



Ohio Dragon-Flyer

Newsletter of the Ohio Odonata Society

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Ohio Odonata Society Board

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Cover Photo: Familiar Bluet. Jay Heiser

Lake MaLisa in the Woodbury Wildlife Area, Coshocton County, 10/18/21.

Sony RX10M4 with 24-600mm equivalent, 600mm, ISO100, 1/250, f7.1, RAW.

After confirming the continued presence of Autumn Meadowhawks on our property, and some nearby Smoky Rubyspots, I decided to spend a day of my October vacation week looking for late-season oda in the nearby Woodbury Wildlife Area. I started at a 5-acre pond where several observers had recently sighted some species that I hadn't seen in Coshocton County for several weeks. I walked across the dam to the far side, where I found a few Fragile Forktails in a shallow inlet. I returned across the dam and began exploring the north side of the pond, which was getting a strong afternoon sun. I found a group of Familiar Bluets perching along 50 meters of shore, ovipositing along the edge of a patch of water plant. When I first saw the pair in the photo in tandem, I waded out in the water to get a better view. I don't know how long they had already been in tandem, but I watched the female spend 2 shaky minutes trying to lock into the male's hamules. At that point, they became relatively still, without much obvious movement. I squatted and photographed them at their level, with my abdomen only occasionally dipping into the water. After 7 minutes, all 3 of us uncurled. They remained in tandem, flying to another perch. Jay Heiser

Dragonhunters – Clubtail Hunting along the Great Miami River

Sarah White submitted this article in response to the October newsletter appeal to the membership for destination planning strategies. Portions of Sarah's submission will be included in the upcoming planning strategies article. Credit all photos to Sarah.



Eastern Ringtail at the Middletown site.

For the last five years, I have searched for Clubtail dragonflies along the Great Miami River from Miamisburg to Middletown. This is an urban area, downstream of Dayton, and not necessarily what you might imagine when you think of pristine Clubtail habitat. Nonetheless, there are several good sites here.

When looking for Clubtail habitat, the most difficult issue is river access. You need a place with parking and direct access to the water. Look for places that already have public river access, such as boat ramps. A good river map, such as the one from the Miami Conservancy District, will show you the boat ramp locations. Additionally, there are excellent bike trails along the Great Miami, and bike path trailheads are a good place to park and take a short walk to the river.

Google Earth can be helpful. The main thing I look for is open areas where the riverbanks are not completely tree-lined. Google Earth has its drawbacks though. The main problem is that it can

be difficult to judge how steep the riverbanks are. There is really no substitute for seeing a site with your own eyes.



Miamisburg River Flats. Google Earth

This brings me to an important tip: survey potential Clubtail habitat in wintertime. Why in wintertime, you ask? Because the Clubtail season is short ... only a few weeks for some species. It goes by in a blink. And you don't want to waste a minute of Clubtail season exploring unproductive habitat. I set aside time on dull winter weekends to explore new sites. Many of the sites turn out to be duds, either due to lack of river access or inappropriate habitat. But that is okay, because if I am going to spend an afternoon at a site that doesn't pan out, I would much rather do it in wintertime than late May or June, when every minute of field time counts.

You might be wondering how to identify good Clubtail habitat in wintertime. Nothing is flying then, right? Eventually, you learn to recognize the right habitat. First and foremost, you want a place where the riverbanks are flat and level, not places with steep riverbanks. This eliminates many locations with river levees or high banks. Second, look for vegetation along the river's edge—preferably water willows and thick beds of weedy vegetation. Newly emerged teneral Clubtails need a safe place to hide, and later the vegetation provides good hunting grounds for adults searching for smaller insects to prey on.

Trees are also an important thing to have near Clubtail habitat. Many Clubtails spend part of their lives away from the river, foraging in trees. But there is one caveat: I don't like to see places where the trees are growing right along the river's edge to the extent that they overshadow the river. You want sunny, open stretches of riverbank with trees nearby but not right along the water.

Also, keep in mind that Clubtail nymphs are burrowers. They need a soft substrate—either mud or sand or some combination thereof. And look for shallow riffles or rapids; they help to keep the water well-oxygenated. You can evaluate all of these factors by visiting a site in wintertime! Eventually, you will get a feel for whether a site is potential Clubtail habitat. The only hard part is waiting several months to see whether your hunch pays off.



Russet-tipped Clubtail at Miamisburg River Flats.

Knowing when to look for Clubtails is almost as important as knowing where to look. Clubtail season happens in two stages. The first is in spring, primarily late May and the first half of June. Several species have mass synchronized emergences then. The second stage is spread out over a long period from mid-summer to autumn.

The two most common spring-flying species along this stretch of river are Cobra Clubtails (*Gomphurus vastus*) and Midland Clubtails (*Gomphurus fraternus*). Both can be found at all five sites, but the

greatest numbers are at Miamisburg. Cobra Clubtails have a mass emergence there in late May. If you visit on the right morning, it can be a magical experience. I found at least 30-35 teneral Cobras emerging at the Miamisburg river flats, during a two-hour span on May 23rd. I went through a whole camera battery on Cobra Clubtails! Their numbers stay strong through the middle of June. After that, sightings fall off sharply, although you can still find stragglers into early August. Midland Clubtails emerge at about the same time as the Cobras, in late May, and they continue flying through June.

Other spring-flying Clubtails are less common at these sites. I have found two Rapids Clubtails (*Phanogomphus quadricolor*) and a single individual each of Pronghorn Clubtail (*Phanogomphus graslinellus*), Handsome Clubtail (*Gomphurus crassus*), and Plains Clubtail (*Gomphurus externus*)—all at the two Miamisburg sites. I have yet to find these species at the other three sites further downstream. The water quality there might not be good enough to allow these species to flourish. One of the two Rapids Clubtails at Miamisburg was a very fresh teneral. It must have emerged at the site, but apparently the population is small. Germantown MetroPark nearby has a much better population of Rapids Clubtails, probably due to better water quality in Twin Creek.

Later in summer, the Clubtail season is dominated by Russet-tipped Clubtails (*Stylurus plagiatus*) and Eastern Ringtails (*Erpetogomphus designatus*). My first experience with an Eastern Ringtail was at Case Landing. I was standing beside the boat ramp, when I noticed a brightly-colored Clubtail of a type I had never seen before. It turned out to be a Montgomery County record. Since then, I have found multiple Eastern Ringtails at four of these five sites (all except Crain's Run), including males and females (and tenerals). Their flight season is late July through early October, with the biggest numbers in August and early September.

Russet-tipped Clubtails are harder to come by, at least on this stretch of river. I find them at the two Miamisburg sites, but not at the three sites downstream. Rick Nirschl found the first Russet-tipped in Miamisburg. I found one individual each year in 2018, 2019, and 2020, and three individuals in 2021 (all females). They fly in August and September.

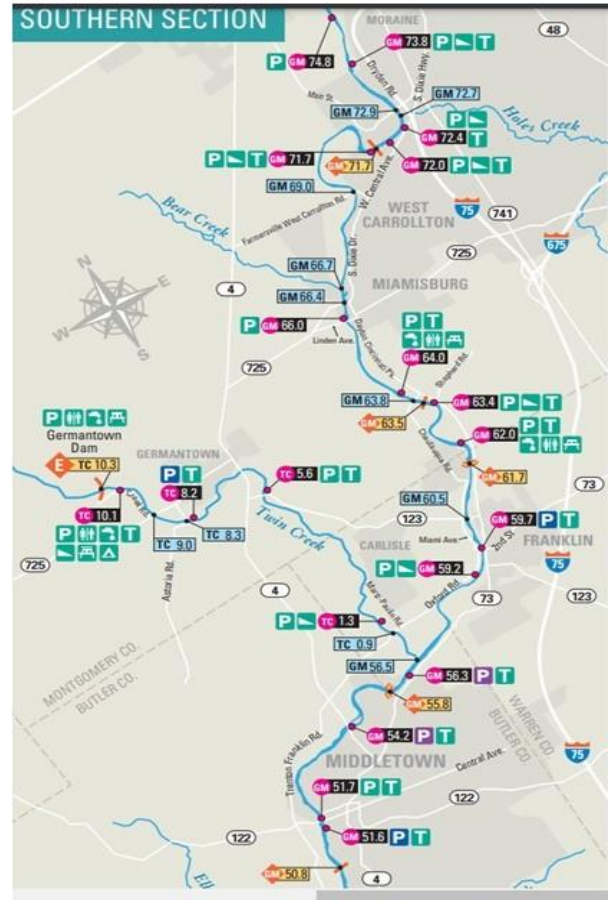
Other late-season clubtails include Dragonhunters (*Hagenius brevistylus*) and Flag-tailed Spinylegs (*Dromogompus spoliatus*). Flag-tailed Spinylegs are present at all of these sites except Crain's Run, but not in large numbers. I have found a few Dragonhunters at Miamisburg, but I am not sure whether they are breeding at this site. (The few individuals I saw might have been strays from nearby streams).



Dragonhunter and Monarch at the river flats

Weed beds hold butterflies and other pollinators, and are good hunting grounds for Clubtails. I spotted the female Dragonhunter lurking in the weeds. A few moments later, this top predator took down a Monarch butterfly right in front of me! The neat thing about Clubtail hunting is you never know what you are going to find. It takes a lot of patience and repeat visits to find them. But riverways can be great places for migratory birds and butterflies—like the colony of Dainty Sulphur butterflies I found at Middletown in 2019. If you keep an open mind, you can nearly always find something of interest!

The Great Miami River Map produced by the Miami Conservancy District, shows river access points with a pink ball followed by a river-mile number. Great Miami river-mile numbers **GM 0.00** reference distance from the mouth of the Great Miami River at the Ohio River.



[Great Miami River Map](#)

Miamisburg River Flats **GM 66.4**

Downtown Miamisburg has high river levees, but there is a flat area, on the east side, just north of the OH 725 bridge. I found this spot during one of my winter exploration-walks, where the ground is level with the river. This is the best of the five sites for Clubtail habitat, both in terms of overall numbers and species diversity.



Miamisburg river flats (north of 725 bridge), as I first saw it in wintertime...



...and later in summer

Miamisburg river flats meets all of the necessary criteria—flat and level riverbanks, shallow riffles, lots of water willow and weedy vegetation, and some trees but also open, sunny areas. This site gets mowed in dry season, but fortunately the ground is too wet to mow entirely during most of Clubtail season.

Case Landing Boat Ramp in Miamisburg [GM 66.0](#)

This west side site, by the Linden Avenue bridge, is close to the river flats. It holds similar Clubtail species, but in slightly lower numbers. The riverbanks are steeper on this side, but Clubtails love perching on the sunny rocks beside the boat ramp.

Crain's Run Park [GM 62.00](#)

This east-side site is the least productive of the five, mainly because the riverbanks are too steep. It is a

beautiful stretch of river with lots of rapids and riffles, but it doesn't have the flat riverbanks that Clubtails need. I find a few Cobra Clubtails here, but not as many species overall as at the other sites.



Cobra Clubtail at Crain's Run.

Franklin Kayak Ramp [GM 59.2](#)

The Great Miami takes a small jog here through a corner of Warren County at this west-side site. I was curious to look for Clubtails here, because Warren County had no records of Cobra Clubtails or Eastern Ringtails. I was able to add both species to the Warren County list in 2021. This site has a broad, flat area along the river, with plenty of water willows and weedy vegetation.

Middletown Bike Trailhead at Rt 4 Bridge [GM 54.2](#)

This east-side site is another large, flat area of riverplain, below the bike path.



Middletown site near Route 4 bridge

I find Clubtails here with some searching, but not as many as I expected. Part of the problem is that the riverbed is very rocky, with less soft sediments and vegetation than at the Miamisburg sites.

Sarah White

Trailing Silk



While searching for Elusive Clubtail on the Little Miami, we saw a Russet-tipped Clubtail trailing silk. I found a couple more dragonflies trailing silk in my photo library. What's going on here? It doesn't appear to impede flight, but neither does it seem beneficial. The long, single strand indicates something other than a cobweb blunder. They don't produce it, so why are dragonflies trailing silk?



A few days later I saw strands of silk blowing in the wind up the Little Miami, the tops of the strands always in the lead as something was weighting the

bottoms. And then, this heavier spider, towed by two gossamer strands, waterskied upriver.

Ballooning is a process by which spiders, and some other small invertebrates, move through the air by releasing one or more gossamer threads to catch the wind, causing them to become airborne at the mercy of air currents and electrical fields. (Wikipedia)

Dragonflies might catch a strand of balloon silk with a wing and, during aerial maneuvering, the trailing silk becomes attached to the dragonfly's abdomen, but another possibility is predation.

Spiders that hunt on exposed surfaces or that balloon from prominences should be potential prey for dragonflies.

Dragonflies in late summer and fall may be significant predators on spiders attempting to disperse.

(Journal of Arachnology 16:121) [Dragonfly predation](#)

Exposed spiders in a preparatory ballooning posture, or actually drifting in the wind, should be an easy target for the attack helicopters of the bug world. Many dragonfly species catch and consume their prey while airborne.

Trailing silk could be a midair mishap with balloon silk or it could be predation. Either way, it is vestigial evidence of a balloonist's cancelled flight plan.

In a different approach to spider predation, the largest Odonate in the world plucks spiders from their web! [Blue-winged Helicopter](#)

Virtual Dragonhunters

[Dragonfly Society of the Americas Virtual Lecture Series](#). Lecture schedules are updated regularly at: [Dragonfly Society of the Americas](#)

OOS member Kim Smith's excellent September article on the Great Spreadwing (*Archilestes grandis*) can be found there.

November ID Challenge

The ID Challenge only includes species known from Ohio. A description of how you arrive at your identification is not required but appreciated. Please include your name in the email; not to worry, only correct responses will be posted in the next newsletter. Identification to: lundbergj@hotmail.com



Update – Planning Strategies

Submissions are needed on the following topics:

- Species or genus specific niche habitats
- River bottom analysis and expectations
- Discerning niche habitats from virtual resources
- Your favored virtual resources and use
- Maximizing your time on road trips
- Sources for determining public access
- On-site survey strategies
- Anything else

With membership participation making this a successful OOS cooperative effort, December's newsletter will include an article on planning strategies for Season 2022. Submissions ranging from single one-liner tips to lengthy research flows are all welcomed. Although, recognition is preferred, please note if desiring anonymous publication of your submission: lundbergj@hotmail.com

October Challenge Revealed



The slender, mostly black abdomen with limited blue striping was cropped from the challenge image. What remains for positive identification is a narrow, blue antehumeral stripe; connected, blue postocular spots and turquoise eyes capped black.

Congratulations to Jim Heflich for correctly identifying the **Stream Bluet**



Seeking ID Challenge submissions: Please submit the actual ID and key identification points with the image to: lundbergj@hotmail.com

Upcoming Newsletter Changes

Photo of the Month replaced: There are always too many excellent photos to choose from. Beginning December, Photo of the Month will be replaced by Reader Submitted Photos – all those submitted will be published. Please look back through the entire year for December submissions.

Desperately seeking submissions Monthly ID

Challenge: Please submit the actual ID and key identification points with the image.

lundbergj@hotmail.com

Ohio Dragonfly Survey

October was not the greatest Odo-weather. Days were cool and frequently cloudy. We still managed good data. 2021 doubled the survey average (455) on observations with 946 Research Grade records, and was just under the survey average (41) on distinct species with 40.

Two October observations of Striped Saddlebags lifted the 2021 total species count to 140. This tops the 139 species recorded in 2019 and 2020.

November will be even slower, the 10-day forecast is cold. Sunshine and microclimate effect will bring the few remaining Odes out to bask. Based on recent data (2017-2020), these would be the likely

November Odes:

Species	Average # Reported
Autumn Meadowhawk	30
Great Spreadwing	6
Familiar Bluet	4
Shadow Darner	2
Spotted Spreadwing	1

At this point, Eastern Pondhawk is the clear leader in reported observations (1712). Forktails (Eastern and Fragile) are tied with 1359.

Lucas (1892), Ashtabula (1854), and Franklin (1811) are very close in observations. These numbers are behind the peak (Franklin Co in 2019 with 2799). Geauga and Lucas both have 77 species, marking a new high for a county in a year.

Five species were recorded in all 88 counties in 2021: Blue Dasher, Eastern Pondhawk, Widow Skimmer, Easter Forktail, and Fragile Forktail. Only one year (2019) has a better record on this measure.

2021 numbers for the low end were better than 2020! In 2020 we had 20 counties that had fewer than 25 observations. At this point (and I'm still anticipating some 2021 data), we have only 2 counties with fewer than 25 observations. Yay! It's interesting to me that our top counties average 31x the observations and 14x the observers as the bottom counties. Other numbers, like species and data follow these same trends - we just need more people out looking around in the remote areas.

If you haven't already, please get your data into iNaturalist. Given 2021 submissions on older data and corrections, all the data will be extracted from iNat, hopefully starting December 1.

Questions to: jlem@woh.rr.com

Jim Lemon

Ohio Dragonfly Survey

Species Count – Year to Date

Species	#	# Counties
Eastern Pondhawk	1712	88
Blue Dasher	1687	88
Common Whitetail	1449	84
Widow Skimmer	1366	88
Eastern Forktail	1359	88
Fragile Forktail	1359	88
Eastern Amberwing	1019	86
Ebony Jewelwing	909	69
Autumn Meadowhawk	818	61
Violet Dancer	721	71
Familiar Bluet	665	73
Blue-fronted Dancer	655	73
Powdered Dancer	636	53
Slaty Skimmer	519	57
Common Green Darner	487	62
American Rubyspot	473	44
Double-striped Bluet	471	68
Blue-tipped Dancer	466	57
Twelve-spotted Skimmer	460	64
Stream Bluet	421	57
Halloween Pennant	420	70
Slender Spreadwing	361	51
Calico Pennant	328	52
Skimming Bluet	325	61
Orange Bluet	313	63
Black Saddlebags	286	60
Prince Baskettail	270	64
Blue-ringed Dancer	255	39
Westfall's Slender Bluet	240	40
Azure Bluet	216	43
Unicorn Clubtail	203	45
Blue-faced Meadowhawk	167	19
Carolina Saddlebags	167	38
Dot-tailed Whiteface	149	22
Dusky Dancer	147	35
Lancet Clubtail	146	36

Wandering Glider	139	37
Turquoise Bluet	138	13
Great Spreadwing	129	14
Eastern Red Damsel	128	17
Citrine Forktail	119	32
Spangled Skimmer	118	29
Midland Clubtail	108	22
Painted Skimmer	107	24
Seepage Dancer	106	5
Spotted Spreadwing	98	17
Amber-winged Spreadwing	89	18
Shadow Darner	88	27
Vesper Bluet	82	19
Lilypad Forktail	81	8
Band-winged Meadowhawk	80	15
Dragonhunter	79	21
Cobra Clubtail	78	12
Ashy Clubtail	76	27
Banded Pennant	71	15
Black-shouldered Spinyleg	69	22
Flag-tailed Spinyleg	67	20
Tule Bluet	67	10
Elfin Skimmer	66	2
Smoky Rubyspot	66	4
Swamp Spreadwing	62	20
Comet Darner	59	23
Sphagnum Sprite	59	9
Plains Clubtail	54	2
Swamp Darner	52	28
Swift River Cruiser	50	20
Elegant Spreadwing	49	11
Sweetflag Spreadwing	49	12
Gray Petaltail	46	15
Pronghorn Clubtail	46	8
Swift Setwing	46	4
Spot-winged Glider	45	16
Aurora Damsel	44	12
Emerald Spreadwing	39	15
Fawn Darner	37	18
Paiute Dancer	37	3
Arrow Clubtail	35	8

Spatterdock Darner	32	13
Blue Corporal	31	13
Brown Spiketail	31	4
Cyrano Darner	30	13
Common Baskettail	28	17
Royal River Cruiser	28	16
Great Blue Skimmer	27	10
Belted Whiteface	26	1
Sedge Sprite	26	4
Eastern Least Clubtail	25	5
Russet-tipped Clubtail	25	2
Eastern Ringtail	23	4
Yellow-sided Skimmer	23	1
Rapids Clubtail	22	9
White-faced Meadowhawk	22	3
Southern Pygmy Clubtail	21	2
Ruby Meadowhawk	20	12
Arrowhead Spiketail	19	8
Delta-spotted Spiketail	19	2
Springtime Darner	19	11
Lyre-tipped Spreadwing	18	1
Rainbow Bluet	18	7
Clamp-tipped Emerald	17	7
River Jewelwing	17	1
Dusky Clubtail	15	5
Lilypad Clubtail	15	3
Mocha Emerald	15	6
Duckweed Firetail	13	1
Golden-winged Skimmer	12	4
Harlequin Darner	12	3
Southern Spreadwing	12	6
Common Sanddragon	11	3
Double-ringed Pennant	10	2
Handsome Clubtail	9	3
Rusty Snaketail	9	2
Black-tipped Darner	8	3
Elusive Clubtail	7	3
Lance-tipped Darner	7	2
Tiger Spiketail	7	3
Jade Clubtail	6	2
Green-faced Clubtail	5	1

Twin-spotted Spiketail	5	4
Laura's Clubtail	4	2
Northern Bluet	4	1
Slender Baskettail	4	4
Stream Cruiser	4	2
Beaverpond Baskettail	3	2
Gilded River Cruiser	3	1
Green-striped Darner	3	2
Ocellated Darner	3	3
Macromia Hybrid	2	2
Marsh Bluet	2	1
Rambur's Forktail	2	1
Red Saddlebags	2	2
Striped Saddlebags	2	2
Chalk-fronted Corporal	1	1
Frosted Whiteface	1	1
Riffle Snaketail	1	1
Saffron-winged Meadowhawk	1	1
Smoky Shadowdragon	1	1
Splendid Clubtail	1	1
Stygian Shadowdragon	1	1
Variegated Meadowhawk	1	1

Ohio Dragonfly Survey

Numbers by County – Year to Date

County	Observations	Species	Observers
Adams	171	35	21
Allen	57	21	5
Ashland	70	28	18
Ashtabula	1854	64	27
Athens	85	33	17
Auglaize	67	26	6
Belmont	47	15	4
Brown	76	31	6
Butler	717	45	48
Carroll	23	13	2
Champaign	960	58	44
Clark	534	53	28

Clermont	419	55	51
Clinton	89	24	12
Columbiana	55	17	9
Coshocton	1116	53	8
Crawford	76	35	9
Cuyahoga	749	53	89
Darke	284	53	6
Defiance	75	33	8
Delaware	152	35	51
Erie	216	33	16
Fairfield	59	26	20
Fayette	119	35	6
Franklin	1811	56	134
Fulton	82	28	5
Gallia	25	17	4
Geauga	959	77	49
Greene	617	59	56
Guernsey	46	20	4
Hamilton	644	56	92
Hancock	187	46	16
Hardin	52	24	2
Harrison	58	32	8
Henry	75	25	4
Highland	134	34	16
Hocking	80	32	21
Holmes	83	25	18
Huron	137	22	5
Jackson	107	22	12
Jefferson	41	17	5
Knox	60	21	13
Lake	829	71	49
Lawrence	40	17	5
Licking	279	36	25
Logan	277	47	7
Lorain	860	57	44
Lucas	1892	77	66
Madison	247	29	15
Mahoning	62	20	20
Marion	65	21	6
Medina	318	40	29
Meigs	30	15	3
Mercer	83	25	2
Miami	239	50	15

Monroe	23	13	3
Montgomery	932	73	68
Morgan	118	29	9
Morrow	46	22	10
Muskingum	82	33	11
Noble	39	18	3
Ottawa	113	27	28
Paulding	80	29	2
Perry	120	23	5
Pickaway	55	22	18
Pike	144	32	10
Portage	506	67	40
Preble	72	25	20
Putnam	87	24	4
Richland	52	21	14
Ross	163	33	14
Sandusky	225	33	15
Scioto	112	20	12
Seneca	64	22	8
Shelby	184	45	10
Stark	1447	72	32
Summit	984	64	108
Trumbull	135	33	13
Tuscarawas	74	26	6
Union	177	27	18
Van Wert	51	21	2
Vinton	56	19	4
Warren	234	50	44
Washington	60	25	3
Wayne	117	28	28
Williams	207	43	5
Wood	198	33	18
Wyandot	48	22	7