Newsletter of the Wisconsin Dragonfly Society

Wisconsin Odonata News

Vol.4 Issue 1

December, 2016

Featured in this issue:

Fostering the appreciation, study and enjoyment of Wisconsin's dragonflies and damselflies and the aquatic habitats on which they depend.

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By **Dan Jackson**

Banner photo (left) Blue-ringed Dancer male
Banner photo (middle) Blue ringed Dancer female
Banner photo (right) Blue ringed Dancers ovipositing

By **Dan Jackson**

Wisconsin Dragonfly Society

Board Members

It is hard to believe that it is almost Christmas and that the 2016 flight season for Odonata is already becoming a distant memory. It definitely feels like each year goes by faster than the last. For me, this is a good time to catch up on photo processing, doing some reading about Odonata, and for making plans for next year's flight season. Hopefully, I will be ready to go when the Common Green Darners and Variegated Meadowhawks migrate back to our state in early spring.

2016 was another exciting year for the Wisconsin Dragonfly Society and for the Wisconsin Odonata Survey. Based on a quick look, it appears that 138 species were reported this year on the survey!! That means that 80% of the species that have ever been reported in Wisconsin were seen and reported this year!! That, along with over 5,000 sighting records submitted on the survey, shows that members of the Wisconsin Dragonfly Society and other Odonata enthusiasts are truly making a difference in terms of the knowledge about the Odonata that occur in Wisconsin. Thanks to everyone who participates in the survey for all of your hard work and effort!!

Another highlight for the year was a fun annual meeting. This year's event was held in late June in Jackson County and about 40 people took part. The field trips were very successful with over 60 species found during the event. That is pretty spectacular for a two-day event. Thanks to all who helped to put it together and to those who joined us!!

This month is the last month of my two-year term as President of the Wisconsin Dragonfly Society. Thank you for the honor being able to serve in this role. I have really enjoyed it.

I would like to take this opportunity to thank all of the members of the board for your efforts during my term. I really appreciate your support!! You are the unsung heroes of this organization and I am proud to be part of this special group.

On January 1st, Ryan Chrouser will begin his term as the next President of the Wisconsin Dragonfly Society. Please join me in thanking him for taking on that role and supporting him as he leads this organization for the next two years. I am very confident that our organization will be in great hands!!

Dan Jackson

President

Wisconsin Odonta Survey (WOS) Summary for 2016

Ryan Chrouser
President elect

Winter is upon us, and another season of dragonfly adventuring has flown past. My last dragonfly observation hit the Wisconsin Odonata Survey (WOS) database on November 16th, and I am already speculating when that first brave Common Green Darner will follow its instincts north to Wisconsin and its unpredictable spring; thus beginning the 2017 field season.

Don't get me wrong, winter does have its qualities to appreciate; beautiful fresh snowfalls and relaxing time with loved ones is a needed reprieve from the busy summer. It also gives those of us who range from slightly, to disturbingly, obsessed with the Odonata to reflect on our experiences from the last year. The artist and explorer in me reviews my pictures; recalling trudges through marshes, mucky ponds and treacherous currents. I relive epic chases of my flying quarry, and the patient stalking that leads to that near perfect photo of a rare species that has eluded me for too long. However, the scientist in me wants to see the numbers.

The WOS gives us access to a fantastic dataset. Every year I review rare species sightings and check out which counties had the most action in the previous year. I use this data to start laying out some ideas and goals for the next year. I would like to take this opportunity to share some of the numbers with you, and maybe get you excited about having some goals for next year as well.

Let's start by looking at the overall numbers for 2016. We set a new high mark for the WOS with 5180 observations. This is a 28.8% increase from 2015. Also worth noting is that we added some new contributors this year. I don't have access to the exact number, but I can say that it wasn't just a few of us veteran observers increasing their number of observations. To all new contributors reading this, thank you!

The observation data shows us a positive trend of growth (Chart 1). What can we expect for 2017; another 20% growth in observations? Why don't we dig a little farther into the data set and see if we can identify any room for growth. In 2016, observations were reported in 57 of Wisconsin's 72 counties (up from 54 the year before). That means about 20% of Wisconsin's counties had no reports from last year, in addition, 16 counties had less than 10 observations reported. Of the 5180 observations, 3999 were from twelve counties (77.2%), and 2957 were from only five counties (57%). To reiterate, more than half of our observations came from just five counties, and ¾ of the observations came from just 12 of 72 counties. I am not trying to dazzle you with numbers, but the point is that we have many counties in the state that need to be surveyed more in depth. If we can continue to recruit to the WOS, we have a great chance to improve upon our 2016 numbers. Even more importantly, we have a great opportunity to improve our knowledge of Odonata distribution and habitats in Wisconsin.

Now that we have covered the data, let's look at some fun stuff.

- We had reports of 23 priority species (referred to as "Most Wanted" on the WOS website) submitted to the WOS this year (Table 1 below).
- Blue-ringed Dancers were discovered in Waukesha and Jefferson counties at the Bark River; a new species for the state!
- We have some decent data for Blue-eyed Darners that seem to indicate there may be two flights in Wisconsin.
- This seems to have been a banner year for Green-striped Darners. We had 15 observations in the WOS this year compared to 21 from all the previous years combined. I had one observation counting twenty plus at just one marsh!

I have one last item of interest to mention. We set late season records for many species this year. Prior to 2015 we had two November Odonates in the WOS records. After 2015 and 2016 we now have ten (Table 2). This is a pretty remarkable increase. It is notable that the records in these cases were not just broken by a few days, but in many cases by nearly a month. I don't want to get into too much speculation about what this means from a broader perspective; but collecting this type of data over the next several years will be incredibly important to determine if we have a trend as opposed to a couple of outliers.

The long and short of it is that your observations are very valuable and appreciated. This data is important and freely available to all of us, which I think is pretty fantastic! I ask and hope that you will continue to report your observations to the Wisconsin Odonata Survey.

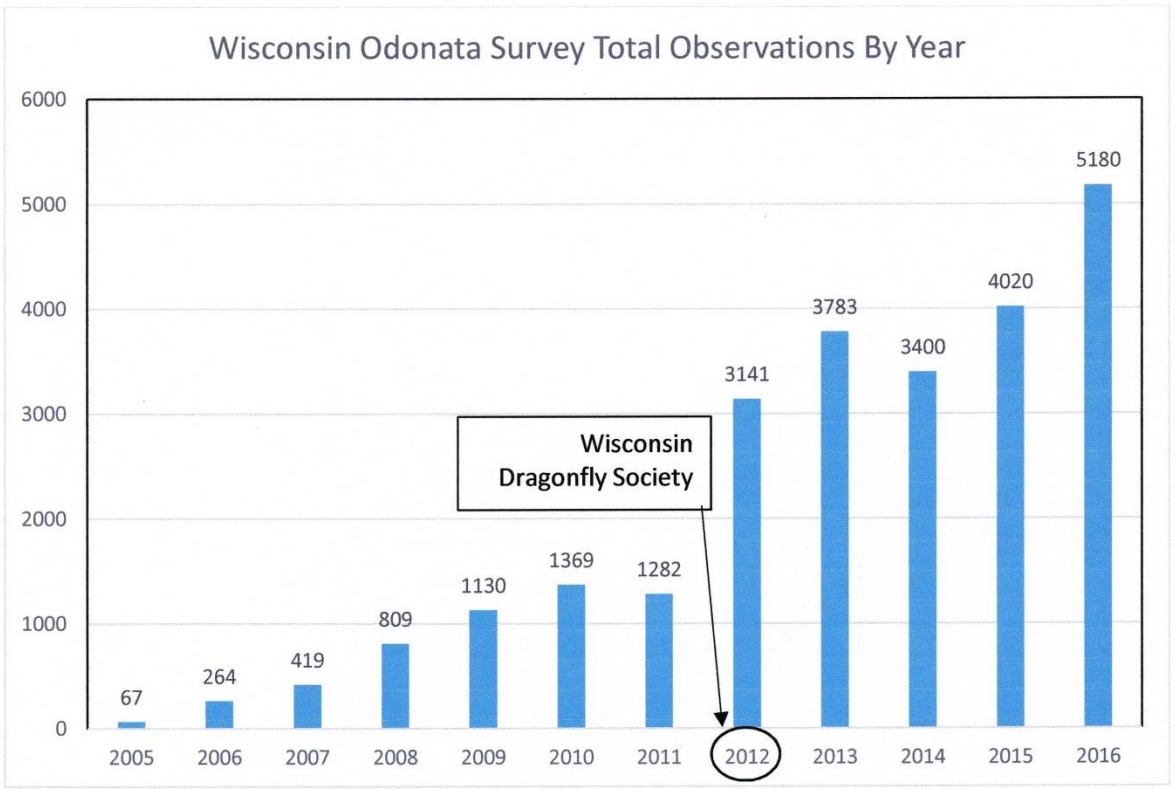


Chart 1 - Wisconsin Odonata Survey Total Observations by Year

	2016	2015	Pre 2015 record	difference in days *
Autumn Meadowhawk	18-Nov	15-Nov	10-Nov	8
Familiar Bluet	17-Nov	7-Oct	11-Oct	37
American Rubyspot	16-Nov	17-Oct	17-Oct	30
Common Green Darner	14-Nov	15-Nov	8-Nov	7
Blue-eyed Darner	10-Nov	3-Nov	12-Oct	29
White-faced Meadowhawk	10-Nov	4-Nov	20-Oct	21
Great Spreadwing	6-Nov	13-Sep	11-Oct	26
Spotted Spreadwing	3-Nov	10-Nov	12-Oct	29
Shadow Darner	1-Nov	22-Oct	21-Oct	11
Eastern Forktail	5-Nov	9-Nov	20-Oct	20

*latest in 2015 or 2016 vs pre 2015

Table 2 – Late season records 2015/2016 vs pre 2015

Species	County
Subarctic Darner	Douglas
Swamp Darner	Kenosha
Blue-eyed Darner	Eau Claire, LaCrosse, Dane
Spatterdock Darner	Ozaukee, Waukesha
Smoky Rubyspot	Rock
Springwater Dancer	Iowa
Blue-ringed Dancer	Jefferson, Waukesha
River Bluet	Vernon
Azure Bluet	LaCrosse, Kenosha, Jackson, Waukesha, Grant
Double-striped Bluet	Ozaukee, Waukesha
Slender Bluet	Waukesha
Sphagnum Sprite	Jackson
Incurvate Emerald	Vilas, Bayfield, Eau Claire, Jackson, Clark
Clamp-tipped Emerald	Chippewa
Ringed Boghaunter	Wood, Eau Claire
Jade Clubtail	Waukesha, Grant
Unicorn Clubtail	Sheboygen, Fon du Lac
Sioux Snaketail	Eau Claire, Clark
Great Spreadwing	Milwaukee
Painted Skimmer	Ozaukee
Striped Saddlebags	LaCrosse
Carolina Saddlebags	Waukesha
Royal River Cruiser	Vernon

Table 1 - Wisconsin Odonata Survey Priority Species Reported 2016

A new record for Eau Claire County,
Ringed Boghaunter (*Williamsonia lintneri*)

Photo by Ryan Chrouser

A New Species for the State – Blue-ringed Dancer (*Argia sedula*)!

Robert DuBois,
Dept. of Natural Resources, Superior, Wisconsin <robert.dubois@wisconsin.gov>

On 28 June 2014, Steve Nanz (from New York) visited a church in Dousman, Waukesha County, and photographed a male damselfly by the Bark River, a 109-km tributary of the Rock River in southeastern Wisconsin. The damselfly he photographed later proved to be a Blue-ringed Dancer (*Argia sedula*), a species with a southern and eastern distribution in the United States. Steve noticed that the species was not listed on the Wisconsin Odonata Survey (WOS) website as occurring in Wisconsin, so he emailed the image to me on 5 June 2016. This was indeed a new state record for Wisconsin! Needing to know if a population of Blue-ringed Dancers was still persisting in this section of the Bark River, and if so, how extensive it was, a number of WDS members began surveying the Bark River and other nearby rivers as soon as we could, and we continued throughout the summer. Joanne Kline, Freda van den Broek, and I made multiple visits to a number of areas, and Dan Jackson, Kurt Huebner, and John Dixon each made a visit to the primary area to photograph the species and observe its behaviors.

On 8 June we collected four F-0 Blue-ringed Dancer nymphs at the church site (near the intersection of U. S. Route 18 and State Route 67), which confirmed that the site was being used successfully for breeding. This section of river is relatively shallow and well vegetated with clear, gently flowing water over bottom materials comprised of sand, gravel and cobble. In late June and early July Blue-ringed Dancer immatures and mating adults were observed along a 3-mile reach of river centered at Dousman. In late July and early August we made a number of visits at road crossings at increasing distances from the church site that ultimately revealed a robust population occupying a roughly 20-mile reach of river from the Turner Road Bridge in Slabtown, Jefferson County (N42.9672; W88.6379), upstream to Cushing Memorial Park in Delafield, Waukesha County (N43.0611; W88.4143). Areas of the Bark River above and below this reach were searched for Blue-ringed Dancers, but only a single male was found in the brown-stained lower river below the Rome Mill Pond. Our searches for the species in areas of the Oconomowoc, Mukwonago, Scuppernong, and Whitewater rivers (Waukesha and Jefferson counties) were also unsuccessful. A full description of our sampling efforts, as well as the behaviors, habitats, and associations of this population with other odonates, can be found in ARGIA (2016. 28[4]). ARGIA is the News Journal of the Dragonfly Society of the Americas (you must be a dues-paying member of DSA to access recent issues).

Because many areas of southern Wisconsin have never been thoroughly surveyed for damselflies, and Blue-ringed Dancers look superficially similar to other, more common species, it is impossible to know if this population became established recently or if it had simply gone unnoticed. Blue-ringed Dancers will not be given a rarity designation (ranking) in Wisconsin until more information is collected about them here so that the range and conservation status can be established with greater confidence. This species is thought to be uncommon where it has been found in the Upper Midwest (Illinois, Indiana, and Michigan), and in the Province of Ontario. Further surveys for Blue-ringed Dancers are recommended in other river reaches in the southeastern counties of Wisconsin, especially those that are similar in size and physical aspects to the Bark River, and those that are tributary to the Rock River.

Blue-Ringed Dancers at the Bark River
Photo by Dan Jackson

Bark River, Dousman; Waukesha County, WI
Photo by Joanne Kline

What is the Incomparable Comet Darner (*Anax longipes*) doing in Wisconsin?

Robert DuBois and Freda van den Broek
(Article summary by Freda van den Broek)

The first tangible evidence of the successful breeding of a rare-to-Wisconsin dragonfly, *Anax longipes* (Comet Darner) was discovered this summer at the Forest Beach Migratory Preserve in Ozaukee County in the form of a single exuvia (the cast off exoskeleton from which the adult dragonfly emerges). Although adult *Anax longipes* have been reported at a few sites in Wisconsin over the past fifty years, no breeding populations have previously been observed.

The Comet Darner, a large dragonfly with a bright green thorax and red abdomen, is more commonly encountered in southern and eastern United States. It's presence in small numbers in Wisconsin raises the question of whether this dragonfly is an occasional migrant or vagrant in Wisconsin, or if small breeding populations might eventually be discovered. This question is addressed in an article that was published in **ARGIA,** the quarterly news journal of the Dragonfly Society of the Americas, entitled ***"What is the Incomparable Anax longipes (Comet Darner) Doing in Wisconsin?"*** by Robert DuBois and Freda van den Broek. (ARGIA 2016.28[4])

After considering the observational data, known behavioral patterns and the theory of metapopulations, Robert DuBois concludes that the existence of small but persistent, interacting subpopulations is the most likely explanation for the presence of *Anax longip*es in Wisconsin. Small breeding populations of *Anax longipes* in Wisconsin would represent the most northwesterly range of this species in North America to date.

Comet Darner exuvia (*Anax longipes*) left, Common Green Darner (Anax junius) right

Clubhouse Pond at Forest Beach Migratory Preserve, Ozaukee County, where the Comet Darner exuvia was found

Comet Darner (*Anax longipes*) male in flight
Photos by Freda van den Broek

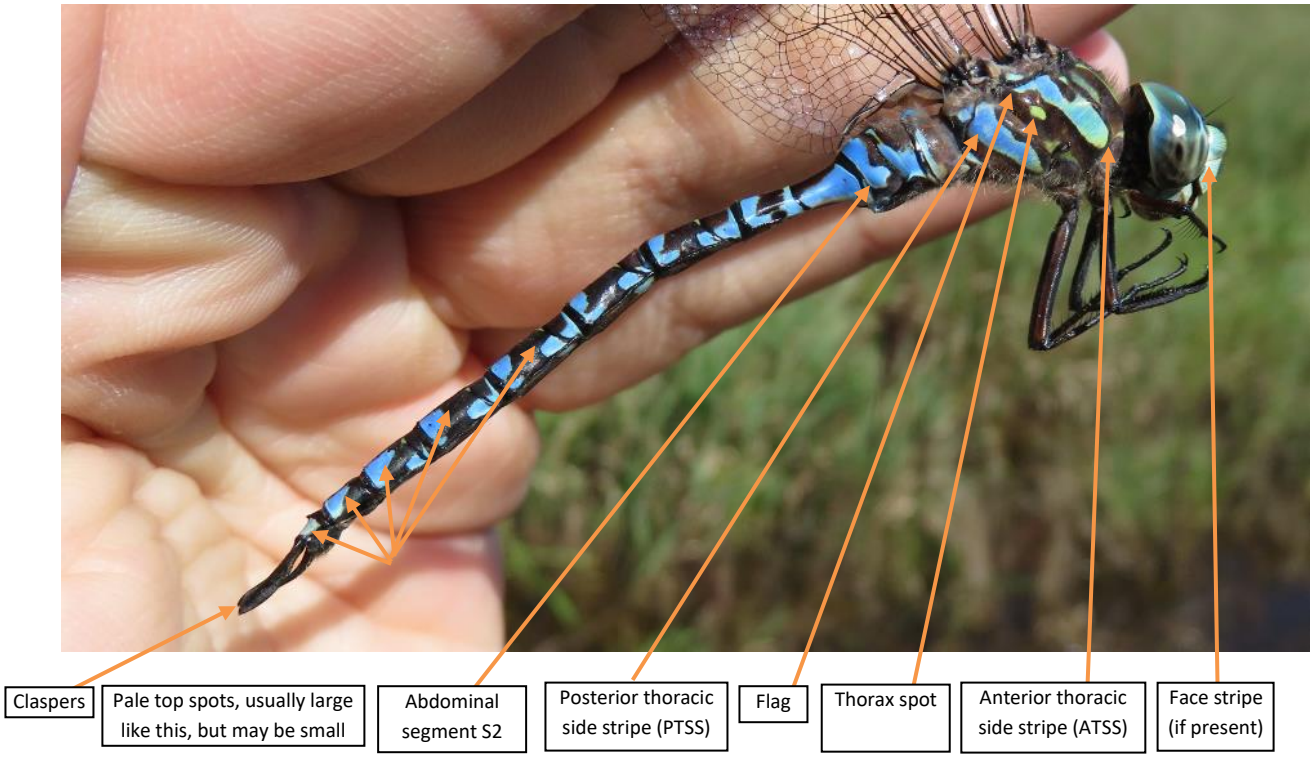
How to Identify Mosaic Darners

Ryan Chrouser

There are many groups of Odonates that can be challenging to identify in the field. One of these groups is the mosaic darners (genus *Aeshna*). My goal is to provide you with some handy identification tips that you can use when one of these energetic whirlwinds crosses your path. Hopefully if you get a good photo or two you will be able to use this reference as a quick check. If you get the dragonfly in hand, even better!

In addition to the *Aeshna* genus, I am including two other similar genera; *Basiaeschna* (Springtime Darner) and *Rhionaeschna* (Neotropical Darners, in Wisconsin, Blue-eyed and Spatterdock Darners) as these insects superficially resemble mosaic darners (*Aeshna*). Together, these three genera constitute twelve known species in Wisconsin. Remember that variation exists throughout populations, so there will always be exceptions to the rules. The goal is to get your eyes and cameras focused on the correct features.

Our twelve suspects can be divided superficially into three groups of four, based entirely on the anterior thoracic side stripe (the ATSS, the side stripe on the thorax closer to the head): the straight stripes, the notched stripes, and the irregular stripes. We will proceed with a key of sorts. I will use pictures whenever possible and try to clearly describe important features. Where and when a dragonfly is found are also useful in narrowing down which species you might have, however I have not included much of this information here in the interest of saving space and focusing on basic field marks. Please reference the Wisconsin Odonata Survey for more details about the habitat, flight season, and other relevant information.



Anatomy of a Mosaic Darner

Group 1– Anterior thoracic side stripe is irregular

1A – ATSS is variable - either with a very thin stripe, thin stripe with widening at the ends, or a thin broken stripe.

Variable Darner
(Aeshna interrupta)

1C – ATSS is broken into a wide mottled pattern.

Mottled Darner
(Aeshna clepsydra)

1B – ATSS has a double bend, forming a "zigzag" pattern.

Zigzag Darner
(Aeshna sitchensis)

1D – ATSS has a bend on the front and the back of the stripe.

Subarctic Darner
(Aeshna subarctica)

Group 2 – Anterior thoracic side stripe is notched on the front

2A – ATSS has a very shallow notch on the front. Flag on the top of the ATSS is present but narrow. Generally no spot in between the ATSS and Posterior thoracic side stripe (PTSS).

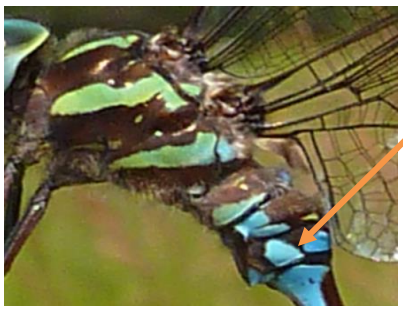
Lance-tipped Darner
(Aeshna constricta)

Other field characters: male color is green to blue, male claspers are wedge type (with a spur on the end (only notched ATSS Darner with this type of claspers). Female occurs as a blue form or yellow form.

Wedge type claspers

2B – ATSS has a moderate notch, but much greater angle than 90 degrees. ATSS and PTSS of the male nearly all green. Wide flag on the top of ATSS. Small spot between the ATSS and PTSS.

Green-striped Darner
(Aeshna verticalis)



Other field characters: Male claspers are paddle typed. Segment S2 on the abdomen often has the colored area bisected with a dark line, if it is not bisected it is generally deeply notched. Female color is variable but can be green to blue, it is very hard to distinguish from Canada Darner females based on color. Use the thorax markings and the pattern on S2 of the abdomen as much as possible to differentiate between these two species.

Paddle type claspers

2C – ATSS has a deep notch, nearly 90 degrees. ATSS usually is blue and green, while the PTSS is normally blue. Narrow flag on the top of the ATSS, but variable. Spot in between stripes is oval, larger, and more noticeable.

Canada Darner
(Aeshna canadensis)

Other field characters: Male claspers are paddle typed. Segment S2 on the abdomen does not have colored area bisected with a dark line and is only moderately indented. Female color is variable but can be green to blue, it is very hard to distinguish from Green-striped Darner females based on color. Use the thorax markings and the pattern on S2 of the abdomen as much as possible to differentiate between these two species.

2D – ATSS has a very deep notch, nearly 90 degrees or even acute. ATSS looks more "pinched" by this notch than the other notched darners. The ATSS usually is blue and green, while the PTSS is normally blue. The flag on the top of the ATSS is disconnected and forms a separate spot. The spot in between stripes is noticeable and is more elongate than the Canada Darner.

Lake Darner
(Aeshna eremita)

Note disconnected flag, and elongate spot as compared to the connected flag and ovular spot of the Canada Darner

Other field characters: Male claspers are paddle typed. A dark line is visible across the face and PTSS has a distinct notch on the front end. Canada and Green-striped Darner lack these features.

Group 3 – Anterior thoracic side stripe is straight-edged (not notched) on the front and the back.

3A – ATSS is light yellow and contrasts greatly with blue on abdomen.

Springtime Darner
(Basiaeschna janata)

Other field characters: Male claspers are paddle typed and narrow. Smaller than mosaic darners. Flight season very early (May and June), likely done flying as other mosaic type darners are emerging. Much more blue on the abdomen when compared with Shadow Darner. Common and widespread in Wisconsin.

Springtime Darner (above left) showing much more blue on the abdomen than the Shadow Darner to the right

Shadow Darner (above right) showing more greenish stripes with blue on the top, note much less blue on the abdomen than other mosaic type darners and the pale spots on the bottom of some abdominal segments

3B – ATSS is yellow to very light green bordered with narrow black edges, sometimes with a touch of blue on the top.

Shadow Darner
(Aeshna umbrosa)

Other helpful notes: Male claspers are wedge type with a spur (only straight stripe darner with this feature, see photo of claspers at Lance-tipped Darner notes). Pale top spots on abdomen are much smaller than other mosaic type darners in Wisconsin. Obvious pale marks on the ventral surface of several abdominal segments, which is unique to this species in our area. Later flight season than Springtime Darner which shares some habitat types. Common and widespread in Wisconsin.

3C – ATSS is blue-green.

Black-tipped Darner
(Aeshna tuberculifera)

Other notes: Male claspers are paddle type. Segment 10 of the abdomen has no color spots on the top, it is entirely dark. This feature is unique to this species among male mosaic darners. Females are colored similarly to the males.

Uncommon but widespread in Wisconsin.

3D – ATSS is blue, eyes are bright blue (these features for males only).

***Rhionaeschna* sp**.

Other notes: Male claspers are forked. This feature is unique to this genus among mosaic type darners in Wisconsin. Females can be variable in color; bluish and yellowish forms occur. They will have more coloration on the abdomen than the Shadow Darner, lack the bold color of the female Black-tipped Darner, and also lack the contrast of thorax to abdomen color of the Springtime Darner.

Blue-eyed Darner (*Rhionaeschna multicolor*)

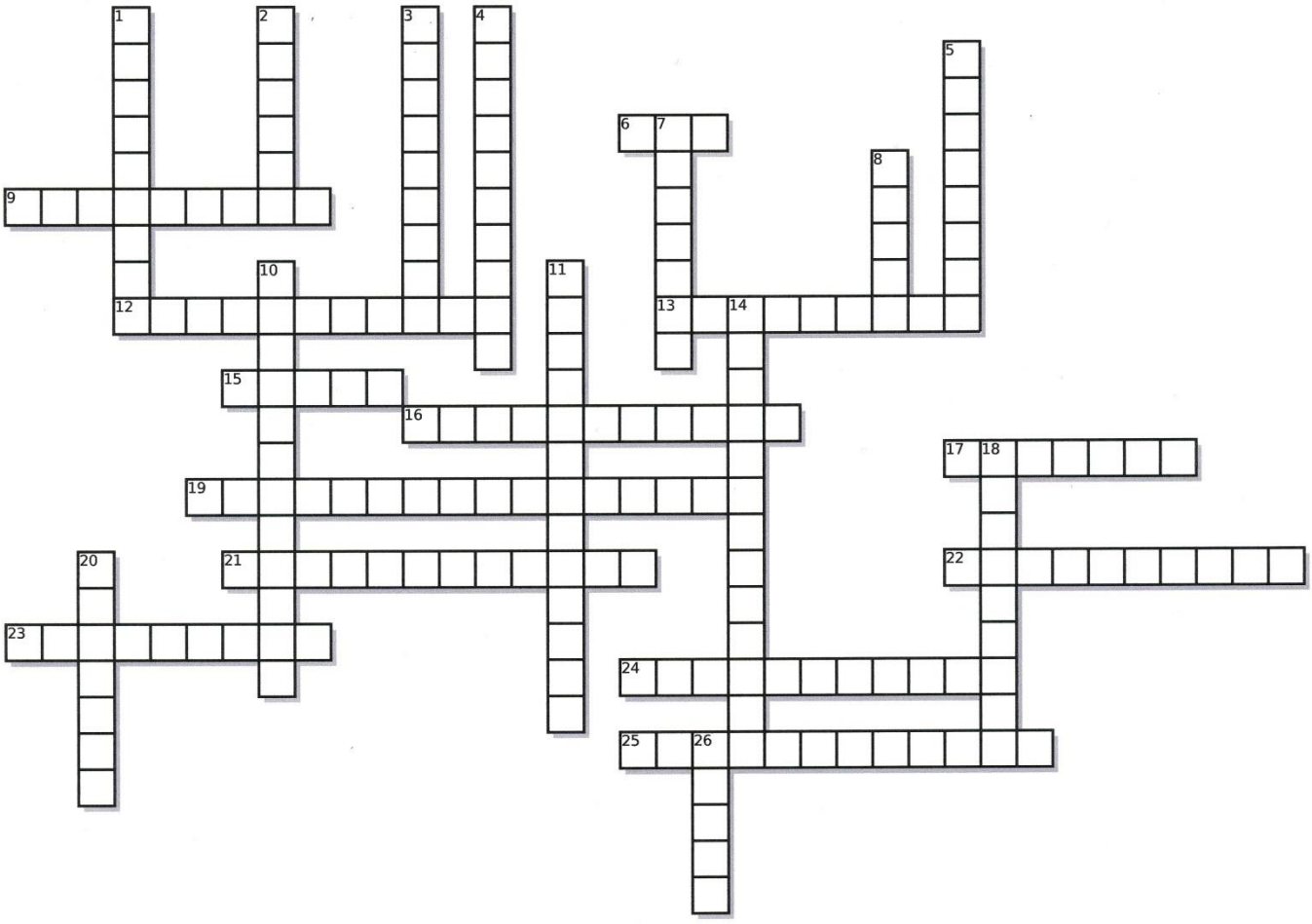
Acknowledgements:

Thanks to Bob DuBois and Dan Jackson for ensuring that my field marks are accurate and appropriate.

All photos by Ryan Chrouser except for Zigzag Darner by Ami Thompson; Mottled and Subarctic Darners by Dan Jackson. Thank you both for sharing your photos!

Odonata Crossword

By Robert DuBois



ACROSS

6 number of abdominal segments of all odonates
9 the first (anterior) section of the thorax
12 scientific name of the genus of small, mostly red damselflies with one species in Wisconsin
13 scientific species name of a spreadwing found in Wisconsin mostly in the southern third of the state
15 upper pair of terminal appendages (claspers) at the tip of the abdomen of male odonates
16 common name for a genus of small, late-season dragonflies with mostly red males when mature
17 a newly transformed adult before the wings are fully hardened
19 common name of a pond damsel discovered in Wisconsin for the first time in 2014
21 currently the only federally endangered odonate in North America that has a stronghold in Door County
22 whitish, grayish, or pale bluish waxy substance that covers various parts of the body of some odonates as they age
23 scientific name of a family of dragonflies with widely separated eyes that are often found in rivers
24 the act of laying eggs
25 Wisconsin's best known writer of Odonata-related poems

DOWN

1 the scientific suborder of Odonata that contains the damselflies
2 small, usually dark cell near the tip of the wing of most odonates
3 scientific species name of the more common and widespread of the two species of boghaunters in Wisconsin
4 behavior to cool the body by pointing the tip of the abdomen towards the sun (reduces surface area exposed to sunlight)
5 species name of a large darner with green thorax and red abdomen
7 shed exoskeletons left behind when nymphs transform into winged adults
8 circular or heart-shaped position of mating odonates
10 scientific name of the family of Odonata with the most genera in Wisconsin
11 common name of the genus of emerald dragonflies whose flight period is restricted to dusk and into darkness
14 common name of the least common of four species of broad-winged damselflies in Wisconsin
18 common term for when a mature nymph leaves the water and transforms (undergoes metamorphosis) into an adult
20 technical term for the dark stripe on the side of the thorax of some damselflies below the pale, antehumeral stripe
26 shallow notch of vein intersection on the leading edge of the wing near the midpoint

Kate Redmond, also known as ***The BugLady*** has been writing a **Bug o'the Week**, every week, for the last nine years. A wealth of these informative and entertaining articles about various insects, including many of our dragonflies and damselflies can be accessed via the UWM Field Station's website. Visit the archives to enjoy more of the The *BugLady's* delightful sense of humor and her stunning photographs. We thank *The BugLady* for permission to reprint this article.

Desirable Damsels

Citrine Forktails and Double-striped Bluets have a few things in common. Both are at the edge of their range here, with records in only a few counties (and so are on the "Most Wanted" list); both (especially the Double-striped Bluet) have long flight periods that last well into the second half of summer; and both have been given the title by various references of "*Smallest Damselfly* (and even *Smallest Odonate*) *in North America.*"

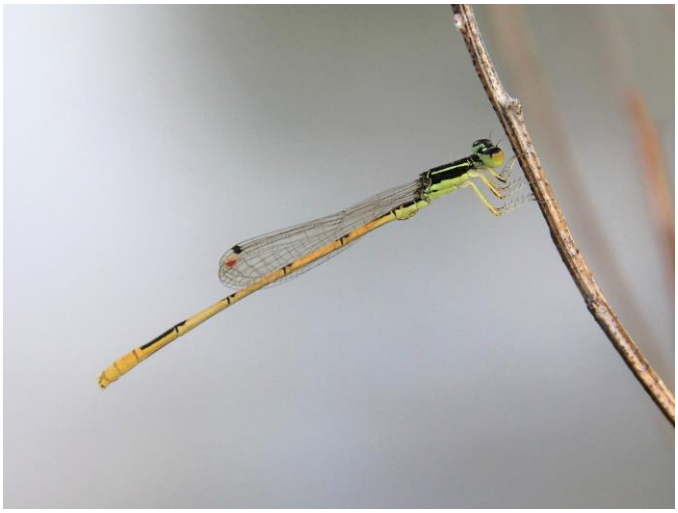


Figure 1 - Citrine Forktail *(Ischnura hastata)* male
Photo by Freda van den Broek

Male CITRINE FORKTAILS (*Ischnura hastata*) sport a dark thorax and a yellow abdomen; younger females are orange and black http://bugguide.net/node/view/774423/bgimage, and mature females could easily be mistaken for female Eastern forktails http://bugguide.net/node/view/280601/bgimage. *Stigmas* are the pigmented spots near the tips of dragonfly and damselfly wings, and the male Citrine forktail is the only damselfly whose red-orange forewing *stigmas* aren't located directly on the wing's edge. (See Figure 2)The books say that this tiny damselfly measures 20–27mm in length (an inch is about 25 mm), but the thick, pale-colored abdomen on the individual that the BugLady saw made it look "heftier" than the slender Eastern forktails (which are listed at 20–33 mm long) that shared the shoreline that day.

Its daintiness is misleading – this damselfly gets around! It has been extending its range from the south towards the northeast (at present, excluding the Northwest), and there is speculation that Citrine Forktails may colonize northern areas seasonally (no surprise here, Large milkweed bugs and Spotted cucumber beetles travel north with the spring, as do some dragonflies and butterflies). Citrine Forktails can be found from California to Venezuela to New England, and they have made their way to offshore islands - all the way, in fact, to the Galapagos and to the Azores, which lie in the Atlantic Ocean some 930 miles west of Portugal.

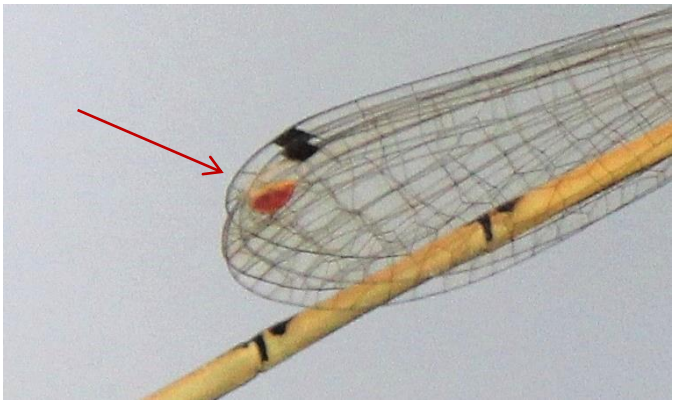


Figure 2 - Red-orange forewing stigma

Citrine forktails depart from the standard damselfly reproductive script just a bit, too. Females mate only once and then use those sperm for all of their egg-laying, and they (generally) oviposit alone. The population of Citrine Forktails in the Azores reproduces by *parthenogenesis* – females, without benefit of males, lay eggs that hatch into more females - the *only* Odonate known to do that.

Its wide range and pioneering sensibilities suggest that this is an adaptable generalist. Look for it at the edges of wetlands, including ephemeral ponds, crowded with emergent sedges, grasses and rushes.

In the 2005 edition of his Damselflies of the North Woods, Bob DuBois tells us that DOUBLE-STRIPED BLUETS are increasing their range to the north and west, and suggests that we keep an eye out for them. According to Bob, most Wisconsin records are from counties along the west edge of Lake Michigan, where the weather may be tempered by the big pond, and reports are needed from inland counties.

The BugLady had no trouble finding them in Ozaukee County in the summer of 2016. Double-striped Bluets (*Enallagma basidens*) get their name from a thin, blue line that splits the black shoulder stripe, so if you can *spot* them (at about 21-28

mm long, they are a seriously small bluet), you can ID them – the BugLady photographs them and then zooms the image to see what she is seeing. They are a "blue bluet" with abdomens that have more blue than black, and they have small eyespots. Females are drab, but they also have the double stripe.

Figure 3 – Double-striped Bluet *(Enallagma basidens)* male
Photo by Freda van den Broek

Figure 4 – Double-striped Bluet (*Enalagma basidens*) female
Photo by Kate Redmond

Figure 5 – Double-striped Bluet (*Enalagma basidens*) teneral female
Photo by Kate Redmond

Originally from the Southwestern US and northern Mexico (they were initially described in Texas), Double-striped Bluets have been expanding their range during the past century and are now found all the way from California to the Gulf States to New England and beyond (they were recorded in Canada in 1985), their trajectory just nicking southern of Wisconsin.

The books say to look for them flying and hovering over fairly open ponds, reservoirs, or very slow streams, though the BugLady frequently sees them in fields away from water. Females oviposit into mats of algae or other floating vegetation, usually with the male in tandem (but if she submerges during ovipositing, he doesn't go with her).

(The BugLady is still convinced that Sedge Sprites are the smallest damsels.)

The BugLady

Figure 6 – Double-striped Bluets (*Enalagma basidens*)
Photo by Kate Redmond

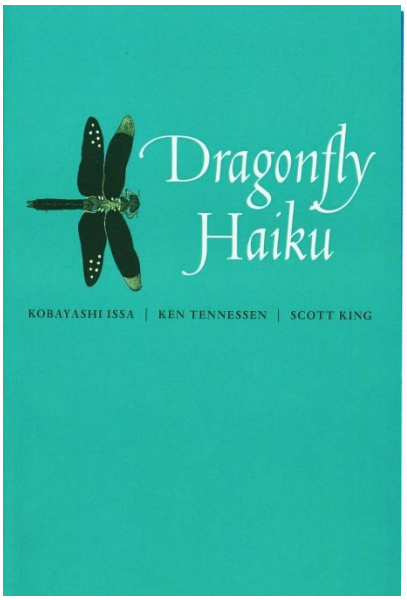
As the *BugLady*, Kate Redmond's mission statement is "Less stepping on bugs." She hopes that people will be wowed by the beauty and intricacy of bugs. She's happiest when she's taking pictures, preferably in a wetland.

See the Bug o 'the Week archives at
http://www4.uwm.edu/fieldstation/naturalhistory/bugoftheweek/

February 2016 release

DRAGONFLY HAIKU

Kobayashi Issa, Ken Tennessen, and Scott King



"A delightful little book in which two contemporary poets join Issa for a nature walk, celebrating the life and moods of a remarkable insect through the timeless, one-breath art of haiku." – David G. Lanoue, former President of the Haiku Society of America and author of *Issa and the Meaning of Animals*

"This little book of haiku is a rich store of thought-provoking commentary on all aspects of dragonfly life. Poetically presented but nonetheless to the point, each haiku evokes a picture of these wonderful insects and, no less, the gifted people who study them." – Dennis Paulson, author of the Princeton Field Guides *Dragonflies and Damselflies of the West* and *Dragonflies and Damselflies of the East*

"*Dragonfly Haiku* is drop-dead delightful. I would buy this book for the pleasures of its design, alone; or the clean and joyful translations of Issa; or the dragonfly haiku by Tennessen; or the dragonfly haiku by King. Taken together, the book offers more fun, almost, than a person can stand. There's one haiku after another I wish I had written. I confess to reading straight through like some kind of haikuholic, but I'll be going back to give each haiku, each dragonfly, the attention it deserves. And I'll also buy copies for friends." – Bart Sutter, first Poet Laureate of Duluth and author of *Chester Creek Ravine: Haiku*

Dragonfly Haiku gathers over one hundred haiku, all pertaining directly or indirectly to dragonflies, by three authors. Here, new English translations of classical haiku by Japanese poet Kobayashi Issa converse with modern haiku by poet scientists Ken Tennessen and Scott King. Eleven of the Issa poems have been annotated and printed with the original Japanese text.

Order Dragonfly Haiku from Amazon for **$16**

Or send $16 (includes shipping) to:

Red Dragonfly Press 307 Oxford Street Northfield, MN 55057

Book Review

Dragonfly Haiku

Kobayashi Issa, Ken Tennessen, and Scott King

Something about the book ***Dragonfly Haiku*** inspires reverence at first touch. Beyond the visual and tactile appeal of the book – it has an attractive cover with a soft, smooth texture –I am intrigued. What could two renowned odonatologists and a Japanese lay priest possibly have in common? In order to answer this question, some background information about the authors and the basic structure of haiku is necessary.

About the authors
To quote directly from the biographies in the book: "***Kobayashi Issa*** (1763 – 1828), a lay priest of Shin Buddhism (the True Pure Land School), wrote over 20,000 haiku (of which more than fifty were about dragonflies) and is considered one of the great masters of the form.

Ken Tennessen is the author of Waushara County Dragonflies and Damselflies (guidebook), *Utterly Bugged* (Red Dragonfly Press, 2013) and numerous scientific articles about dragonflies. He calls Wisconsin home but travels widely, mostly researching and photographing dragonflies.

Scott King is a poet and citizen scientist who lives in Northfield, Minnesota. In addition to being editor of the Red Dragonfly Press, he's been researching the dragonflies of the genus *Sympetrum* (the red dragonflies) in preparation for a book on their natural history."

About haiku
A traditional Japanese haiku is composed as a single line poem of 17 syllables, in groups of 5, 7 and 5 syllables respectively. Haiku in English is usually expressed in 3 lines that may broadly reflect the 5-7-5 syllable structure, or may depart from it altogether.

Other traditional elements in haiku include the use of a seasonal reference to create a present-moment context (the word "dragonfly" in itself is a seasonal reference); and a 'cutting' where the use of a word/s or punctuation marks separates two juxtaposed elements in a meaningful way.

The beauty of ***Dragonfly Haiku***

There is a sense of timelessness in the poetry of Issa, Tennessen and King as the everyday (present moment observation) is juxtaposed with the eternal through the medium of haiku. The keen observations of the scientist, are refined by the poet, and expanded through the perspective of the priest, so that the distinction between the mundane and the sacred is blurred. Not only are we left with a greater appreciation of dragonflies in general, but we also see ourselves reflected in their behaviors in ways that are both humorous and profound. ***Dragonfly Haiku*** is a field trip like none other; it is likely to inspire and delight no matter what the season!

Freda van den Broek

International Odonatological News

Renowned Dutch odonatologist, Dr Klaas-Douwe Dijkstra, named a dragonfly from Madagascar in honor of Sir David Attenborough, famous English naturalist and father of the modern documentary, on the occasion of Sir David's 90th birthday in May this year.

Acisoma attenboroughi, Attenborough's Pintail, a dragonfly in the family Libellulidae, is widely distributed throughout Madagascar. The species was named and described by Dijkstra following a trip with several European and American colleagues to the island in January 2016.

To view the brief and eloquent dedication that was broadcast on BBC television, click here **BBC programme 'Attenborough at 90'**

Another odonate that was recently discovered in Gabon, Africa, and named by Dijkstra, the Sparklewing damselfly (Umma gumma) has been hailed as one of the top ten new species for 2016. http://www.esf.edu/top10/

Dijkstra is the author of the ***Field Guide to the Dragonflies of Europe*** (2006) and the ***Handbook of East African Dragonflies*** (2014).

Freda van den Broek

Odonata Trails

Our week-long Odonata road trip had drawn to a close and we had already begun the journey from northern Wisconsin back to the south-eastern part of the state. With senses still acutely attuned to anything-odonata, the passing sight of a certain store-front sign resulted in an immediate about-turn. We absolutely had to check out the "Odonata Art Gallery"!

Our curiosity was rewarded. The Odonata Art Gallery in Mercer is owned and operated by Mitchell and Laureen Meyers, both former entomologists and artists in their own right. In addition to exhibiting the work of approximately 80 local artists, they specialize in framing artwork. Mitch's beautiful nature and wildlife photographs and Laureen's paintings may also be purchased at their gallery. The Meyers' passion for nature in general, (and occasionally the Odonata) is clearly evident in their work.

The gallery does not have much of an online presence but some information may be found at: https://www.facebook.com/pages/Odonata-Art-Gallery/345885148820828

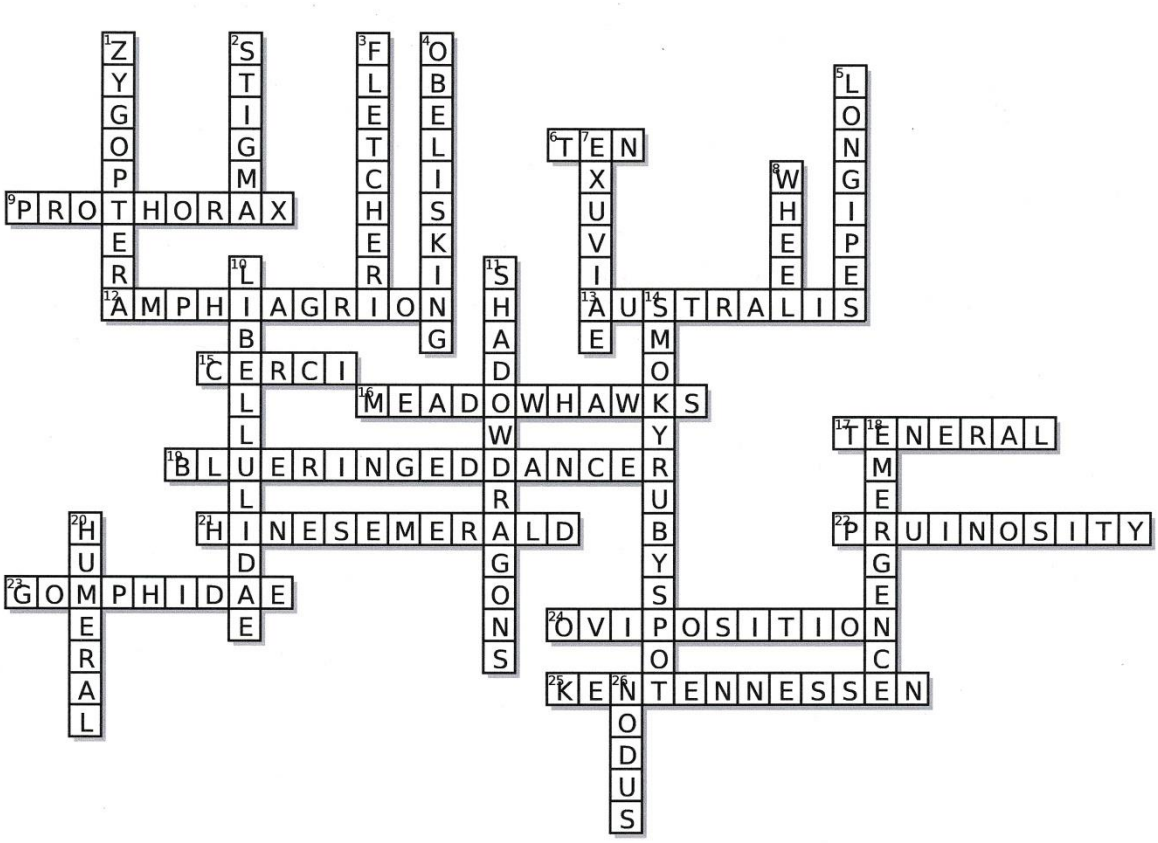
Should you find yourself in the area, a visit to the Odonata Art Gallery is a delightful experience.

4474 N. US Highway 51
Mercer, Wisconsin 54547

Phone 715 476 2910

Freda van den Broek

Answer Key to Crossword (See page 14)



Membership in the Dragonfly Society of the Americas (DSA)

Membership in the DSA is open to any person in any country and includes a subscription to ARGIA. Dues for individuals in the US, Canada or Latin America are $20 US for regular membership and $25 US for institutions or contributing membership, payable annually on or before 1 March of membership year. Dues for members in the Old World are $30 US. Dues for all who choose to receive Argia in PDF form are $15. The Bulletin of American Odonatology is available by a separate subscription at $20 US for North Americans and $25 US for non-North Americans and institutions. Membership dues and BAO subscription fees should be mailed to Jerrel Daigle, 2067 Little River Lane, Tallahassee, FL, USA 32311. More information on joining DSA and subscribing to BAO may be found at www.dragonflysocietyamericas.org/join

Wisconsin Dragonfly Society (WDS) Membership Application

Membership in the WDS is open to any person in any state.

The WDS dues are as follows: $5 annual single member; $7.50 for family membership.
WDS costs are minimal; members must opt-in before WDS will share their e-mail address or other contact information with other members of WDS.

Send check or money order to:

Matt Berg

572 N. Day Rd

St Croix Falls, WI 54024

Name _____

Address _____

City, State, Postal Code _____

E-mail _____ Share? _____

Check membership category that applies:

Annual Individual Membership: $5.00 ☐ Annual Family Membership: $7.50 ☐

Lifetime Individual Membership: $50.00 ☐ Lifetime Family Membership: $75.00 ☐

Total enclosed $ _____

ARGIA

The News Journal of the Dragonfly Society of the Americas

Recommended Reading

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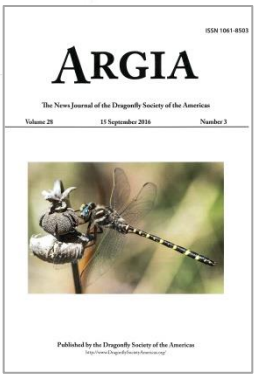


Front cover: Sarracenia Spiketail (*Cordulegaster sarracenia*) male, Pitcher Plant Bog, Kisatchie National Forest west of Alexandria, Louisiana, April 2016. Photo by David Oakley.

RESOURCES

Links

http://wiatri.net/inventory/odonata/WDS/Images/WDS_ConstitutionBylaws.pdf
Wisconsin Dragonfly Society constitution and by-laws

http://wiatri.net/inventory/odonata/WDS/Images/WDS_Brochure.pdf
Printable brochure of the WDS

http://wiatri.net/inventory/Odonata/ Resource for citizen participation

http://wiatri.net/inventory/Odonata/Resources.cfm List of resources from Bob DuBois

http://www.facebook.com/groups/wisconsindragonflysociety/ - our group on Facebook - it's a joy to see these contributions from many people and our members helping them identify their odes.

www.facebook.com/WisconsinDragonflySociety/photos stream - our Facebook page photos. You can go to this link even if you are not a Facebook member.

http://bryanpfeiffer.com/2013/12/31/the-year-in-flight/#gallery/4056/264/0 Bryan Pfeiffer is a blogger who enjoys dragonflies as well as birds. This slide show has several beautiful pictures of odonates. "Follow" him and you'll get lots of good reporting on the habits of the Odonata.

http://bryanpfeiffer.com/2014/01/09/surviving-the-polar-vortex/ - an amazing story of the early collecting of Philip Powell Calvert in Costa Rica.

http://bryanpfeiffer.com/ - the home page of Bryan Pfeiffer's website – many great photos here and news of GLOM, etc.

http://www.odonatacentral.org/ - OdonataCentral hosts the official website of the Dragonfly Society of the Americas. The journals *Argia* and the *Bulletin of American Odonatology* are online and searchable.

Supplies

Nets, vials, pins, etc. can be purchased from BioQuip Products, Inc., website:
http://www.bioquip.com

Collecting envelopes can be acquired on-line from: see tab for Books and Supplies, Envelopes
http://www.iodonata.net/

RESOURCES

Recommended Guide Books

· Burton, Paul. 2010. ***Common Dragonflies of Northern Door County****:* Stonehill Publishing; Ephraim, Wisconsin. (Available from www.doorcountybooks.com)

· Legler K., D. Legler, and D. Westover. 2013. ***Color Guide to Dragonflies of Wisconsin***: Edition 5.1; Karl Legler, Sauk City, Wisconsin. This new version has been expanded to include all WI species of dragonflies; available from http://uwarboretum.org/bookstore/

· Lam, Ed. 2004. ***Damselflies of the Northeast*****:** Biodiversity Books; Forest Hill; New York. 96 pp. (Note: very useful for WI, having all but one of our species.) http://www.edlam.net/book.html

· DuBois, R. 2005. ***Damselflies of the North Woods***: Kollath-Stensaas Publishing; Duluth, Minnesota. 128 pp. (Omits several species found only in the southern-most counties - out of print but useful if you can find a copy at a reasonable price.)

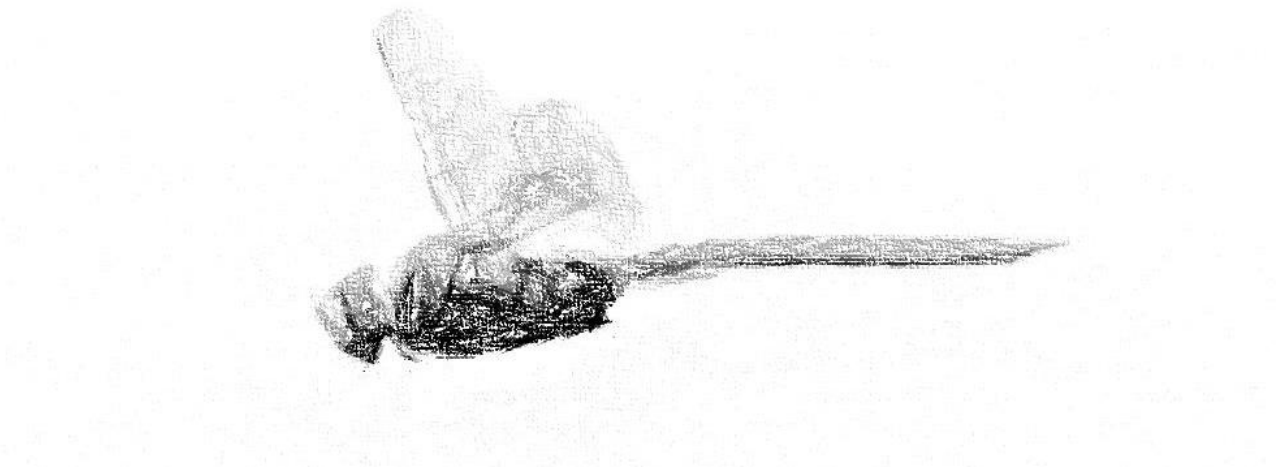
· Mead, K. 2009. ***Dragonflies of the North Woods***: 2nd Edition. Kollath-Stensaas Publishing; Duluth, Minnesota. 193 pp. http://www.dragonfliesofthenorthwoods.com

· Paulson, D. 2012. ***Dragonflies and Damselflies of the East***: Princeton University Press, Princeton, NJ. (This is the most complete reference for eastern North America).

· Garrison, M. 2011. ***Damselflies of Chicagoland: A Photo Field Guide***, version 2, 135 pp. (Free PDF down-load). http://fieldguides.fieldmuseum.org/guides/guide/388

· Rosche, L., J. Semroc, L. Gilbert. 2008. ***Dragonflies and Damselflies of Northeast Ohio***: 2nd Edition. Cleveland Museum of Natural History, Ohio, 300 pp. http://www.ddneo.info

· Tennessen, Ken. 2010. ***Waushara County Dragonflies and Damselflies****:* 32 pp. (Available from the author: ktennessen@centurytel.net).



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