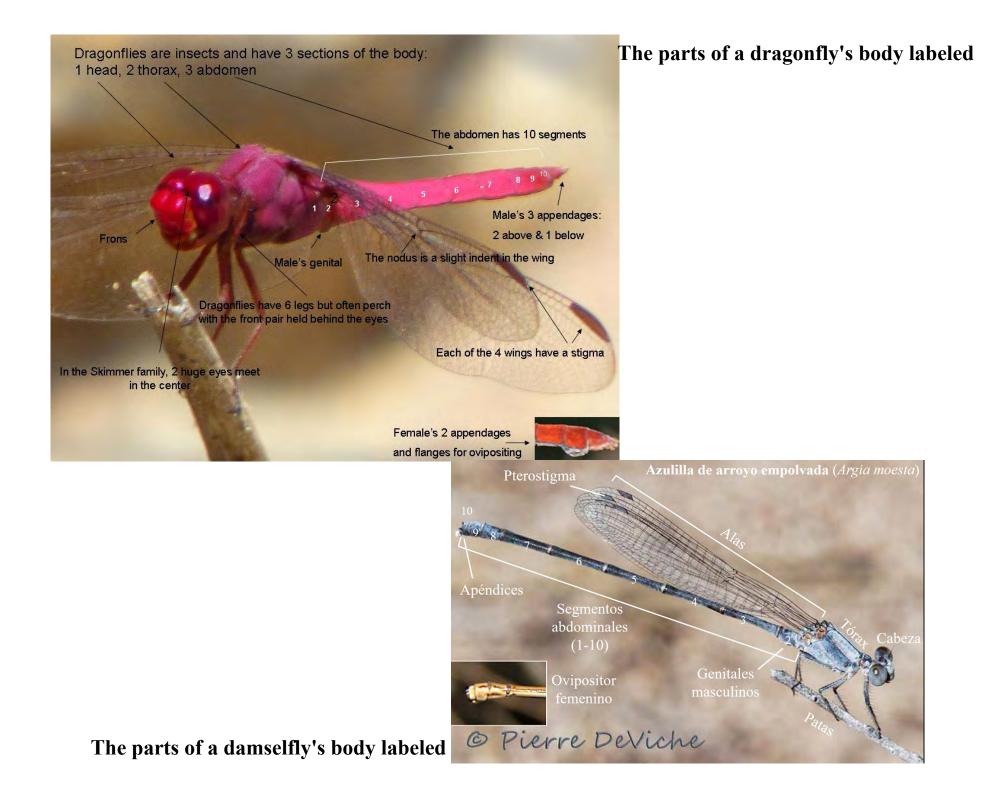


Damselflies

# A First Guide to the Dragonflies (Odonata) of Jalisco, Mexico

A contribution to the study of Odonata biodiversity in Jalisco, Mexico. This PDF includes all species known from current records, including scientific and private collections, NaturaLista, iNaturalist and other sources. All photos are © Copyrighted. There is a glossary at the end of this PDF. The companion website has a link to the Excel Chart with Jalisco's species by municipality and species maps.

For help with identifications &/or to make a photo contribution, put your photograph up on iNaturalist (https://www.inaturalist.org) or Naturalista (https://www.naturealista.org) or contact Kathy Biggs - azalea@sonic.net



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# About/How to Use This Guide

#### ORGANIZATION

This guide is organized first by suborder and then within suborder by family. The families are ordered from most to least often seen. Within families, the dragonflies are ordered by color and similarity with the most frequently seen species followed by less frequently seen species. The dragonflies are grouped within genus by color except for where one species looks much more like those in another genus. Because dragonflies change their color as they mature, color is not always the best indicator of species, but it is what most amateurs notice first.

#### PHOTOS

On each page a mature male is presented first, followed by a female. Sometimes when a photo of a female has yet to be acquired, a second male is shown. Other times a detail is presented. Be aware that young males start life looking like a female. When the author has found no photographs available, sketches are provided when possible.

#### INFORMATION

Below or to to the side of the male image is text describing the male, then the female of the species. Similar species may be mentioned. Behavior may be mentioned. The habitat where the species breeds is described and then the known flight season is listed. Dragonflies can fly  $\sim$ 48 KPH (30 MPH) and thus can be found far from water while feeding. There is much still to be learned about the dragonflies of Jalisco and therefore the flight data is followed by the words thus far. YOU can make contributions to the knowledge by adding your observations to either



iNaturalist.org or its sister site, Naturalista.org. Occasionally a note is added when further information would be helpful.

# **Information about Dragonflies**

### LIFE CYCLE



Dragonflies

Dragonflies begin their lives as eggs laid in water or in plant matter in the water.

The eggs hatch into tiny nymphs that eat other small creatures. A nymph may go through about 12 molts as it matures. With each molt, the wing-pads grow longer. On its last molt the nymph sheds its exoskeleton and emerges as a winged, air-breathing, flying insect.

All dragonflies are carnivores. They eat other insects and sometimes spiders. They have teeth but do not bite people unless restrained. They do not have stingers and therefore cannot sting, but some have learned to mimic that behavior when held in the hand!

The flying dragonfly or damselfly lives for only several months to up to nearly a year.

Some species in Jalisco may be able to complete their life cycle in less than one year.

#### HOW TO TELL A DRAGONFLY FROM A DAMSELFLY

Dragonflies are usually bulkier than damselflies and are stronger fliers. Often their large eyes actually touch each other. They usually perch with their wings held out to their sides; sometimes set in a downward and forward position.

Damselflies are always thin and dainty with their eyes widely separated giving them a hammer-headed look. Many perch with their wings held together. One family spreads their wings delta-like.

# **SUBORDER I:**

# Four Anisopteran families of dragonflies have been documented in Jalisco: The three most common are

# I. Skimmers



Part I—Skimmers (Libellulidae) —62 species have been documented in Jalisco. Skimmers have eyes that touch. Males and females can be differently colored and they often perch on vegetation.

# II. Clubtails



# **Part II—Clubtails** (Gomphidae)—19

species have been documented in Jalisco. Clubtails have widely separated eyes and often a clubbed abdomen. They usually perch on rocks and sandbars.

# III. Darners



**Part III—Darners** (Aeshnidae)—16

species have been documented in Jalisco. Darners have eyes that touch and patterned abdomens. They are usually in flight & hang perch on vegetation.

# Part I—Skimmers (Libellulidae)

Common Name (Scientific Name) photos & description

-62 species documented in Jalisco

=!==!==!==!==!=

Quick Guide to the Skimmers—22 genera —the 4 most common:

# Pondhawks Erythemis

# Speckled Dashers *Micrathyria*

Medium-sized, most show green or blue coloration, some show red. Perch low on the ground or on floating vegetation. Small and usually found on ponds or pools of rivers, all have white faces and spots atop the abdomen.

Medium-sized, usually found on streams, most perch on rocks and sandbars. Many have paired spots atop S7.

**Sylphs** 

**Macrothemis** 

King Skimmers *Libellula* 

Large-sized, many have brilliant colors and some have patterned wings. Perch atop vegetation.







C Dave Biggs

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# **<u>Carmine Skimmer</u>** (Orthemis discolor)



photos: male and female size: medium/large, length 49-52 mm male: glossy red eyes & face; carmine red thorax and abdomen; wings clear with black veins including costa female: orange-brown; somewhat obscured but complex pale pattern on thorax sides, pale stripe top center; noticeable flanges near bottom end of abdomen; leading edge of wing and costa dark similar species: very similar to the Roseate Skimmer which has purplish eyes, face & frons habitat: ponds and slow moving water Jalisco flight season: flies all year



# Roseate Skimmer (Orthemis ferruginea)





**photos:** male and female **size:** medium/large, length 51-53 mm

male: eyes purple with metallic purple frons; abdomen bright lilac going to red at the tip; wings clear with some reddish veinsfemale: tan-brown; prominent complex pale pattern on thorax sides, pale stripe top center; noticeable flanges on lower abdomen endsimilar species: very similar to the more common Carmine Skimmer which has red eyes and face; all wing veins are dark



habitat: ponds and slow moving water
Jalisco flight season: flies all year

Roseate vs Carmine males -

they are often much more difficult than this to tell apart



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# Slender Skimmer (Orthemis levis)

#### CAlfredo Dorantes Euan

photos: male and female size: medium, length ~44 mm, wingspan ~44 mm male: slender red abdomen with black atop S7 & around S8-10; wide pale stripes on side of thorax; wings have yellow costa female: slender abdomen with noticeable flanges, prominent wide pale stripes on side of thorax similar species: *Tramea* have color in their wings and do not hold them down and forward habitat: ponds and slow moving water Jalisco flight season: months 4,7-11 thus far



# **<u>Red Pondhawk</u>** (*Erythemis haematogastra*)



photos: male and young female RARE in Jalisco - please report any sightings size: medium/large, length 45-50 mm, wingspan 72-78 mm male: slender red abdomen, usually with thin black rings, S1&2 expanded; brown thorax and small basal wing patches; dark face female: shaped like male, color duller, face dark; wingtips can be slightly colored behavior: perches low on vegetation and wood habitat: found at Rio del Tuito in Yelapa in 2017 & 2019 Jalisco flight season: months 1-3 thus far



# Flame-tailed Pondhawk (Erythemis peruviana)

# Arlene Ibarra Villanueva

photos: male and female

size: medium, length 36-43 mm, wingspan 58-70 mm
male: flame-red abdomen contrasts with jet-black thorax; small amount of dark in basal portion of wing; black legs
female: tan face; brown thorax sides with noticeably paler top; abdomen pale brown with dark brown rectangles on side of each segment; pale stigma behavior: perches on ground or vegetation
habitat: open marshes; heavily vegetated ponds
Jalisco flight season: months 6,10-12 thus far



# **Claret Pondhawk** (*Erythemis mithroides*)

# Jose Eduardo Mendoza Rojas

photos: male and female
size: medium, length ~38 mm
male: body all red with basal brown-red spot in hindwings that extends
from front to back
female: light reddish brown with dark rings; pointed ovipositor;
wings mostly clear with dark stigma
behavior: perches on the ground or vegetation
habitat: swampy, well-vegetated ponds & still waters
Jalisco flight season: months 6,11-12 thus far

Note: this may be a separate species than those found farther south



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# **Red-mantled Dragonlet** (*Erythrodiplax fervida*)



photos: male and female size: small, 32-36 mm, wingspan ~50 mm male: red face and eyes, abdomen and thorax red with black patterning; dark red basally on each wing female: like male but can be tan where male is red; ovipositor points straight down habitat: ponds and lagoons, slow moving water Jalisco flight season: months 1-4,9,11,12 thus far



## **Red Rock Skimmer (***Paltothemis lineatipes***)**



# Mayan Setwing (Dythemis maya)

# © Dave Biggs

photos: male & female size: medium, length 40-45 mm, wingspan 72-82 mm male: red body, without any black: red-orange basal wing patches; black stigma; bright red face and eyes; no white on thorax sides female: like male but orange-brown with dark wingtips similar species: Cardinal Meadowhawk has white dot on side of thorax and usually a small amount of black at base of wings behavior: wings held down and forward ("set") habitat: ponds in the open, slow moving water Jalisco flight season: months 1,2,5-12 thus far



# Cardinal Meadowhawk (Sympetrum illotum)



photos: male and female RARE in Jalisco - please report any sightings size: small/medium length 32-40 mm, wingspan 55-60 mm male: cardinal red head, thorax, abdomen, wing veins; red on wings is diffuse, only close to body and near the leading edge, wings usually have small dark streaks at extreme base; thorax sides have two white spots/dashes; body with no black, stubby appearance; red legs female: less colorffliul; pale red legs; abdomen wider habitat: ponds, lakes Jalisco flight season: flies all year

# Neon Skimmer (Libellula croceipennis)



#### photos: male & female

size: medium/large, length 46-59 mm, wingspan 72-90 mm male: very wide bright neon red/pink abdomen; thorax and underside can be tawny; red on wings only adjacent to body and near leading edge - it does not extend to the nodus; the stigma on each wing has a dark outline



female: wide abdomen is tan/orange with a noticeable pale stripe along the top of the thorax; wings mostly clear, lacking a strong colorful streak, and the 2nd vein from front is NOT yellow similar species: male Flame Skimmer has color in the wings that extends to the nodus fore to back; female Flame Skimmers have more color in their wings with the 2nd vein yellow; their abdomens are not as wide (see next page) habitat: ponds in the open and slow moving water Jalisco flight season: flies all year

# Flame Skimmer (Libellula saturata)



photos: male and female size: medium/large, length 50-60 mm, wingspan 85-93 mm male: red-orange face, thorax, abdomen, legs, appendages; red color in the wing extends to the nodus fore to back with a darker basal streak; 2nd vein yellow female: tan/orange with noticeable pale stripe top of thorax; wings have orange streak at leading edge with the 2nd vein yellow; noticeable flanges near end of abdomen; a few females become male-like in their coloration similar species: Neon Skimmer is more pink, has wider abdomen; Needham's Skimmer has the color in the wing confined to leading edge habitat: ponds in the open and slow moving water Jalisco flight season: months 1,3-11 thus far



# Needham's Skimmer (Libellula needhami)



Carlos G Velazco-Macias

photos: male and female

**RARE in Jalisco** - please report any sightings

size: medium/large, 45-57 length mm, wingspan 73-83 mm

male: red color in the wing confined to leading edge, ; dark streak atop abdomen thickens towards end female: like male but pale yellow color, dark wingtips, pale stigma similar species: Neon Skimmer is more pink, has wider abdomen with no black habitat: ponds, lakes; usually found near the coast Jalisco flight season: month 8 thus far

# Hercules Skimmer (Libellula herculea)



photos: male and female RARE in Jalisco - please report any sightings size: large, ~55 mm, wingspan ~85 mm male: cherry red abdomen with black spots atop of S7 & 8, black tip; thorax becomes silvery pruinose on the sides, shiny dark on top; black legs; clear wings with dark veins and stigma female: like male but lacks silver thorax sides and abdomen is wider habitat: ponds, lakes, canals Jalisco flight season: 7-9, thus far

# Red-tailed Pennant (Brachymesia furcata)



**photos:** male and female

size: medium, 38-46 mm, wingspan 66-73 mm

male: Meadowhawk-like; stocky with S2 expanded; face & abdomen red; thorax brown; each abdomen segment with thin dark ring, black spots atop segment 8 & 9; wings have dark veins, amber at base with long stigma; jet black legs;

"ski- tipped" appendages

female: brown with pale stripe between wings & at abdomen base; small black spots atop last segments

similar species: Neon and Flame Skimmers have pale legs and color in the wings

habitat: ponds, lakes, canals

Jalisco flight season: months 5-7,10,11 thus far

# Red Saddlebags (Tramea onusta)



photos: male and female size: medium, length 42-45 mm, wingspan 80-90 mm male: red body; irregular dark red basal patch in hindwings, often with large clear area near the body, abdomen has black atop last 3 segments female: like male but orange-brown, clear wingtips; dark spots atop segments 8-9 behavior: oviposit in tandem with female dropping by herself to water surface and then picked back up by the male ("Tramea Dance") habitat: ponds Jalisco flight season: months 4-12 thus far



# Vermillion Saddlebags (Tramea abdominalis)



# Striped Saddlebags (Tramea darwini) note: formerly T. calverti



photos: male and female
RARE in Jalisco - please report any sightings
size: medium, length 45-49 mm, wingspan 80-86 mm
male: 2 pale stripes on sides of thorax; basal color in wing dark and narrow; abdomen tip all dark
female: tawny; 2 broad side stripes on thorax; top of S8-10 of abdomen black
similar species: Antillean Saddlebags lacks stripes on thorax sides as does Red Saddlebags
which has larger amount of red at wing bases
behavior: oviposit in tandem with female dropping by herself to water surface and then picked back up by the male ("Tramea Dance")
habitat: warm shallow ponds and other quiet waters, including brackish and temporary
Jalisco flight season: July thus far

# Variegated Meadowhawk (Sympetrum corruptum)





photos: male and female size: medium, 37-42 mm, wingspan 60-64 mm male: quite variable; olive-green/gray and reddish plaid, turns redder as it ages, unique white "porthole-like" spots low on abdomen; thoracic stripes not always complete but end in yellow spot; cranberry eyes; bicolored stigma

> female: like male but less red; more muted &/or pastel habitat: all slow waters behavior: known migrant Jalisco flight season: months 7,8,10-12 thus far

# Mexican Amberwing (Perithemis intensa)



#### photos: male and female

size: very small, length 23-29 mm, wingspan 41-44 mm
male: small and stubby; all orange colored, including the wings which
have pale yellow-orange stigmas and veins, the forewing triangle has 2
cells and the hindwing triangle has cross-veins; the thorax is without
bold pale patches; immatures are more yellow
female: like male but the wings have amber-orange bands with dark
spots, darker stigmas than male with the forewing and hindwing
triangles the same as on the male
behavior: perches in the sun, often on twigs, close to water surface
similar species: Slough Amberwing has orange-red stigma, the outside
of the legs are dark and it prefers to perch in the shade; the
Eastern Amberwing has whiteish patches on the sides of the thorax,
the stigma is red-orange and there is a dark spot at the
outer angle of the wing's triangles.

habitat: slow waters and ponds Jalisco flight season: flies all year



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# Eastern Amberwing (Perithemis tenera)



photos: male and female
size: very small, length 19-25 mm, wingspan 33-43 mm
male: tiny and stubby; wings are yellowish-orange, they may have small dark spots, stigma is reddish; thorax is brownish with two pale side stripes; abdomen is more patterned than that of the Mexican Amberwing female: brown body; variable dark patched/spotted wings
similar species: the Mexican Amberwing has pale stigma and veins, Slough Amberwing has outside of legs dark behavior: perches in the sun; mimics wasp behavior by waving wings and abdomen up and down habitat: ponds, lakes, slow streams, even brackish waters
Jalisco flight season: months 3-10 thus far
Note: Recently the species *P. mooma* was merged with this species in this area (May 2020).

# Slough Amberwing (Perithemis domitia)







size: very small, length 22-25 mm, wingspan 34-41 male: tiny and stubby; sides of thorax with pale stripes; wings reddish-orange with red stigma; outside of legs are dark female: brown body; basal half of wings amber with dark spots similar species: the Mexican Amberwing has pale stigma **behavior:** prefers to perch in the shade habitat: ponds, puddles in slow waters Jalisco flight season: flies all year VS

<Slough

Mexican males >



# Wandering Glider (Pantala flavescens)



# © Pierre Deviche

photos: females size: medium, 45-49 mm; wingspan ~76 mm male & female: sexes both marked the same; golden yellow colored with dark line atop abdomen; clear wings, hind wing very wide similar species: Spot-winged Glider is browner and has a small basal dark spot on hind wings behavior: known migrant, almost constantly in flight; hang perch habitat: fish-less ponds in the open; slow moving water Jalisco flight season: months 1-3,6-11 thus far



# **Spot-winged-Glider** (*Pantala hymenaea*)



photos: males size: medium, 45-47 mm; wingspan ~75 mm male & female: body earth-tones with round dark basal spot on hindwings (spot can be difficult to see ) behavior: almost constantly in flight; hang perch habitat: ponds in the open; slow moving water behavior: known migrant, almost constantly in flight; hang perch similar species: Wandering Glider is more golden, lacks basal wingspot Jalisco flight season: months 7-11 thus far

## Hyacinth Glider (Miathyria marcella)



photos: male and female size: small/medium, 35-38 mm, wingspan 58-66 mm male: straw-colored abdomen with amber-tinted wings, hindwing wide with noticeable straight dark diffuse basal wing-band and golden wing-veins female: like male, white stripe on thorax side similar species: Aztec Glider has more patterned abdomen and less color in the wings behavior: almost constantly in flight; hang perch habitat: ponds in the open; slow moving water where water hyacinth is plentiful Jalisco flight season: months 2,3,5-8,10,11 thus far



#### **Dwarf Glider** (*Miathyria simplex*)



**photos:** male and female **size:** small, lenghth 28-32 mm, wingspan 48-52 mm

male: abdomen dark red; wide hind wing has a large brown patch at the base which reaches outward to cover most of triangle but leaving a clear "window", leading veins show red all the way out to the very small stigma; frons NOT metallic violet female: not all are as thin as this photo; like male but abdomen patterned yellow and brown; no color in wings beyond patch behavior: almost constantly in flight; hang perch

habitat: slow moving waters Jalisco flight season: months 5,10 thus far

## Garnet Glider (Tauriphila australis)

@ Terry Carr

photos: male and female size: medium, length 40-47 mm; wingspan ~75 mm male: wide hind wings with semicircular basal dark patch, some basal veins red;abdomen red with thin black rings; solid dark thorax female: like male but less colorful; sometimes only a hint of color in the wings similar species: Red Pondhawk has an expanded first & second segments behavior: almost constantly in flight; hang perch habitat: ponds, rivers streams and canals with water hyacinths

Jalisco flight season: month 6 thus far

© Steve Collins

# Aztec Glider (Tauriphila azteca)

C Francisco Izquierdo

# © Doug Danforth

photos: male and female size: medium, 40-44 mm; wingspan ~75 mm male & female: earth-toned with strongly patterned abdomen; wide hind wing with semi-circular basal dark patch, small stigma similar species: Garnet Glider has red abdomen;

Hyacinth Glider has colorful wing veins behavior: almost constantly in flight; hang perch habitat: ponds in the open; slow moving water Jalisco flight season: months 5-6,8-10 thus far

# Brown Setwing (Dythemis sterilis)



photos: male and female size: medium and thin, length 37-42 mm, wingspan 30-35 mm male: very slender abdomen with slender triangles, when mature it is dark pruinose; face pale with eyes capped with brick red; slight basal wing patches female: like immature male but dull tan or brown; slight basal brown patches with extreme wing tips dark habitat: slow moving streams, rivers and ponds Jalisco flight season: months 1-4,6-12 thus far

# **Black Setwing** (Dythemis nigrescens)



photos: mature and female size: large but thin, length 37-45 mm, wingspan 62-72 mm male: when mature, pruinose dark thorax with thin abdomen; face and eyes dark with dark metallic frons; no basal wing patches, long dark stigma female: like immature male with pale marks on thorax and abdomen; wing tips brown; dark metallic frons habitat: slow moving water Jalisco flight season: months 1-3,5-11 thus far



#### Seaside Dragonlet (*Erythrodiplax berenice*)



### **<u>Plateau Dragonlet</u>** (*Erythrodiplax basifusca*)



photos: male and female size: small, length 24-34 mm, wingspan 43-53 mm male: dark abdomen develops thin pale blue pruinosity on abdominal S2-7; face tawny to metallic black; wings clear except hind wing often with small basal dark amber patch, long stigma female: stubby, golden yellow, interrupted brown side stripe; dark rectangular triangles on S4-8; long stigma habitat: marshy areas along moving water Jalisco flight season: flies all year



# Blue Rock Skimmer (Paltothemis cyanosoma)

Laura Gaudette

**photos:** male and appendages from paratype specimen **RARE** - please report any sightings

size: medium/large, length 48-51 mm, wingspan ~90mm

Laura Gaudette

male: frons metallic purple; body dark with blue pruinosity on thorax, S1-3&10, slight blue banding at segments; hindwing lacks a basal spot female: dark labrum on face, thorax brown, prothorax pale brown with dark brown stripes; abdomen dark brown with yellow spots behavior: perch on exposed rocks at sunny spots habitat: streams in woodland or forests at low altitude Jalisco flight season: months 1,8,10,11

### **<u>Blue Dasher</u>** (*Pachydiplax longipennis*)



**photos:** male and female **size:** medium, length 32-45 mm, wingspan 48-50 mm

male: pruinose blue, developing dark tip, tan under segment 1-3; striped thorax can become all blue; teal green/blue eyes; distinctive white face with black between the eyes; wings, often held downward, can show brown tinted areas; thorax often becomes completely pruinose; no pale spots atop abdomen

© Ricardo Arredondo T.

female: rectangular buff marks on dark background; no other is like it; white face

similar species: Western and Eastern Pondhawks have green faces; the Speckled Dashers (Micrathyria) have spots atop abdomen

behavior: unlike Pondhawks, don't perch on ground or floating vegetation unless it is windy

habitat: ponds, slow waters Jalisco flight season: months 5-8 thus far

#### Western Pondhawk (Erythemis collocata)



Rare in Jalisco - please report all sightings

size: small/medium, length 39-42 mm, wingspan 63-65 mm

**male:** pruinose blue with bright green face; deep blue eyes; dark appendages; immature like female, the blue color is pruinosity where the thorax is the last to turn blue, no dark patches/spots/bands

female: emerald green body with a thin dark line along top, often showing some yellow; abdomen much thicker than Great Pondhawk similar species: Eastern Pondhawk males have white appendages as do the females which are also more patterned;

Blue Dasher has white face as do Speckled Dashers

behavior: usually perches low, often on or near the ground or on floating vegetation; known to eat other dragonflies

habitat: ponds, pools in creeks

Jalisco flight season: month 7 thus far

#### Eastern Pondhawk (Erythemis simplicollis)





**photos:** male and female **size:** medium, length 36-48 mm, wingspan 63-65 mm

male: pruinose blue with bright green face; deep blue eyes; white appendages; immature colored like female with the blue colored pruinosity on the thorax being the last so the green stays the longest there; wings with no dark patches/spots/bands female: emerald green body with pale and dark areas along abdomen; white appendages; spout-like ovipositor similar species: Western Pondhawk males have dark appendages as do the females which are also less patterned; Blue Dasher has white face as do Speckled Dashers

**behavior:** usually perches low, often on or near the ground or on floating vegetation; known to eat other dragonflies; males display white appendages held upward in a spiraling duel face to face with other males

habitat: ponds, creek pools

Jalisco flight season: months 9,10 thus far [check photos/specimens closely for appendage color]

### Great Pondhawk (Erythemis vesiculosa)

© Dave Biggs

photos: male and female
size: large and long, length 55-65 mm, wingspan 80-82 mm
male: narrow long abdomen with dark and green bands;
green face, eyes green-gray; appendages white;
juvenile has green stigma
female: like male; eyes dark; thin abdomen with short
inconspicuous ovipositor
behavior: often flies with abdomen raised 30 degrees;
perches with wings held forward; wary
habitat: ponds; pools of creeks and rivers
Jalisco flight season: months 1-4,6-12 thus far



#### **<u>Pin-tailed Pondhawk</u>** (*Erythemis plebeja*)

# © Dave Biggs

photos: male and 2 females size: medium but very long, length 41-48 mm, wingspan 74-75 mm male: when fully mature, all black including face; clear wings with small dark basal patch & pale yellow stigma; legs all black; long narrow abdomen with bulbous S1-2, yellow appendages; when immature, abdomen patterned yellow & dark female: like immature male; much less black on abdomen; noticeable scoop-like ovipositor under S9 points straight downward; wings clear; can become almost as dark as male with maturity similar species: female Eastern & Western **Pondhawks** are not this thin nor long; **Black** Pondhawk has wider abdomen behavior: perches with wings held forward habitat: slow moving water Jalisco flight season: months 1-4,6-12 thus far



# **Black Pondhawk** (Erythemis attala)

© Dave Biggs



photos: males and females
size: medium, length 42-44 mm, wingspan 69-80 mm
male: when mature all black except for pale appendages;
hindwings with large semicircular black basal spot
female: paired dull yellow spots atop S3-6; basal spot on hind wing is smaller
and paler than on male; conspicuous spout-like ovipositor under tail end
points straight down; some females become all black
habitat: ponds with shaded edges - often found in dense vegetation
Jalisco flight season: months 1-5,9-12 thus far



### **Blue-eyed Setwing** (Dythemis nigra)



### Thornbush Dasher (Micrathyria hagenii)



Francisco Farriols Sarabia - Naturalist

photos: male and female size: small, length 31-36 mm, wingspan 45-52 mm male: white face; patterned abdomen with twin spots on S7 that have rounded notches top and bottom; stripe on side of thorax forked at the top female: like male but more heavily patterned atop the wider abdomen, with paired elongate spots similar species: Blue-eyed Setwing has pale markings that are quite small until the large ones on S7, lacks spots atop S6; Square-spotted Dasher - large spots on S7 have square shape without notches, slightly clubbed, thinner stripes atop other segments habitat: ponds, slow moving water Jalisco flight season: months 1,2,4,5,7-11 thus far



## Spot-tailed Dasher (Micrathyria aequalis)



size: small, length 28-33 mm, wingspan 45-52 mm

**male:** white face, blue-green eyes; mostly pruinose blue-gray abdomen is slender, especially the mid-segments, widened at end with a pair of rearward pointing twin pale triangles atop S7; the striped thorax top and sides are more noticeable in immatures,

the abdomen turns darker pruinose as it matures

female: can become pruinose similar to male but often heavily patterned on the thorax and with a double line of dots atop the abdomen culminating in two rearward facing triangles on S7; darkened wash near wingtips

similar species: abdomen of Dusky & Square-spotted Dashers have square spots; 3-striped Dasher has trapezoidal spots;

Blue Dasher lacks spots

behavior: female lands to oviposit, fastening eggs to the underside of a leaf

habitat: ponds, slow moving water

Jalisco flight season: months 1-8,10-12 thus far

# Square-spotted Dasher (Micrathyria ocellata)



photos: males and a female size: medium, length 28-33 mm, wingspan 45-52 mm male: white face; pale stripes on the thorax sides and front with a dark stripe extending down from the rear edge of the hindwing; abdomen is distinctly shorter than the hindwing, end of abdomen is expanded with paired spots that are more square-shaped than elongate, lacking notches, upper appendages are convergent female: heavily patterned on the thorax and abdomen, with twin spots near an expanded abdomen tip similar species: Spot-tailed Dasher - rearward pointed spots on tail; Dusky Dasher has pruinose thorax; Caribbean Dasher has abdomen longer than hindwing habitat: ponds, slow moving water Jalisco flight season: flies all year





# **Three-striped Dasher** (*Micrathyria didyma*)



photos: male and female size: small/medium, length 33-37 mm, wingspan 52-67 mm male blue-green eyes; white face; swollen end of abdomen with white twin trapezoidal spots which are very narrowly separated; side of thorax has 3 parallel but uneven black and pale green stripes female: like male but abdomen less clubbed at tip habitat: ponds in the open; slow moving water Jalisco flight season: months 1-4,6-8,10-12 thus far O Daug Danforth

#### Dusky Dasher (Micrathyria schumanni)



photos: male and female size: small, length 30-33 mm, wingspan 52-57 mm
male: like Spot-tailed Dasher but spots atop tail squared, not pointed at end, end of 'tail' black; frons metallic blue female: an almost plain, brown abdomen with dark rings behavior: perches on twigs and vegetation habitat: ponds, slow moving waters, Jalisco flight season: months 1,5-10,12 thus far



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# Black Dasher (Micrathyria atra)



photos: male RARE in Jalisco - please report any sightings size: small, length ~32 mm, wingspan ~66 mm male: white face, blue-green eyes; pruinose blue-gray on only S1-3 rest of abdomen is black and not expanded, spots atop S7 are rectangular; the thorax top is black and the sides are mildly marked female: like male but with less intense coloration and dark wingtips similar species: the Dusky Dasher is not black atop the thorax habitat: ponds, slow moving water, especially with mangroves Jalisco flight season: month 8 thus far

# Upland Dasher (*Micrathyria paulsoni*) NEW species described 2020





photos: male and female RARE in Jalisco - please report any sightings size: medium, length 37 mm, wingspan ~56 mm male: white face, blue-green eyes; two wide pale green stripes on sides of thorax, thorax top is black with thin pale stripes; pruinose blue-gray on only S1-3, S4&5 with small pale triangular marks on sides, S6 all black, spots atop S7 are rectangular female: like male but top thoracic stripes a bit wider, abdomen with S3-5 with backwards pointing darts similar species: Black Dasher has fewer marks on abdominal segments & other dashers are not black atop the thorax habitat: upland ponds surrounded by forest, slow moving water Jalisco flight season: month 6-8 thus far



#### "Yelapa" Dasher (*Micrathyria* cf ocellata)



photos: males RARE in Jalisco - please report any sightings size: small/medium, length ~29 mm, wingspan ~47 mm male: similar to Square-stopped Dasher but the pale stripes on the thorax sides form a loop at the bottom; end of abdomen somewhat more expanded than other Dasher spp. and with square-shaped spots S7 female: TBD

> habitat: Rio del Tuito & environs of Yelapa Jalisco flight season: found in January & February

#### Sierra Madre Sylph (Macrothemis ultima)

# © Dave Biggs

photos: male and female size: small, length 36-39 mm, wingspan 53-68 mm male: dark, patterned abdomen expanded near tip with paired elongate spots atop S8; blue eyes; mirror image "L's" atop thorax; stripes on sides of thorax joined to form a loop at top; dark face; clear wings female: like male but with dark amber wash at tip and at base of wings habitat: moving water behavior: hang perch on vegetation, often on spider lily leaves Jalisco flight season: months 1-5,8,9,11 thus far



# **Jade-striped Sylph** (*Macrothemis inequiunguis*)



photos: male and female size: small, length 32-36 mm, wingspan 50-62 mm male: dark, patterned abdomen with expanded tip with paired oval spots atop S8; stripes on sides of thorax, dark face; wings have basal amber wash female: like male but with dark wingtips habitat: small rocky streams and rivers in the forest behavior: hang perch on vegetation or atop leaves Jalisco flight season: months 2,7-8 thus far

### White-tailed Sylph (*Macrothemis pseudimitans*)

**Photos:** males and female **size:** medium, length 35-43 mm, wingspan 60-67 mm **male:** dark species with dark "clubbed" tail which at maturity develops a large pruinose white area on S6-9; dark thorax has 2 pale blue triangular stripes on top and spots on sides; bright blue eyes; metallic blue frons **female:** similar but darker brown color; abdomen not clubbed; wing tips clear **behavior:** male flies short beats over the water landing occasionally on rocks in the stream or on sand near river banks **habitat:** low moving water **Jalisco flight season:** flies all year © Dave Biggs

© Dave Biggs

#### Delta-spotted Sylph (Macrothemis hemichlora)

© Dave Biggs photos: males RARE in Jalisco - please report any sightings size: small/medium, 27-35 mm male: blue eyes; pale, mirror-image triangles atop thorax; dark abdomen strongly patterned with pale spots & widely expanded near tip with large expanded paired tear-drop shaped spots atop segment 8; lower thoracic stripe shaped like the letter "r" female: like male but with dark amber wash at tip and base of wings behavior: often perches by clinging to leaf edges habitat: streams Jalisco flight season: months 2,9 thus far



# **Slender Clubskimmer** (*Brechmorhoga praecox*)



photos: males and female
size: medium/large, length 47-53 mm, wingspan 72-74 mm
male: slender, somewhat clubbed abdomen with paired pale
yellow spots atop S7 that are spatulate in shape;
wings with two rows of cells in the anal loop,
brown at base of wings; aqua eyes
female: like male but wings may be yellow or pale brown,
always has brown at base of wing;
abdomen not as clubbed
behavior: hang perch
habitat: moving waters of sandy rivers and streams Jalisco
flight season: months 1,3,6-8 thus far



#### Vivacious Clubskimmer (*Brechmorhoga vivax*)



photos: male and female Rare in Jalisco - please report any sightings size: medium, length ~45 mm, wingspan ~72 mm
male: 2 continuous cell rows between the basal edge of the wing and the anal loop (the "boot"); S3 with green stripe on each side that does not come together with the sideways bottom green line female: like male but less clubbed in appearance behavior: hang perch
similar species: Slender Clubskimmer has 3 continuous cell rows between the basal edge of the wing and the anal loop (the "boot"); habitat: moving waters of sandy rivers and streams - found on the Horcones River below the Vallarta Botanical Gardens

Jalisco flight season: month 11 thus far

# Common Blue-eye (Anatya guttata)



photos: males and female RARE in Jalisco - please report all sightings size: medium, length ~43 mm, wingspan 52 mm male: blue eyes and thoracic marks; white face with dark spot; dark abdomen with pale blue marking on S1-3 and yellow on S4-9; appendages yellow; upper legs yellow and lower legs dark female: like male but paler - more yellowish on thorax and abdomen behavior: mostly perch in shade, can be found in sunlight habitat: swampy ponds and still pools in forested streams Jalisco flight season: months 10,11

Note: formerly A. normalis

### **Straw-colored Sylph** (Macrothemis inacuta)





Photos: male and female

size: medium, length 41-48 mm, wingspan 66-74 mm

male: distinctive, very slender cylindrical yellowish-brown abdomen; white slashes on top and sides of thorax; pearly blue eyes female: similar; sometimes amber tint to forewing tips and/or at hindwing base; pale legs with dark "knees and feet"

**behavior:** hang perch **habitat:** slow moving water; sometimes ponds **Jalisco flight season:** months 2,4-6,8-11 thus far

# **Evening Skimmer (Tholymis citrina)**



**photos:** male and female **RARE in Jalisco -** please report all sightings **size:** medium/large, length 48-53 mm, wingspan ~ 75 mm

male: steel-blue eyes; long tapered pale brown body; clear wings with pale amber nodal patch on hind wing; long straight upper appendages female: like male but with appendages spreading; both sexes have an "open-toed" anal loop in the hindwing

**behavior:** crepuscular; hang perches **habitat:** shallow ponds and marshes **Jalisco flight season:** month 6 thus far

#### **Black-winged Dragonlet** (*Erythrodiplax funerea*)



v v v

<-- nontypical male with clear area at base of wings is fairly common in parts of Jalisco photos: mature male and female; atypical male size: medium, length 38-42 mm, wingspan 52-70 mm male: slender and black; wings black from near base to halfway between nodus and stigma (does not touch stigma), wings can be clear at base; immature has yellow on S1-7, similar to female female: spotted form - slender black body with round black spot at hind wing base, other form - tan/brown; with front of thorax darker than the sides; dark wingtips habitat: ponds in the open; slow moving water Jalisco flight season: flies all year

Note: Band-winged Dragonlet E. umbrata not expected in Jalisco



### Filigree Skimmer (Pseudoleon superbus)

Doug Danforth

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photo: male and female size: medium, length 38-45 mm, wingspan 63-73 mm male: wings variably dark and lacy, sometimes almost all dark, but tips mostly clear; brown body with pale chevrons ages to nearly all black; eyes are striped and when mature are nearly all black female: lace pattern on wings more open; spout-like ovipositor behavior: perch low, often on rocks/debris/sandbars, often in oblique posture; at a distance can look just like a dry leaf! habitat: ponds; rocky areas of rivers with slow moving water Jalisco flight season: flies all year

© Dave Bigg.

# Desert Whitetail (Plathemis subornata)



 RARE in Jalisco - please report any sightings

 size: medium, length 40-52 mm, wingspan 64-76 mm

 male: pruinose white abdomen; wings with 2 narrow zigzag black bands, middle third usually fills in dark, basal half of wings have extensive white pruinosity; dark appendages

 female: brown body with paired yellow oblong spots; 2 pale, jagged thoracic stripes; each wing has dual zigzag bands, clear wing tips

 similar species: Common Whitetail not found in Jalisco, has much less white in wings

 habitat: desert springs, ponds, lakes

 Jalisco flight season: months TBD

# Hoary Skimmer (Libellula nodisticta)



photos: male and female Rare in Jalisco - please report all sightings
 size: medium/large, length 46-52 mm, wingspan 76-82 mm
 male: thorax and abdomen pruinose blue-gray; thorax of immature has 2 broken yellow stripes; wings have small dark area at base
 and at nodus, basal dark wing area becomes surrounded by white, black stigma; no other white on wings
 female: dark gray/brown with row of yellow dashes along abdomen side; when mature can turn pruinose like male
 similar species: Twelve-spotted Skimmers have dark wingtips; not found in Jalisco
 habitat: springs; spring-fed streams
 Jalisco flight season: TBD

# Gray-waisted Skimmer (Cannaphila insularis)



habitat: marshy ponds, lakes and streams Jalisco flight season: month 7 thus far

Note: original link to male on iNaturalist - https://www.inaturalist.org/observations/6937121

# Part III—Spiketails (Cordulegasteridae)

—1 genera/species documented in Jalisco. All Spiketails have long abdomens and yellow and black patterning.

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# Apache Spikletail (Cordulegaster diadema)



photos: male and a female ovipositing RARE in Jalisco - please report any sightings size: very large, lenght 74-88mm, wingspan 89-109 mm male: very dark appearance; narrowly separated tear-shaped aqua-blue eyes are yellow-green in juveniles; dark abdomenis banded rather than spotted with segments 6-8 moderately expanded, there is a thin half-ring between the bands female: similar to male; long abdomen with a spike-like ovipositor behavior: hang perches; copulation in trees can take 2 hours; females oviposit with downward vertical thrusts into sand at edge of waterway habitat: small mountain streams with silt-bottom pools Jalisco flight season: month 12 thus far

# Part III—Clubtails (Gomphidae)

—19 species documented in Jalisco.

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Quick Guide to the Clubtails—7 genera All Clubtails have widely separated eyes, clear wings, and often a clubbed abdomen. The males usually perch on rocks and sandbars. Most are found on moving water. The 3 most common genera:

# Sanddragons

# Progomphus

Medium-sized, thin abdomen without large "clubs", found on sandy or gravelly creeks and rivers

# Leaftails

# **Phyllogomphoides**

Large-sized, dark with long abdomens with leaf-like flanges near abdomen tip, often perch on vegetation

# Ringtails

# Erpetogomphus

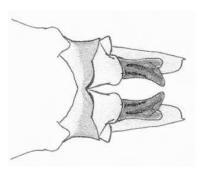
Moderate-sized, green thorax, pale rings on abdominal segments; perch on rocks, sandbars



Note: Not all clubtail species' information or images available at this time.

#### Zebra-striped Sanddragon (Progomphus clendoni)





©Enrique González Soriano

photos: male and female; male appendages from below size: medium/large, 46-52 mm
male: dark thorax sides have pale yellow stripes, top stripes form a disjointed "W"; abdomen S1-7 very narrow, expanded at tip, club of S8-10 black & preceded by thick yellow ring, pale yellow rings on middle abdomen segments; appendage tops smooth & yellow, lower appendages forked; blue-gray eyes, yellow face with dark markings
female: patterned like male; small top point on S1; appendages white; wings slightly yellowed behavior: males perch on sandbars and rocks
habitat: moving water with sandy and rocky areas Jalisco flight season: months 1-4,7-9,11,12 thus far



### \*Splendid Sanddragon (Progomphus zonatus)



**photos** scan of dead male specimen and appendages **RARE** - please report any sightings as they would be a state record

size: large, length ~62 mm

**male:** dark thorax with gray stripes top and sides, side stripes with mid-points widest and pointing away from each other; abdomen dark with thin rings S3-5, S1-7 very narrow, expanded at tip, club of S8-10 black & preceded by thick yellow ring,, appendages dark with pale tips

female: TBD

behavior: males perch on sandbars and rocks habitat: moving water with sandy and rocky areas in higher elevations Jalisco flight season: months \*NOT FOUND IN JALISCO YET BUT POSSIBLE

# Mexican Sanddragon (Progomphus mexicanus)



# "Yelapa" Sanddragon (Progomphus cf. mexicanus)

photos: males and appendages size: medium, TBD mm rare in Jalisco, please report all sightings male: wings slightly amber-tinted; appendages only yellow at the extreme tip and unforked; middle thoracic side stripe interrupted female: TBD behavior: males perch on sandbars and rocks habitat: moving water with sandy and rocky areas

@ Terry Caur

Jalisco flight season: months 1,11,thus far

**Note:** this represents an undescribed species; recorded twice in Yelapa in different years by different individuals in town near the Yacht Club

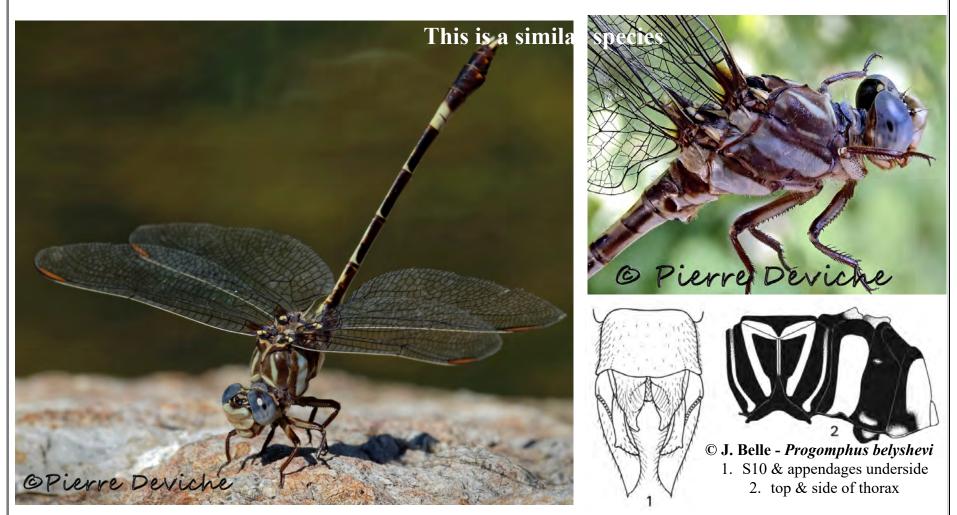


# **Gray Sanddragon** (*Progomphus borealis*)



RARE in Jalisco - please report any sightings size: large, length 56 - 62 mm, wingspan 66 - 72 mm male: yellow face; thorax sides have large gray patches; dull pale yellow triangles top of very thin black abdomen; costa yellow; upper appendages yellow, lowers dark, like the Common Sanddragon; both arch abdomen when perching female: very similar to male but lacks club, abdomen more cylindrical behavior: males perch on sandbars and rocks habitat: sandy rivers, lakes Jalisco flight season: months TBD

# Belyshev's Sanddragon (Progomphus belyshevi)



photos: undescribed species, cf. *Progomphus belyshevi* - the assumption that **Belyshevi's** would be similar; drawings of appendages and thorax RARE in Jalisco, please report all sightings size: large, length 55-56 mm, wingspan ~66

male: much like the Gray Sanddragon with dark and gray areas on the thorax sides, sides of the thorax darker with a smaller amount of gray, middle wide dark stripe, which is joined with the femoral stripe; appendages more narrow than in Gray Sanddragon

female: like male but slightly larger habitat: assumed to be sandy rivers, lakes Jalisco flight season: months TBD

# **Broad-striped Forceptail** (Aphylla angustifolia)

# © Vincent Vander Heijden

photos: mature male and immature male size: large, length 62-68 mm, wingspread 74-82mm male: 3 pale stripes on side of thorax with the middle stripe narrower; abdomen narrow with a flange on S8 (males and females) female: very similar but abdomen more cylindrical, club narrower habitat: lakes, ponds and pools of intermittent streams with muddy bottoms Jalisco flight season: months 6,8,10 thus far

O Yesenía Vega

# Narrow-striped Forceptail (Aphylla protracta)

# © CPalomera García

photos: male and female size: large, length 64-66 mm male: flanged abdomen mostly russet-colored; thorax brown with narrow pale stripes; lower appendage unnoticeable; blue eyes female: like male habitat: lakes, ponds and pools of intermittent streams with muddy bottoms Jalisco flight season: months 1,5,6,8,10 thus far



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# Angle-tipped Forceptail (Phyllocycla elongata)

O Doug Danforth

Eduardo Axel Recillas Bautista

**photos:** male and female **RARE in Jalisco -** please report any sightings

size: large, length ~55 mm male: 4 pale stripes on thorax sides; abdomen thin and black with all dark club & appendages, each segment's ring twice size of preceding ring female: abdomen more cylindrical, pale area reduced; no club, pale under S9&10 habitat: streams with deep pools Jalisco flight season: months TBD

Note: Phyllocycla breviphylla may be a synonym of Phyllocycla elongata.; female above labeled P. breviphylla on iNaturalist

#### Two-striped Leaftail (Phyllogomphoides bifasciatus)

#### photos: male, appendages and female size: large, length 57 mm

**male:** only two stripes on sides of thorax with no hint of any other markings; pale face with dark cross stripes, pale blue eyes; middle abdominal segments have rings open at top, S7/8 with broad complete ring, club widely flanged ("leaf-like"), appendages pale with dark edges

female: less colorful; abdomen more cylindrical; lacks club habitat: small streams in semi-forested areas to larger streams and small rivers with pools Jalisco flight season: months 9-11 thus far



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32 P. bifasciatus

80

# West Mexican Leaftail (Phyllogomphoides nayaritensis)





Los Naranjos Retreat

photos: males and appendages size: large, length 60-68 mm
male: dark thorax with mirror image "L" on top, slight yellowish cast to the 2 stripes on side, small middle stripe; pale face with dark cross stripes, pale blue eyes; middle abdominal segments have rings open at top, S7/8 with broad complete ring, club widely flanged ("leaf-like"), appendages pale with dark edges female: like male but without the widened flanges; the larva is unknown
habitat: rocky and muddy rivers with moderately swift current Jalisco flight season: months 7,9,11,12 thus far

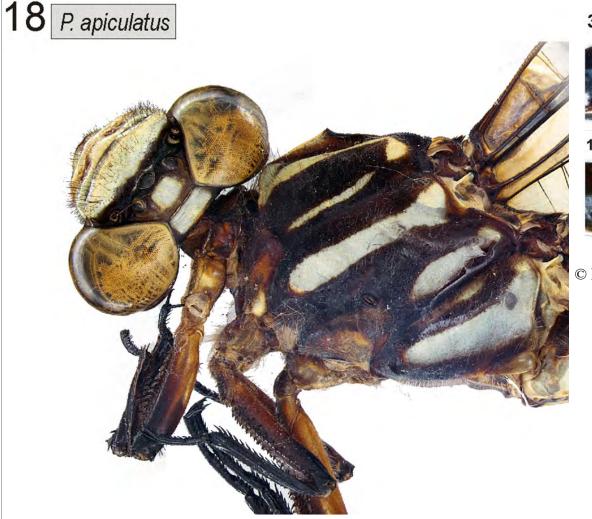
# Pacific Leaftail (Phyllogomphoides pacificus)

# © Doug Danforth

photos: males size: large/very large, length 65-67 mm male: blue eyes widely separated; sprawling legs; well camouflaged; 5 parallel & entire bluish-white thoracic stripes; incomplete abdominal rings prior to S7 female: less colorful; abdomen more cylindrical habitat: streams with deep pools Jalisco flight season: months 7-12 thus far



# **<u>\*Spine-tipped Leaftail</u>** (*Phyllogomphoides apiculatus*)



© Phyllogomphoides Belle 1970 - Plazi TreatmentBank

31 P. apiculatus



109 P. apiculatus



© Phyllogomphoides Belle 1970 - Plazi TreatmentBank

photos: details of male head and thorax, male and female abdomen tip and appendages size: large, length 52 mm, wingspan 80 mm male: upper appendages with a small spine female: like male but with a paler frons; stigma a reddish brown habitat: streams with deep pools Jalisco flight season: \*NOT FOUND IN JALISCO YET BUT POSSIBLE

Note: formerly called the Apiculate Leaftail.

# Yellow-legged Ringtail (*Erpetogomphus crotalinus*)



photos: male and female
RARE in Jalisco - please report all sightings
size: medium, length 45-49 mm, wingspan 60-72 mm
male: yellow-green thorax lacks any dark striping;
abdomen yellow with indistinct black rings,
medium-sized club, yellow appendages;
wings with yellow costa on both sexes
female: like male but abdomen more cylindrical,
S1-2 mostly green, lacks club
behavior: males perch on rocks, sandbars and on branches
overhanging streams
habitat: moving water with riffles in the sunshine
Jalisco flight season: months 7,9,11 thus far

© Ricardo Arredondo Torres

# **One-striped Ringtail** (Erpetogomphus bothrops)

# @ Terry Carr

photos: male and female size: medium, 38-47 mm
male: thorax green with one dark stripe; green face with blue eyes; tip of narrow ringed abdomen is expanded with some yellow on the underside female: thorax like male's; abdomen more cylindrical, lacks club; shows rings at abdominal segments
behavior: males perch on rocks, sandbars and on branches overhanging streams
habitat: moving water
Jalisco flight season: months 9-12 thus far



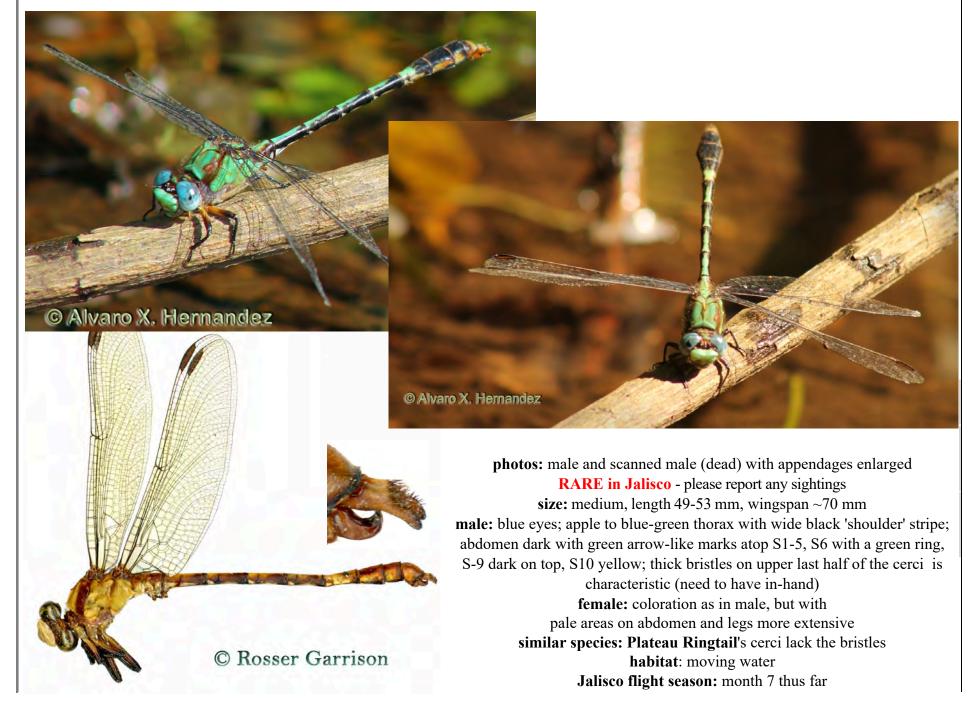
#### Straight-tipped Ringtail (Erpetogomphus elaps)

# © Troy Hibbitts

photos: male and female RARE in Jalisco - please report any sightings size: medium, length 39-49 mm; wingspan 50-62 mm male: green thorax, top thoracic stripe dark, wide and short; no true side stripe; abdomen mostly dark with pale rings on S4-6, S7 with wider pale area, the top of club dark; straight blunt appendages pale; lower appendages curved to meet straight upper appendages at midpoint female: like male; abdomen more cylindrical, lacks club behavior: males perch on rocks, sandbars and on branches overhanging streams habitat: moving water Jalisco flight season: months 9-11 thus far



## **Boa Ringtail** (Erpetogomphus boa)



## Plateau Ringtail (Erpetogomphus sipedon)

© Rosser Garrison

© Ana Nuño

photos: male and appendages, and females
 RARE in Jalisco - please report any sightings
 size: medium, length ~41 mm, wingspan ~66 mm
male: blue eyes, green thorax, slender dark abdomen with thin yellow
 rings; appendages yellow and lack bristles on upper half
 female: abdomen more cylindrical, lacks club; eyes more gray
 behavior: males perch on rocks, sandbars
 and on branches overhanging streams
 habitat: moving water
 Jalisco flight season: months 6,7 thus far

Carlos G Velazco-Ma



# Aztec Clubtail (Stylurus falcatus)

Stylurus falcatus, new species, type male , Plate I (from A NEW SPECIES OF STYLURUS FROM MEXICO (ODONATA : GOMPHINAE) by Leanora K. Gloyd) 1944

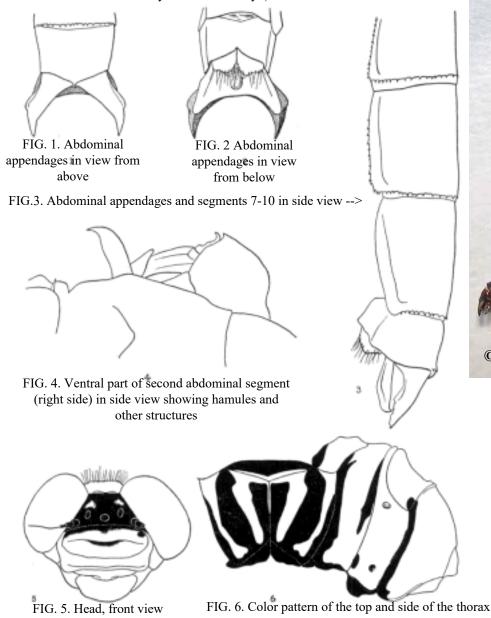


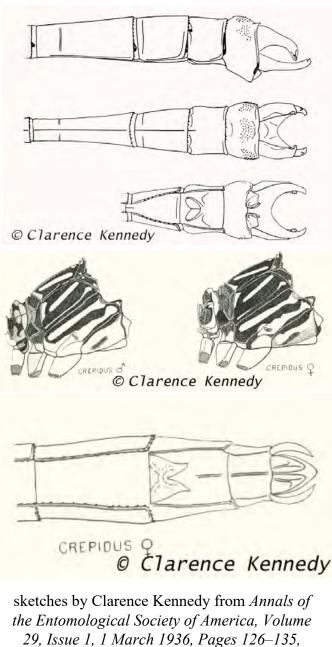
Photo of this species not available, below is a scan of this species



habitat: Lago de Chapala Jalisco flight season: month 8 thus far

# **Tehuantepec Knobtail** (Epigomphus crepidus)





https://doi.org/10.1093/aesa/29.1.126

photo: male & drawings of appendages and thorax of both sexes RARE in Jalisco - please report any sightings size: medium, length ~43-55 mm wingspread ~70 mm male: knob-like appearance to "club" & appendages; dark-brownish with pale yellow or olive green stripes on the head and thorax; abdomen S1&2 olive, S3 1/3 black with top ridge yellow, S4-6 similar but with black on each, S7 2/3 yellow, S8-10 dark, appendages dark female: similar to male but markings not as well defined and without knob at end of tail habitat: lowland moist forests and rivers Jalisco flight season: month 3

# Part IV—Darners (Aeshnidae)

—17 species that have been documented in Jalisco.

# Quick Guide to the Darners—6 genera

Darners have eyes that touch broadly and patterned abdomens. They seldom perch, but when they do they hang perch on vegetation. The 3 most common:

# Pilot & Malachite Darners

Coryphaeschna & Remartinia

Long slender abdomens



# **Green Darners**

# Anax

Bulky, large broadly touching eyes, solid green thorax

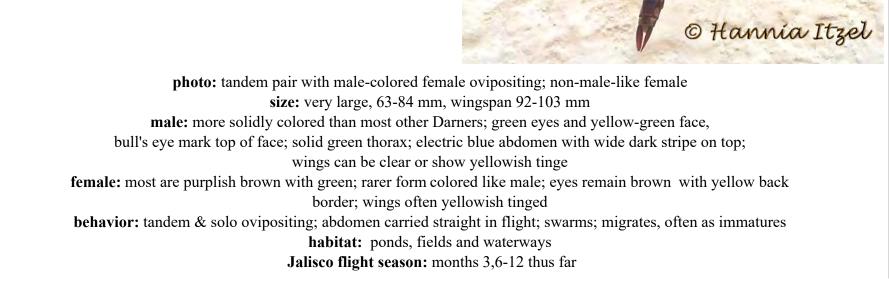


# Two-spined Darners *Gynacantha*

Crepuscular, hang-perch in deep shade during the daylight. Females have two spines on the underside of S10



# Common Green Darner (Anax junius)



# Giant Darner (Anax walsinghami) NEW 2022



photo: male in flight and tandem pair RARE in Jalisco - please report any sightings size: huge, male 99 - 111 mm, wingspan 115 - 135 mm
male: largest dragonfly in North America; coloring like Common Green Darner but very long thin blue and dark patterned abdomen; solid green thorax; eyes blue on top, yellow rimmed
female: like male; smaller but still very long narrow abdomen, 88 - 99 mm, wingspan 112 -122 mm; less blue similar species: Common Green Darner caries abdomen straight in flight; eyes green behavior: tandem & solo ovipositing; abdomen carried arched in flight
habitat: canyon and spring-fed streams, marshes, lakes in arid areas. In Jalisco, mating pair were found in November at first crossing of Rio de Tuito and at the Rio de Tuito waterfall Jalisco flight season: months 11&12 th thus far

# Amazon Darner (Anax amazili)



photo: male and female size: very large, 70-75 mm, wingspan ~104 mm male: bull's eye mark on top of frons, eyes brown-gray; solid green thorax, abdomen patterned with white spots, S1-2 pale green stripes, other segments appear patterned with wide, white spots female: similar to male but lacks stripes on S2, otherwise more boldly patterned behavior: males less often seen than females habitat: overgrown weedy ponds Jalisco flight season: months 6,7,9,10 thus far

# Blue-faced Darner (Coryphaeschna adnexa)



# Mangrove Darner (Coryphaeschna viriditas)



photos: male and female size: very large, length 76-85 mm, wingspan 102-120 mm male: green face with black T-spot on frons; green thorax with narrow brown stripes; abdomen streaked with green and brown female: like male but with broader abdomen habitat: mangrove marshes Jalisco flight season: months 1,6,10 thus far

# **Fiery Darner** (*Coryphaeschna diapyra*)



photos: male and female size: very large, length ~75 mm, wingspan ~100 mm male: green thorax with reddish abdomen, long appendages female: like male but with brown eyes; wings can turn brown with maturity habitat: ponds and marshes Jalisco flight season: months 7,8,11 thus far

# Pale-green Darner (Triacanthagyna septima)



photos: male and female **RARE in Jalisco** - please report any sightings size: large, length 59-66 mm

male: pale green thorax, pale yellow legs; eyes bluish-green; thin brown abdomen with green rings; long appendages female: very similar in coloration to male but has greenish-brown eyes; long, slender appendages; T-spot lacks a stem behavior: hang from a twig or vine with abdomen almost vertical; crepuscular feeders, roost within the jungle; come out to feed at jungle edge at dusk habitat: breed in jungle rain pools
Jalisco flight season: months 5,6 thus far

# **<u>Caribbean Darner</u>** (*Triacanthagyna caribbea*)



photos: male and female
RARE in Jalisco - please report any sightings
size: medium, length ~ 63 mm
male: green thorax striped with black; tip of abdomen pale green
female: very similar in coloration to male but with wider body
behavior: hang perch; crepuscular
habitat: tropical forests
Jalisco flight season: months 7,9 thus far

# Malachite Darner (*Remartinia luteipennis*)



photos: male and pair in mating wheel size: very large, 76-80 mm, wingspan 92-102 mm
male: wide green stripes sides and top of thorax, pale thoracic stripes wider than brown stripes; abdomen brown with S1-2 mostly green, thin green marks rest of abdomen
female: like male but eyes and face blue with very short appendages; wings become brown with maturity
behavior: males fly at waist to above head level, hovering now and then
habitat: ponds and streams with marshy edges
Jalisco flight season: months 4-11 thus far

#### Secretive Darner (Remartinia secreta)

© Tripp Davenport

# © Veronik Moon

#### photos: males

size: very large, 78-80 mm, wingspan 92-100 mm
male: like Malachite Darner but with the brown stripes as wide as, or wider, than green stripes
female: unlike male almost unmarked pale yellow-green thorax; abdomen patterned with very short appendages; wings become brown with maturity behavior: secretive
habitat: small pools in fern swamps; unlikely to be in the highlands
Jalisco flight season: months 8,10 thus far

# **Turquoise-tipped Darner** (*Rhionaeschna psilus*)



**behavior:** abdomen carried straight in flight; swarms; migrates **habitat:** ponds, ditches and sluggish streams **Jalisco flight season:** months 1-3,8-12 thus far photos: males size: large, 56-61 mm

male: patterned slender dark abdomen; S9-10 blue on the underside, S10 has paired spots connected by a bar; wide sinuous green thoracic stripes; long slender appendages; inconspicuous bump under first segment
female: thorax similarly marked to male; inconspicuous bump under first segment; spots on abdomen are small and green colored, S10 has paired spots connected by a bar; long appendages



# Black-tailed Darner (*Rhionaeschna jalapensis*) NEW 2021



© Omar Correa Rodríguez

photos: male RARE in Jalisco - please report any sightings size: large, 68 mm male: fewer pale spots atop abdomen than other *Rhionaeschna*; stripes on thorax thin; dark line across face, blue eyes; appendages forked in side view; inconspicuous bump under first segment female: thorax similarly marked to male; inconspicuous bump under first segment behavior: females may submerge abdomen when oviposiing habitat: small to medium ponds Jalisco flight season: month 3 thus far

# **Blue-eyed Darner** (*Rhionaeschna multicolor*)



photos: male and female size: large, 65-69 mm, wingspan 89-92 mm male: bright blue eyes; pale line across face; blue stripes on front and sides of thorax, inconspicuous bump under first segment; abdomen mosaic patterned; appendages shaped like a wrench when seen from the side female: thorax similarly marked to male; inconspicuous bump under first segment; colored as male or in greens and browns behavior: abdomen carried straight in flight; swarms; migrates; hang perch habitat: ponds, ditches and sluggish streams Jalisco flight season: months 2,3,5-11 thus far

## Ditzler's Darner (Triacanthagyna ditzleri)

# © Robert D Stevenson

photos: male and female
RARE in Jalisco - please report any sightings
size: relatively small, length ~59 mm
male: dark brown thorax with green stripes on side wider than the brown background, middle of 3 stripes narrower, stripes atop thorax;
dark brown abdomen with small pale green markings; long appendages
female: very similar in coloration to male; 3 prominent spines under S10; long appendages
behavior: hang perch; crepuscular
habitat: tropical forests
Jalisco flight season: month 8 thus far



# Bar-sided Darner (Gynacantha mexicana)



habitat: ephemeral pools and ponds Jalisco flight season: months TBD

# Twilight Darner (Gynacantha nervosa)

rotated 90°

©Kathy Biggs, posed

photos: male (posed) and female (in-hand) size: very large, 75-81 mm male: tan thorax with 2 dark dots on sides; slender abdomen with thin light green rings female: similar to male but with two spines on underside of abdomen S10; T-spot has spine similar species: Bar-sided Darner has lower appendage less than half length of the uppers behavior: swarm at twilight (corpuscular), does not fly during the daytime; eggs laid in tree holes habitat: ponds, ditches and sluggish streams Jalisco flight season: months 1-3,5,6,9-11 thus far

© Kathy Biggs, posed

# Helen's Darner (Gynacantha helenga)





photo: males (mature and immature) RARE in Jalisco - please report any sightings size: relatively small, length TBD male: bright yellow appendages and tip of S10; abdomen is brown with yellow-green markings that grow smaller on each segment, S1-2 have blue on them; thorax green with brown stripes female: like male; pale stigma behavior: crepuscular, perch by hanging from a twig, vine or leaf habitat: forest clearings Jalisco flight season: months 4,6-8,10,11

# SUBORDER II: DAMSELFLIES (ZYGOPTERA)

Damselflies have widely separated eyes and long thin bodies. Most hold their wings closed above or alongside the abdomen.

**5 of Mexico's 8 families of damselflies have been recorded in Jalisco** (several families have recently been merged into Pond/Narrow-winged Damsels)

### V. Jewelwings

### **VI. Pond Damsels**



Jewelwings (Calopterygidae)

- 1 genus in Jalisco

All have red at the base of their wings and long legs



Pond Damsels (Coenagrionidae)

- 12 genera in Jalisco

Very common, variable and colorful; wings are held closed, above the abdomen



**VII. Spreadwings VIII. Other families** 

Spreadwings (Lestidae)

- 2 genera in Jalisco

They perch with their wings spread delta-like to their sides; blue eyes



Other Families: Shadowdamsels (Platystictidae)

- 1 genus in Jalisco
  Bannerwings
  (Polythoridae)
- 1 genus in Jalisco

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### Part I: Jewelwings (Calopterygidae)

—7 species have been documented in Jalisco.

Only one genus has been recorded in Jalisco

All the males and some of the females in this genus have red in the basal area of their wings, some have additional coloration at the wing-tip





### American Rubyspot (Hetaerina americana)



**photos:** male and female **size:** medium/large, length 40-51 mm

**male:** 1/3 to 1/2 basal area of wings ruby red, tips mostly clear; thorax top blood red, pale side stripes; abdomen bronze-brown-green with thin rings; pale stigma on wing (occasionally missing); tan on underside of abdomen

female: less colorful; wings usually with orange streak on leading edge, tips mostly clear, pale stigma (sometimes missing),

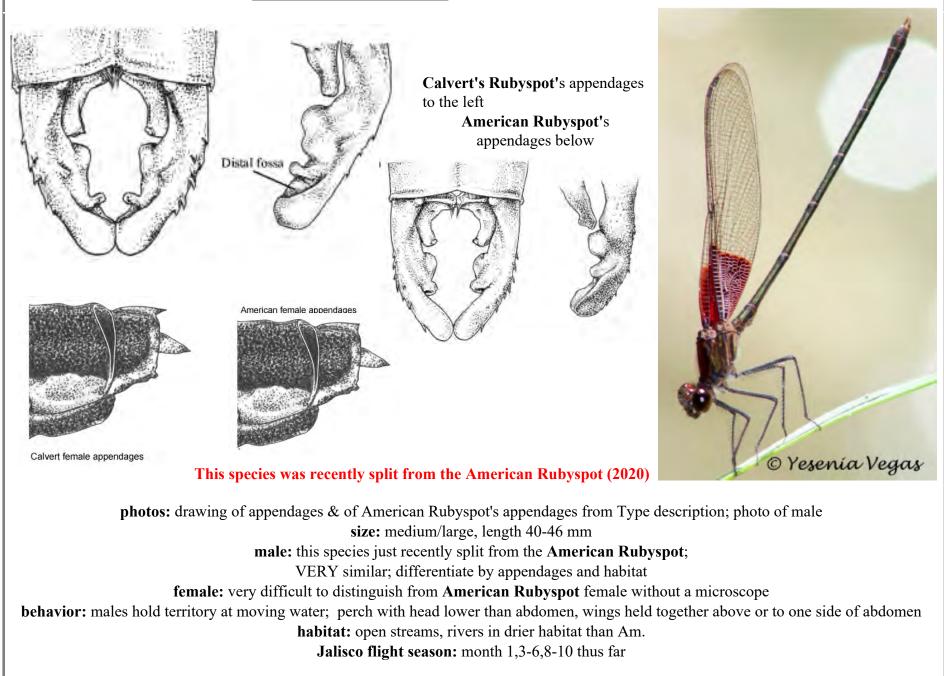
beige stripes down sides of each abdominal segment

behavior: males hold territory at moving water; perch with head lower than abdomen, wings held together above or to one side of abdomen

habitat: open streams, rivers

Jalisco flight season: flies all year

### Calvert's Rubyspot (Hetaerina calverti)



### Canyon Rubyspot (Hetaerina vulnerata)



compare by appendages - American's upper appendages have 1-2 toothlike lobes inside at midpoint while Canyon's lack these lobes female: less red; thorax top metallic green; wing patches orangish, no stigma, smoky wing tips
behavior: males hold a territory at moving water sites; usually don't hold wings together to one side of abdomen like American Rubyspot habitat: canopied streams, rivers

Jalisco flight season: months 2-4,7,10-12 thus far

### Smoky Rubyspot (Hetaerina titia)

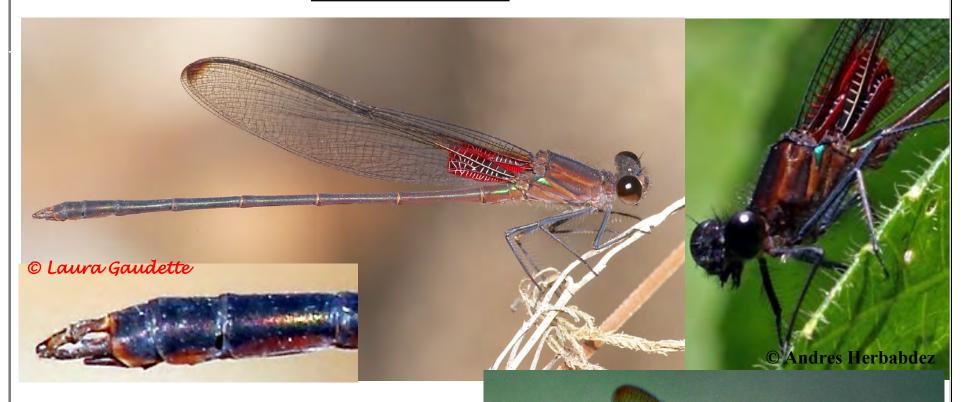
# © Dave Biggs

### upward turned appendages

photos: male and appendages (from side) and female size: medium/large, length 40 - 51 mm male: quite variable; in Jalisco, there is very little dark beyond the basal red in the wings but the wing tips are smoky; chestnut-colored thorax; abdomen mostly black; lower appendages curve upward female: four green spots on the top of the chestnut-colored thorax are diagnostic; pale stigma behavior: males hold territory at moving water sites; usually perch horizontally habitat: sandy-bottomed streams, rivers Jalisco flight season: months 1-3,5-12 thus far



### Highland Rubyspot (Hetaerina cruentata)



© Jaguar Gozando Scl

photos: males (close-up & appendages) and female
size: medium/large length 41- 48 mm
male: like other Rubyspots, has red at base of wing with a dark tip, no stigma; the bright green triangle on the side of the thorax is diagnostic
female: less colorful; wings without red, only amber wash and not dark at tip; green triangle and stripe on thorax side and top
habitat: not found at lower elevations
Jalisco flight season: months 1,3,4,8,9,11 thus far

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### Racket-tipped Rubyspot (*Hetaerina occisa*)



photos: male & appendages (from below) and female size: medium, length 35-48 mm male: ruby red color at base of wings with a distinct jewel-like red colored spot at tip of wings; S1-3 usually red on top; long, racket-shaped lower appendages female: lacks jewel-like spot at wing-tips; top of thorax with green sheen; wings slightly smoky; prothorax (neck-like area) has sideways projections, lacking in female Smoky Rubyspots behavior: males hold territory at moving water sites; sometimes perch with head lower than abdomen & wings held together above or to one side of the abdomen habitat: open clear streams, rivers Jalisco flight season: flies all year



© Terry Carr



### **Bronze Rubyspot** (*Hetaerina capitalis*)



Emmanuel Quevara Lazzano

photos: males
RARE in Jalisco - please report all sightings
size: large, length 45-50 mm
male: wings with stigma present, basal red hindwing patch
shortened, indistinct red -brownat tip of wing; lower appendages
very short; brown thorax with thin pale stripes; large nose-like
structure that lies between the eyes is metallic blue-green
female: stigma present; metallic markings green; side stripe
reaches thorax end; large nose-like structure that lies between the
eyes is metallic green.
behavior: males hold territory at moving water sites; often perch
with head lower than abdomen
habitat: wooded small clear streams
Jalisco flight season: months 6,9,11 thus far



### Part VI: Pond Damsels (Coenagrionidae) - 45 species documented in Jalisco

### Quick Guide to the Pond Damsels—12 genera —the 5 most common:

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### Dancers — Argia

Most are blue and black, some purple/red Hold their wings together sail-like over the body; at moving water—25 species



### Bluets — Enallagma

Blue and black; hold their wings alongside their abdomen when at rest; on still waters—4 species



### Threadtails — *Neo<u>neura/Proto</u>neura*

## Forktails *—Ischnura*

Small and black with blue/green on head and tails—5 species





### **Big Red Dancer** (Argia funcki)



size: VERY large for a damselfly, 47-54 mm; Mexico's largest *Argia* male: bright red where most Dancers are blue; thorax has 2 parallel wide butt unforked side stripes; abdomen tipped in red with reddish rings; stigma red in center female: several color forms, can be like male, blue or brown; stigma shows reddish color behavior: perch high above the water on trees, boulders and cliff faces; become more active as the day warms up habitat: fast moving, mid-elevation stream and rivers Jalisco flight season: months 1,5-8 thus far

### **Fiery-eyed Dancer** (Argia oenea)



photos: male and tandem ovipositing pair size: small/medium, length 33-39 mm male: upper & front of eyes bright red; coppery orange face; top of thorax dark metallic coppery red; abdomen S3-6 blue/purple above with S8-10 all blue; wings clear female: eye color more muted if showing any red at all; tan/brown coloration; top of thorax without red; deeply forked side thoracic marks behavior: Dancers hold their wings closed, above the body when perched, often clapping them together; females may oviposit completely submerged habitat: shallow rocky streams and rivers Jalisco flight season: flies all year



### Painted Damsel (Hesperagrion heterodoxum)



photos: male, young female, mature female size: small/medium, length 27-35 mm
male: red eye spots; red top S8-10; yellow under S1-7; thorax top with 4 blue marks, sides blue, yellow brown in immature; coloration variable by age - immature all orange (above right)
female: only top of S7 blue; thorax top with blue triangles; coloration quite variable with age habitat: creeks and streams
Jalisco flight season: months 3-5,9,10 thus far

### **Amethyst Dancer** (Argia pallens)

© Pierre Deviche



© Rosser Garrison

photos: males and dark form female (bottom)
size: medium/small, length 32-35 mm
male: almost all violet /rose & very pale, even eyes, legs & tops of S8-10; top thoracic stripe thin & narrow, dark side stripe very thin and pinched at middle; prothorax ("neck")
violet; pale stigma; no triangles down side of abdomen;

S7 pale, not black female: dark tan to rose habitat: small streams at low altitudes Jalisco flight season: months 2-4,7,8,11,12 thus far

### Purple Dancer (Argia pulla)



### © Dave Biggs

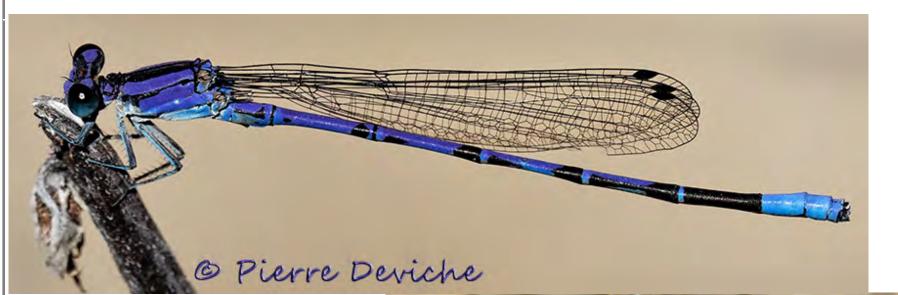


photos: males and females size: small/medium, 23-35 mm male: purple ground color; dark abdomen with thin pale rings and purple tip; thorax with wide side stripe; dark blue eyes have connected purple eye-spots some males & females seem to have a thinner side stripe female: brownish purple; some have darkened wings behavior: Dancers hold their wings closed, above the body, often clapping them together habitat: ponds & slow moving water Jalisco flight season: flies all year

© Kathy Biggs

© Doug Danforth

### Springwater Dancer (Argia funebris), formerly A. plana





photos: male and female size: small/medium, length 33-40 mm male: purple coloration; the top stripe is shaped like a coffin; unforked pinched side stripes; S4 and 5 each have a small triangle that points rearward, S7-10 unmarked pale blue female: like male or pale browns habitat: canopied streams, seeps Jalisco flight season: flies all year

### Variable Dancer (Argia fumipennis)

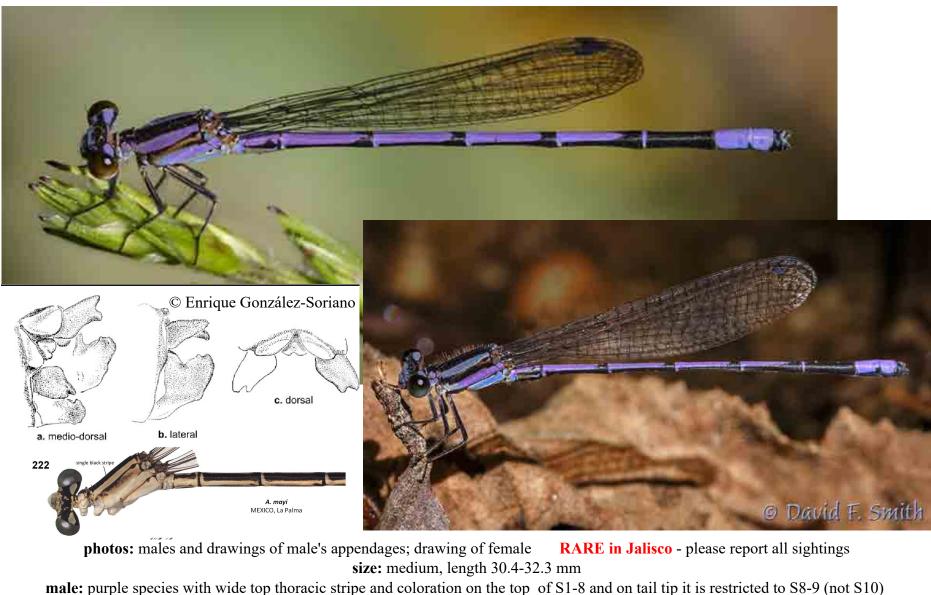


behavior: prefers slow moving areas of streams

**habitat:** slow streams, ponds

Jalisco flight season: months 4,5,7-10 thus far

### May's Dancer (Argia mayi)



male: purple species with wide top thoracic stripe and coloration on the top of \$1-8 and on tail tip it is restricted to \$8-9 (not \$10 female: the mesostigmal plate (neck-like behind head) has erect hind margin similar species: Argia fumipennis has \$10 pale on top, no other male Argia in Jalisco has \$10 dark habitat: mid-elevation clear streams, endemic to Mexico Jalisco flight season: months 8&9 thus far

### **Cerulean Dancer** (Argia anceps)



photos: male and female size: medium length 37-41 mm male: bright sky blue species with very little black; wings can be amber-tinted; large eyespots; ALL the abdominal segments are blue on the top; side stripe pinched but not forked; S2 has short dark stripe on the side; appendages black female: like male or tan; narrow line atop thorax; simple abdomen segments with a single small mark at the rear of each; amber-tinted wings habitat: small rocky streams Jalisco flight season: flies all year



### **<u>Celestial Dancer</u>** (*Argia variabilis*)



size: medium, length 33.6-35.7 mm male: bright sky blue species with very little black; ALL the abdominal segments are blue on the top; side stripe pinched but not forked; top stripe is narrow; S2 has short dark stripe on the side; appendages black

female: blue coloration is duller, shows triangles alongside abdomen similar species: Cerulean Dancer has wider top stripe;
Sierra Madre Dancer shows black between S7&8 and top stripe is wider habitat: forested areas at waterfalls
Jalisco flight season: month 11 thus far



© Juan Carlos Garcia

### **Sierra Madre Dancer** (Argia lacrimans)



**photos:** males and female **size:** medium, length 37-46 mm

male: blue and black species with clear wings; large eyespots; thorax side stripe can be pinched or forked; abdominal S3 & 4 have

incomplete bands versus S5&6 which have complete bands, S8-10 blue;

seen from above, the front 75% of S7 is blue; pale appendages

female: like male or pale browns; bold paired spots on S8,9; the bold pattern on S3-6 swells ventrally at the rearS8 & 9 blue

habitat: small rocky streams in wooded areas

Jalisco flight season: months 3-10 thus far

### Harkness's Dancer (Argia harknessi)



photos: male and ovipositing females size: medium, length 39-44 mm male: bright blue with unforked side stripe; abdomen with S7 black, S3-6 with blue points pointing towards "tail", S8-10 blue with dark lower edges female: patterned like male but points replaced by streaks habitat: rivers Jalisco flight season: months 3-5,7,8 thus far

### Apache Dancer (Argia munda)



photos: males and female (in tandem)RARE in Jalisco - please report all sightingssize: medium, length 36-40 mm

male: thin top and unforked side thoracic stripes, conspicuous pale line low on side of thorax gives it a bi-colored look female: like male or pale browns habitat: canyon streams, even intermittent Jalisco flight season: months 3?,5,9,11? thus far

### Aztec Dancer (Argia nahuana)



male: bright sky-blue; thorax shoulder stripe variably forked (lower stripe can be interrupted; blue "tail" S8-10; distance between lower appendages from above less than width of individual appendages; usually a spot, rather than a dash, on S2 side female: less colorful, thicker bodied than male; one form like male; other is tan and black
 behavior: Dancers hold their wings closed, above the body when perched, often clapping them together habitat: slow waters

Jalisco flight season: months 4-7,9 thus far

### Spine-tipped Dancer (Argia extranea)



photos: male and tandem ovipositing pairs size: small, length 32-37 mm male: blue-colored or light purple with wide, parallel-sided top thoracic stripe, stair-stepped side stripe; saddle-shaped spot side of S2, S3-6 each with an isolated triangle that points backwards, S7 has blue/purple atop ~50%, S8-10 blue with thick black line along the bottom edge female: marked like male but less colorful; darker face; 2 forms, one blue & one tan behavior: Dancers hold their wings closed, above the body, often clapping them together habitat: small rocky &/or sandy streams, usually with a lot of emergent vegetation Jalisco flight season: flies all year

© Laura Gaudette

### \*Anna's Dancer (\*=proposed name) (Argia annae)



### Yaqui Dancer (Argia carlcooki)

# O Dave Siggs

photos: male and female size: small, length 30-33 mm male: blue-colored with thickly-forked side thoracic stripe; S3-6 have long dark triangles along side, S8-10 blue on top and sides and black underneath, S7 all dark female: more strongly marked than male behavior: Dancers hold their wings closed, above the body, often clapping them together habitat: lushly vegetated streams Jalisco flight season: months 1-9,11,12 thus far



### **Tarascan Dancer** (Argia tarascana)



photos: male and 2 females
size: medium, length 34-39 mm
RARE in Jalisco - please report any sightings

male: blue and black species with wide, variably forked side stripe, top split forms a backwards pointing arrow; large eyespots; abdominal S3-6 each have a black band covering less than 1/3 of the segment, S8-10 blue female: like male or pale browns

habitat: streams, ditches

**behavior:** Dancers hold their wings closed, above the body when perched, often clapping them together **Jalisco flight season:** months 6?,7-9,11,12 thus far

### Sabino Dancer (Argia sabino)

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OPierre Deviche

photos: male and female RARE in Jalisco - please report any sightings size: medium, length 36-39 mm
male: blue/indigo coloration; side stripe wide and forked with an
"island" of color at end; S3-5 have a complete black band at the rear that covers about 1/3 of the segment; S6 is 50/50 black & blue, S7 all black on top
female: similar to male but tan and light blue or tan and dark with ringed abdomen
behavior: Dancers hold their wings closed, above the body when perched, often clapping them together
habitat: pools near waterfalls; streams with large boulders
Jalisco flight season: month 8 thus far

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### **Oculate Dancer** (Argia oculata)





**male:** abdomen mostly dark with backwards pointing blue arrows atop the segments nearest the thorax; side thoracic stripe wide and forked; "tail" black on underside with blue on top of S8-10

© Cíndy Skeie

**female:** thorax like male, but abdomens with rings, not points. Blue and tan forms **behavior:** Dancers hold their wings closed, above the body, often clapping them

habitat: ponds; slow moving water Jalisco flight season: flies all year

Note: formerly called the Blue-point Dancer

### Ulmec Dancer (Argia ulmeca)





**photos:** males and female in tandem **RARE** in Jalisco - please report any sightings **size:** large, length 40-46 mm

**male:** blue-colored with thickly-forked side thoracic stripe, wide top stripe; abdomen black with thin blue ring at each segment break, unique dark mark on S8; wings can show tinting

female: a little smaller, tan where male is blue and with pale side streaks on abdomen

similar species: Oculate Dancer has blue points on S3-5; Purple Dancer has eye spots connected by a bar

behavior: Dancers hold their wings closed, above the body, often clapping them together

habitat: mid-elevation rocky streams in pine/oak forest

Jalisco flight season: month 7 thus far

### Tezpi Dancer (Argia tezpi)



C Laura Game Co

**photos:** male, blue female and tandem pair size: small/medium, length 36-42 mm

male: very dark, even the face and eyes, eye-spots not very noticeable; thorax top all dark, sides two-toned; wings usually golden; all dark abdomen including S7-10 with 4 pale rings around segments female: blue or brown; split thoracic side stripe behavior: Dancers hold their wings closed, above the body when perched, often clapping them together habitat: ponds & slow moving water Jalisco flight season: flies all year

### **Dusky Dancer** (Argia translata)



© Miguel L. Cuellar

photos: male and female RARE in Jalisco - please report any sightings size: medium, length 35-41 mm male: very dark with pale rings and no blue on the 'tail'; purplish tint to the body and luscious eyes; side stripe doubled and joined at the base; some cream color low on S8-10 female: like male or light tan; lack the luscious eyes behavior: Dancers hold their wings closed, above the body when perched, often clapping them together habitat: rivers Jalisco flight season: months 6,8 thus far



### Powdered Dancer (Argia moesta)



**habitat:** rocky rivers, windy lakes **Jalisco flight season:** month 8 thus far

### **Neotropical Bluet** (*Enallagma novaehispaniae*)



photos: male and female size: small, length 29-35 mm male: thorax blue or purple-blue, top stripe and side stripe parallel-sided and about the same width; large oval eye spots; long abdomen with blue atop S8 & 9 often separated by a dark ring; top appendages forked & extend considerably beyond lower appendages female: one form like male or somewhat green; other mostly brown similar species: Claw-tipped Bluet has more blue/purple atop abdomen behavior: Bluets usually hold their wings alongside abdomen rather than sail-like over their abdomen



habitat: pools of heavily vegetated streams Jalisco flight season: months 1-6,9,10,12 thus far

### **Claw-tipped Bluet** (*Enallagma semicirculare*)





photos: male and femalesize: small, length 30-32 mmmale: blue or purple with very long, smooth upper appendages that extend considerably beyond lower appendages; S7-9 blue/purple;<br/>top thoracic stripe wider than side stripe<br/>female: like male but more bluesimilar species: Neotropical Bluet has less blue/purple atop abdomen<br/>behavior: Bluets usually hold their wings alongside abdomen rather than sail-like over their abdomen<br/>habitat: heavily vegetated slow streams and ponds<br/>Jalisco flight season: months 1,2,5,7-9 thus far

## Familiar Bluet (Enallagma civile)





photos: male and female size: small/medium, length 28-39 mm male: markings more blue than black, S3-5 are mostly blue; top thorax stripe dark; small comma-shaped eyespots; top appendages longer than lowers, large and fin-like with pale "button," appear splayed female: like male or tan and black

similar species: Arroyo Bluet has S4&5 mostly black and forked upper appendages behavior: Bluets usually hold their wings alongside abdomen and fly low over water along shoreline or over submerged vegetation rather than sail-like over their abdomen habitat: still waters with nearby fields

#### Arroyo Bluet (Enallagma praevarum)

# © Troy Hibbitts

photos: male, appendages and tandem pair size: small, length 26-37 mm
male: S4-7 more black than blue with each segment usually 50% darker than the preceding one; S3 usually more than 50% black, S8 & 9 blue; thorax top stripe dark; forked upper appendages female: pale areas blue or tan; no blue on tail similar species: Familiar Bluet has S4-7 more blue than black behavior: Bluets usually hold their wings alongside abdomen rather than sail-like over their abdomen habitat: lakes, ponds, streams Jalisco flight season: months 1,3,5,7,8,10,11 thus far



# West Mexican Yellowface (*Neoerythromma gladiolatum*)





hint: when you can't see the face, look for the 3+ blue tail-end segments. All dancers and bluets have fewer segments blue

photos: male and ovipositing pair size: small; length 28-31 mm male: uniquely yellow on face; resembles a bright blue Bluet but with blue on 3 of the end of tail segments, including S7-9; wedge-shaped appendages female: like male but with dull yellow-green face similar species: like Bluets (*Enallagma*) but there are no Bluets with yellow faces or three segments wih blue on tail end Caribbean Yellowface (*N. cultellatum*) has S7 all black, not found nor expected in Jalisco habitat: ponds, flooded lagoons especially with grasses and sedges Jalisco flight season: months 2,3,5-11 thus far



# Mexican Forktail (Ischnura demorsa)



# Rambur's Forktail (Ischnura ramburii)



photos: male and immature female
size: small, length 27-36 mm
male: green-blue shoulder stripe very
thin, parallel sided; tiny circular eyespots not connected with a bar; thorax
and S1-3 greenish-blue; yellowish-orange
underside only on S3-7; blue surrounds
S8, part of 9, not top of 10; lower
appendages point straight out
female: two forms, one form is very
male-like or the orther is Day-Glo



red/orange turning tan/olive with a wide black stripe on thorax top similar species: Citrine Forktail female's abdomen not all black; Tiny Forktail male has less blue on tail-tip; Mexican Forktail male is similar with much larger fork atop end of S10 and wider side stripes

Jalisco flight season: flies all year

#### Tiny Forktail (Ischnura capreolus)



appendages forked with the lower fork the longest female: lime green/yellow, blue S9 only similar species: Rambur's Forktail female is without green; Mexican Forktail male is similar but with much larger fork atop end of S10 habitat: dense grass/sedge areas in marshes or at the edge of ponds Jalisco flight season: months 4,6-10 thus far

# Black-fronted Forktail (Ischnura denticollis)



**photos:** male and young female **size:** very small, length 22-26 mm

© Steve Potter

male: no stripes or dots top of thorax; all dark above, sides of thorax blue (green in immature); blue patches on top & bottom of segments 8-9 do not touch; chartreuse underside; frail; upper appendages bent down; stigma has white margin at rear female: thorax sides pale coral but when mature green/blue thorax sides habitat: lakes, ponds, seeps

Jalisco flight season: months 3,5,7,8,10 thus far

# Citrine Forktail (Ischnura hastata)



female: wide black stripe atop thorax in both pruinose mature form and immature orange form

similar species: mature female Mexican Forktail lacks dark top stripe;

Mexican Forktail male is similar but with a much larger fork atop end of S10; no yellow on top

habitat: ponds, flooded lagoons; slow moving water

Jalisco flight season: months 1,3,4,6,8-12 thus far

# **Black and White Damsel** (*Apanisagrion lais*)

# O Azucena Briones Muñoz

photos: male, wingtip and immature female size: medium, length 35-38 mm male: all dark with thin green lines atop thorax and pale pruinosity S8-10; dark smudge-like look at wingtip is diagnostic female: like teneral males, bright orange when immature; male-like when mature behavior: hovers in the shade; seen mostly in the mornings habitat: wet margins of canopied streams and seeps Jalisco flight season: flies all year

@ Art Mur

# **Orange-striped Threadtail** *Protoneura cara*)



© Dave Biggs

photos: male and tandem ovipositing pairs
size: small, extremely thin; length 33-37 mm
male & female: both have very thin dark abdomens with pale
rings; males show more orange on the thorax, eyes and face
behavior: females bend at extreme angles to oviposit,
needing to "park" their very long abdomens between their
wings for stability
habitat: ponds and river pools with abundant underwater
vegetation reaching the surface
Jalisco flight season: flies all year

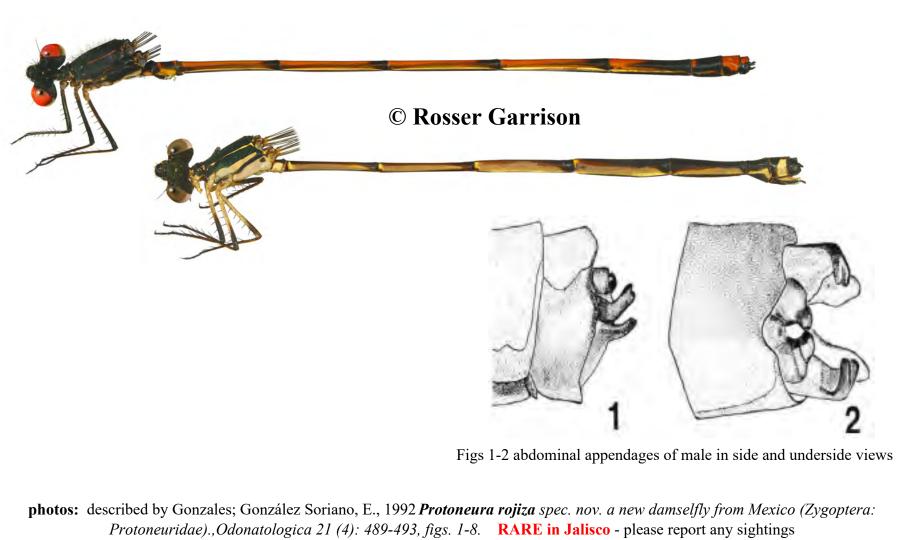


# Amelia's Threadtail (Neoneura amelia)



Jalisco flight season: month 9 thus far

# Ruddy Threadtail (Protoneura rojiza)



size: medium (but larger than other Threadtails in Jalisco), extremely thin, length 39-43 mm male: black head with ivory "face"; thorax black with narrow red line, outer legs black, wings yellowish; blood red abdomen with dark markings atop the segments female: like male but stripes on S1-2 yellow and abdomen reddish brown except S7-10 black

habitat: inland streams

Jalisco flight season: month 7 thus far

# Desert Firetail (Telebasis salva)



**photos:** male and tandem ovipositing pair size: very small, length 23-29 mm male: dainty and slender; all red abdomen extends well beyond wing tips, tip of abdomen without black; red face and eyes; black eye spots; thorax red with black; pale legs female: similarly marked; color varies from brown to tan to orange-red behavior: tandem oviposit; eggs laid in algae mats and floating decomposing vegetation habitat: shallow waters with algae scum and/or floating decomposing vegetation; lowlands Jalisco flight season: flies all year



# Hyacinth Firetail (Telebasis levis)



photos: male and female size: small/medium, length 28-32 mm male: thorax top metallic black, thorax sides lighter colored female: like male or lacks red; top of thorax dark without dark sheen behavior: usually found on ponds and not far from them habitat: ponds with many water hyacinths Jalisco flight season: months 5-11 thus far

# **Striped Firetail (Telebasis filiola)**

# © Dave Biggs

Doug Danforth

photos: male and tandem pair size: VERY small, length 20-26 mm male: dainty and slender; all red abdomen extends well beyond wing tips; blue-green face and bottoms of eyes; thorax black with pale blue-green stripes; tip of abdomen without black female: head and thorax like male; abdomen dark habitat: small weedy ponds and marshes, especially with water hyacinths Jalisco flight season: months 1-7,9-12 thus far

# Middle American Pearlwing (Anisagrion allopterum)



size: length, small/medium ~32 mm

male: abdomen all black on top with some pearly blue under S1-3, & 7-9; thin pale rings S2-7 only; thorax with thick black stripe on top, side dark stripe thicker at front end, pearly blue as color on sides of thorax; small stigma with a hint of white at bottomfemale: when young orange with dark near end of abdomen, there is much color variation with age, at maturity similar to male with pruinosity on tip instead of blue under the tip

habitat: mid-elevation wetlands including marshy ponds and slow streams in or out of forest Jalisco flight season: months 4,11 thus far

# **<u>Red-tipped Swampdamsel</u>** (*Leptobasis vacillans*)

# © Erland Refling Nielsen

photos: mature male, immatures and female RARE in Jalisco - please report any sightings size: medium but thin and long, length ~33 mm male: when mature, thin green stripes on thorax, legs without black bands; abdomen red, green and dark with red tip S8-10 female: change greatly as they age, if they live long enough, they are male-like habitat: presumably swamps Jalisco flight season: months 7,8 thus far



# © Leslie Flint

© Karen Vágueg

# <u>Cream-tipped Swampdamsel</u> (Leptobasis melinogaster)





photos: male and female
RARE in Jalisco - please report any sightings
size: medium but thin, long, length 38-40 mm
male: green eyes & eye-spots; green stripes on thorax, black bands on legs; long, thin dark abdomen with tiny rings and pale pruinosity S7-10
female: shorter abdomen than male, with conspicuous dark rings; no pruinosity; pale blue-green on thorax habitat: shaded pools in slow moving streams, especially with tall grasses
Jalisco flight season: months 1,7,8 thus far

# Lemon-tipped Helicopter (Mecistogaster ornata)



photo: young male, female in flight and mature male scan size: VERY LONG/SLENDER, length 73-102 mm male: wing-tips yellow with very long abdomens; in breeding season wingtips turn dark brown female: wing-tips yellow; very long abdomens behavior: when flying, only the colored wingtips show, making it look like a twinkling light in the jungle; prey on spiders in their webs; hang perch; females lay their eggs in puddles formed in tree holes habitat: areas in jungle with light gaps Jalisco flight season: months 1-4,7,9-12 thus far



**© Dennis Paulson** 

# Part VII: Spreadwings (Lestidae) -

-5 species documented; wings usually held open, long stigmas

-2 genus of Spreadwings occur in Jalisco:

# Stream Spreadwings Archilestes

—1 species Found on moving water, long, hold their wings out to their sides



# Pond Spreadwings Lestes

—4 species Found on still water, not as large as Stream Spreadwings, hold their wings spread out delta style



# **Great Spreadwing (Archilestes grandis)**



**photos:** males and female **size:** large, slender, length 50-62 mm

male: long abdomen is dark gray with greenish sheen, pruinose area near tip; one continuous pale side stripe on thorax side (yellow in mature); blue eyes & face; stigma dark when seen from above; top appendages semicircular, lowers are divergent; S9&10 pale pruinosity female: like male, but tip of tail expanded; eyes and face less blue
 behavior: wings held out straight from the body (spread); oviposit into tree branches overhanging wetlands habitat: streams with overhanging Willow trees etc. where the females place their eggs into the bark Jalisco flight season: flies all year

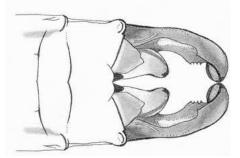
# **Plateau Spreadwing (Lestes alacer)**



**photos:** male and female **size:** length, medium, slender, 34-45 mm

male: broad dark stripe top of thorax, dark side stripe variable width; pale side stripe usually a blue tint & narrowing to a point at rear, slightly convex; abdomen slender, esp. middle segments; reduced dark markings abdomen top; S1,2,8-10 become pruinose with age; lower appendages 75% of uppers
 female: similar to male or with less blue
 habitat: grass-edged ponds, slow streams at low elevations
 Jalisco flight season: months 6-12 thus far

# **Blue-striped Spreadwing (Lestes tenuatus)**



© Enrique González Soriano

#### © Ramón Trinchan



photos: males, appendages and female size: medium, slender, length ~40 mm male: large amount of blue on thorax side, second blue stripe below the upper thoracic stripe; very small amount of pruinosity at tail tip, no pruinosity on S10, only on S9 female: like male or paler blue and metallic brown habitat: woodlands Jalisco flight season: months 6,8,12 thus far

© Ramón Trinchan

# **Tikal Spreadwing (Lestes tikalus)**



**photos:** male, appendages (insert) and tandem pair **size:** small/medium, very slender, length ~ 33-36 mm

**male:** stepped black spots on the pruinose blue thorax sides; long body gray with pruinose area S8-10, while S2 is shiny and not pruinose above; short dark stigma; the top appendages are semicircular and the lower ones are somewhat so, and the lower ones are almost as long as the uppers

female: brown/tan with some green on side of thorax, ovipositor very large extending to end of abdomen behavior: wings held out delta-style from the body (spread); females place eggs in vegetation above where water will pool habitat: shallow ponds and marshes, typically those that are dry in the dry season and re-flooded in next wet season Jalisco flight season: months 2,5,8 thus far

# **Chalky Spreadwing (Lestes sigma)**



**photos:** mature male and ovipositing pair **size:** medium, slender, length 41-45 mm

male: entire thorax becomes pruinose chalky whitish-gray; dark abdomen with segments 8&9 pruinose while S2 is 2/3 pruinose on top; blue eyes, short dark stigma can be bi-colored; lower appendages form an S-curve; immatures are tan with small dark spot on each sides off thorax female: similar to male; dark abdomen with S8-10 pruinose; short ovipositor
behavior: wings held out delta-style; females ofen place eggs in vegetation above where water will pool
habitat: shallow ponds
Jalisco flight season: months 1,2,6,8-10,12 thus far

Part VIII: Other Damselfly Families—2 other families are documented:

#### & Bannerwings (Polythoridae) Shadowdamsels (Platystictidae) =!= =!= =!= =!= =!= Desert Shadowdamsel (Palaemnema domina)

Pierre Devich

# © Pierre Deviche

photos: male and female, **RARE in Jalisco** - please report any sightings size: medium, slender, length 42-45 mm male: long abdomen dark with thin pale rings, S8&9 blue, S10dark; white frons; bright blue "neck" female: like male but less blue or tan where male is blue behavior: secretive; active at dawn and dusk and during light rains; dangle perch mid-day in cavities and overhanging cliffs habitat: places with high humidity in deep shade Jalisco flight season: months 7,8 thus far

# **<u>Blue Cora</u>** (*Cora marina*)

O Yesenia Vega

© Erland Refling Nielsen

photos: male and female RARE in Jalisco - please report any sightings size: medium, but bulky, length 42-45 mm male: bright blue; amber-tinted wings with dark tips, long stigmas; blue atop S1-8, S9&10 all dark; blue "neck"; dark eyes female: bulky and dark with light markings, wings less colored than male but with long stigmas habitat/behavior: rocky forest streams where they perch in shade Jalisco flight season: months 8,9 thus far Note: nymph have gills under abdomen, unusual among living odonates

**Glossary:** 

anal loop: cluster of cells that are foot-shaped in the hind wing of some skimmers

appendages: extensions from the tip of the abdomen. Males use theirs to grasp the female during mating

cerci: upper appendages of male dragonfly

**cf.:** from the Latin "conferre," meaning "to compare," used in biology to represent uncertain identification but similar to the indicated species

club: referring to the expanded abdomen end, often seen on male Clubtails and a few other species

costa: leading vein of wing

frons: the uppermost part of the "face," like our forehead, but situated below and between the eyes

labrum: part of the "face," akin to an upper lip

**nodus:** indentation at midpoint of wing

ovipositor/oviposit: structure for egg laying near the end of the female's abdomen/act of laying eggs

pruinose/pruinosity: waxy coating a dragonfly can secrete to cover its original coloration, like the waxy coating on a plum

S(1-10): segment on abdomen, with S1 nearest the head

stigma: small thickened and darkened area on the leading wing edge near the tip

**TBD**: to be determined

**T-spot:** spot atop face of darners (*Aeshnidae*) that is useful in making identifications

# Notes:

# This guide could not exist without the skill and generosity of the following photographers: (listed in order of number of photos used and then in alphabetic order)

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Tripp Davenport Alfredo D. Euan Leonora K. Gloyd Alvaro X. Hernandez Terry Hibbitts Plazi Treatment Bank Francisco Farriols Sarabia

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