

Williamsonia

Volume 1, Number 4

Michigan Odonata Survey Newsletter

November, 1997

THUMBING AROUND

Mark O'Brien

Earlier this year, Mike Kielb and I thought that a trip to the under-collected thumb region - Huron, Tuscola, and Sanilac counties, would be worth a try. Tom Heatley, who's been combing Macomb and Lapeer Counties for Odonates, joined us for a trip to the thumb on the 25 July. The day was going to be a good one, with mostly sunny skies and temperatures in the low 80s.

As many MOS members know, this region is very flat, and highly agricultural but there are some state game areas, streams, and a few rivers that run through it. Our first stop was the Minden State Game Area in Sanilac Co. According to our DeLorme map, there was a huge boggy area there. Well, the map was right, but the bog is an ancient peat bog with peat up to 15 feet thick that is being mined commercially. Now you know where Michigan Peat Company gets their peat! The State-owned land is surrounded by commercial property, and the bog itself has long been dissected by drainage ditches. It was a great place for blueberries and birds, but little else. I regretted wearing shorts as we plowed through the blueberry and raspberry bushes. We saw or collected in a drainage ditch that skirted the game area: *Libellula pulchella*, *L. lydia*, *L. luctuosa*, *Argia fumipennis*, *Ischnura posita*, and *I. verticalis*. Most of these were of course, county records, but none of them very exciting.

Our next major stop was at Verona State Game Area in Huron Co. The game area has several small streams running through it, and it looked like a decent spot to collect. However, the "streams" were mostly sloughs and temporarily-flooded swales. Again, not a lot of interest there, but we did get *Chromagrion conditum*, *Enallagma ebrium*, plus the usual libellulids. The area is surrounded by wheat and cornfields, so there is little buffer between the game area and the farms.

In Tuscola County, we followed the Cass River for a bit. At River Park, just outside Caro, we collected at a small pond and along the banks of the Cass R. Here the river is quite wide, with a bit of vegetation along the sides. It's not a fast-moving river, and appears to have a muddy bottom. We did get *Argia apicalis* and *A. fumipennis* here, as well as *Calopteryx maculata*, *Pachydiplax longipennis*, and *Ischnura verticalis*. A big find that escaped notice until this fall, when I was identifying the specimens from this summer, was the collection of a single *Enallagma basidens*. Lenawee Co. is the only other Michigan locality known for this species. The only other "goodie" that we saw was a *Macromia* flying downriver, 10 ft. too far away to get with a net.

A little farther downriver, we collected along the Cass near Washburn Road in the Tuscola State Game Area. Here, the river is wide, but not very deep and so slow that flow is barely perceptible. The bottom is very muddy and numerous rocks allowed us to move around the edge of the river to collect numerous Argias. The amazing thing was that we did not see a single Anisoptera here! Not even a 12-spot.

There were lots of *Agia moesta*, *A. apicalis*, *Enallagma exsulans* and *Calopteryx maculata*. Tom Heatley found out that although the Cass is slow, it is wet, as he slipped on a rock and went ALL the way in! Luckily for him, I had a change of clothes handy -good thing he's close to my size, or it would have been a long trip home.

Our final stop in Tuscola Co. was Murphy Lake State Game area. As we were parking in a gravel lot that edged the lake, an old gentleman came up to us and asked that we pay the \$2.00 parking fee. We were a bit dumbfounded at first, and then paid it, when we realized that the road through the game area was posted with "no parking" signs. This guy probably owned the only bit of private land and made it pay off. We didn't get our money's worth, as we saw the common species - *Anax junius*, *L. luctuosa*, *P. longipennis* and *Perithemis tenera*. However, it was getting later in the afternoon by then, and we'd just about had enough for one day.

We stopped for dinner in Cass City and then dropped Tom off at his place in Macomb Co. By the time I got to my driveway, it was 10 pm, and I was pooped. As I look back at the trip, I realize that we did not do badly considering where we went, the time of year, and that we were exploring unfamiliar areas. Just about everything that we collected were county records in Tuscola Co. and Sanilac Co. So, we did fill in some gaps, but were also perplexed by the lack of species that we thought we should have seen. Perhaps pollution by chemicals from agriculture is a culprit in this heavily agriculturized region. Sugar beets, corn, beans and other crops are big in the Thumb. The game areas are not exactly bastions of biodiversity, since they are managed for hunting and fishing. Murphy Lake SGA came the closest to having some interesting habitat, but most were pretty fragmented, too. I guess further work should be done along the shore of Lake Huron, and perhaps in the Flint River drainage. Sanilac Co. has some interesting areas along the Lake Huron shore, too. I know one trip isn't definitive, so I encourage others to explore there when opportunity arises. Target months would be mid-June and mid-August. Who knows, maybe you'll outdo the 1997 O'Brien- Kielb - Heatley Expedition!

Odonata Collected or Observed on the trip:

CALOPTERYGIDAE

Calopteryx maculata

LESTIDAE

Lestes inaequalis

COENAGRIONIDAE

Argia apicalis

A. fumipennis violacea

A. moesta

Chromagrion conditum

Enallagma exsulans (very common)

E. basidens (second county record for MI)

E. civile

E. ebrium

Ischnura posita

I. verticalis

AESHNIDAE

Anax junius

MACROMIIDAE
Macromia (prob. *illinoensis*)
 LIBELLULIDAE
Libellula luctuosa
L. lydia
L. pulchella
Pachydiplax longipennis
Perithemis tenera



DRAGONS ON HOLIDAY

Paul Pratt
 Windsor, Ontario

On Sunday, September 21st we decided to watch dragonflies at Holiday Beach (Essex Co., Ontario) instead of hawks and found an impressive variety along the beach between the hawk tower and tent area (a stretch of about 300 m.). We did not check any ponds or marsh edge. Elaine Sinnott and myself recorded the following 20 species in about three hours.

<i>Lestes cf. rectangularis</i>	Slender Spreadwing	1 (not netted)
<i>Enallagma civile</i>	Familiar Bluet	+60
<i>Ishnura verticalis</i>	Eastern Forktail	3
<i>Aeshna constricta</i> (pair mating)	Lance-Tipped Darner	4
<i>Aeshna verticalis</i> (my first for Ontario)	Green-Striped Darner	1 male
<i>Anax junius</i> (largest concentration seen this fall)	Common Green Darner	+2,000 !!
<i>Epiaeschna heros</i> (Ontario's largest dragonfly)	Swamp Darner	1 female
<i>Stylurus notatus</i> (first record for Holiday Beach)	Elusive Clubtail	1 male
<i>Celithemis elisa</i>	Calico Pennant	1
<i>Erythemis simplicicollis</i>	Eastern Pondhawk	25
<i>Libellula pulchella</i>	Twelve-Spotted Skimmer	25
<i>Pachydiplax longipennis</i>	BLue Dasher	8
<i>Pantala flavascens</i>	Wandering Glider	3
<i>Pantala hymenaea</i>	Spot-Winged Glider	5
<i>Sympetrum obtusum</i> (1st record for Holiday Beach)	White-Faced Meadowhawk	4
<i>Sympetrum rubicundulum</i>	Ruby Meadowhawk	40
<i>Sympetrum vicinum</i>	Yellow-Legged Meadowhawk	40
<i>Tramea carolina</i> (rare in Ontario)	Carolina Saddlebags	2
<i>Tramea lacerata</i> (largest concentration seen this fall)	Black Saddlebags	400 !!
<i>Tramea onusta</i> (rare in Ontario)	Red-Mantled Saddlebags	2 - 4

Many of the small meadows along the beach were well protected from the cool winds and literally swarmed with dragonflies. None of the green darners or black saddlebags were observed in any kind of mating behavior, typical of migrating individuals (however no one really knows where these dragonflies are headed each fall). It was also interesting to find the remains of two green darners in the large webs of banded argiope spiders.

With such impressive concentrations of dragonflies, Holiday Beach may become as well known among dragonfly enthusiasts as it is with hawk watchers.



LATE-SEASON RECORDS ALONG THE HURON

Elvera Shappiro
 Ann Arbor, MI

I have been kayaking mostly in the Huron River in Washtenaw County, and keeping records of the Odonate I have been encountering during my travels. Here is a list of my Fall, 1997 sightings:

Sept.16: Dexter-Huron Metropark to Delhi rapids (kayak). 75° F, sunny, 3-5 pm -- 15 *Argia moesta*, 2 *Calopteryx maculata*, 1 *Stylurus* (prb. *spiniceps?*), 2 *Sympetrum* sp.

Sept. 26: Dexter-Huron Metropark to Delhi rapids (kayak), 55° F sunny, 2 - 5 pm -- 6 *Hetaerina americana*, 4 *Sympetrum* sp., incl. 1 pr in copula, 2 *Anax junius*.

Sept. 28: Hudson Mills Metropark, 55° F, sunny, 10-12 AM, nature trail -- 5 *Sympetrum* (red body, black face)

Oct. 5: Portage Creek below Halfmoon Lake to Hell Creek Ranch (kayak), 70° F, sunny, 1-3 pm -- 7 *Hetaerina americana*, 3 *Perithemis tenera*, several large dark dragons too far away for ID.

Oct. 8: Park Lyndon North, 75° F, overcast, humid, 9-12 AM -- 2 *Sympetrum* spp.

Oct. 8: Hudson Mills to Delhi (kayak), 80° F, sunny, 3-6 pm -- 10 *Argia moesta*, 4 *Hetaerina americana*, 1 *Sympetrum* sp., 3 large dragonflies, too far away for ID. *Argia* and *Hetaerina* perched repeatedly on the kayak and paddles, riding there for a few hundred feet. One *Hetaerina* became my companion for a half-mile or so, perched on the bow handle of the kayak.

ISCHNURA CORRECTA

Mark O'Brien

In issue no. 2 of Williamsonia, Mike Kielb (1997) presented a list of interesting potential new records, based upon various specimens and literature. One potential species can be removed from that list. The *Ischnura* specimen from the MSU collection that was originally determined as *I. perparva* (Say) by Rosser Garrison in 196_, is really a female *I. verticalis* (Say) [Oakland Co., MI, Lake Orion, 29 June 1958, W. A. Drew, coll.]. I was finally able to check the determination with other specimens and using Westfall and May (1996). The specimen bears MOS Catalog #MOS0025117. *Ischnura perparva* is a predominantly western N.A. and montane species and does not reach the Great Lakes region. As some of you may be aware, *I. verticalis* is one of the most commonly encountered damselflies in the State.

I thank Dr. Fred Stehr, Michigan State University Dept. of Entomology, for allowing access to the collection at MSU.

LITERATURE CITED

- Kielb, M.A. 1997. Additions and corrections to the Odonata of Michigan. *Williamsonia* 1(2):1-2.
 Westfall, M. J. Jr. and M.L. May. 1996. Damselflies of North America. Scientific Publishers. Gainesvill, FL. 650 pp.

NEW REGIONAL RECORDS FOR MICHIGAN

Ethan Bright

Stylogomphus albistylus and *Gomphus (Hylogomphus) adelphus* - **Baraga Co.**, Tioga R. at US-41 near road-side rest stop (T48N R32W Sec. 08, NW 1/4), about 20-30 m upstream of the US-41 bridge, about 200 m downstream from a waterfall. The stream flows through a series of rapids over large boulders and cobble, with grassy banks apparently well stabilized against erosion. Larval collection near a somewhat undercut bank with some woody debris.

It is expected that *S. albistylus*, previously known only from one record in Lake Co. in the Lower Peninsula (Leonard 1940), and Marquette Co. (Kielb, Bright and O'Brien 1996) in the Upper Peninsula, is more widely distributed in the western half of the UP than current records indicate. This is not surprising, as this species appears common in northern Wisconsin (Hilsenhoff, 1995). Where present, larvae appear common in well-oxygenated and clean waters flowing through undisturbed habitat. Larvae are typically found near and among woody and leafy debris, within close proximity to current but apparently not in deadwater zones. Emergence in this part of its range occurs in late June, usually in late morning or early afternoon. Larvae crawl out of the water upon rocks and vegetation of banks less than 1 m from the water's edge, and within 15 minutes adults are free of its larval skins (28 June 1997, pers. obs.). One specimen from the Pine River in the Huron Mountains was allowed to emerge in sunlight quickly died; another seen to emerge in the shade quickly took flight. Perhaps this small gomphid has become adapted to emerge in dimly lighted spaces as a predation-avoidance behavior.

LITERATURE CITED

- Hilsenhoff, W. L. 1995. Aquatic insects of Wisconsin. Keys to Wisconsin genera and notes on biology, distribution and species. (3rd Ed.). Publication Number 3 of the Natural History Museums Council, University of Wisconsin-Madison (1995).
- Kielb, M. A., E. Bright, and M. F. O'Brien. 1996. Range extension of *Stylogomphus albistylus* (Odonata: Gomphidae) for the Upper Peninsula of Michigan. The Great Lakes Entomologist 29(2):87-88.
- Leonard, J. W. 1940. *Lanthus albistylus* (Hagen), a new record for Michigan, with ecological notes on the species (Odonata: Gomphinae). Occasional Papers of the Museum of Zoology, University of Michigan, No. 414. 6 pp, 1 plt.

SOMATOCHLORA TENEBROSA NOT IN MICHIGAN

Mark O'Brien

Kormondy (1958) listed a specimen of *Somatochlora tenebrosa* Say (Clamp-tipped Emerald) from the Michigan State University collection, with the only locality data given as "Ag. Coll. Mich." [no date] [det. by E.J. Kormondy in 1956]. To date, that has been the only record of the predominantly southeastern species for Michigan. I recently borrowed the above specimen from the MSU collection, and it is not *S. tenebrosa*, but *S. hineana* Williamson. The male

genitalia are very diagnostic, and I'm surprised that it was originally misidentified. Since this endangered species is already known from Michigan (see *Williamsonia* 1[3]:7), this isn't a state record.

However, the data with the specimen, "MI: East Lansing, Ingham Co.", is not what Kormondy stated. It is interesting to note his comment, "Dr. R. L. Fischer assures me that the label used indicates the specimen was collected in Ingham County." The label with the specimen is a flap from a paper triangle with the locality typed, and Kormondy's identification written in India ink. The only remaining enigma is the actual locality, date and collector, and since Kormondy's description of the locality does not match verbatim with the label presently associated with the specimen, I have to assume that it was relabeled after Kormondy examined it to give a more precise locality. Based upon habitat descriptions given by Vogt and Cashatt (1994), and present distribution of *S. hineana* in Michigan (W. Steffins, pers. comm.), I don't believe the specimen came from anywhere near Ingham County, MI.

I thank Dr. Fred Stehr, MSU Dept. of Entomology, for access to the MSU collection and for the loan of the specimen. It now bears Michigan Odonata Survey #MOS0025237.

LITERATURE CITED

- Kormondy, E.J. 1958. A catalogue of the Odonata of Michigan. Misc. Publ. Museum of Zool. Univ. of Mich. 104:43 pp.
- Michigan Odonata Survey. 1997. Hine's Emerald in Michigan! *Williamsonia* 1(3):7.
- Vogt, T.E. and E. D. Cashatt. 1994. Distribution, habitat, and field biology of *Somatochlora hineana* (Odonata: Corduliidae). Ann. Entomol. Soc. Amer. 87(5):599-603.

WEB-BASED KEY TO THE LARVAE OF MICHIGAN ODONATA

Ethan Bright

During the past year I have been preparing a web-based, on-line key to the larvae of Michigan Odonata. This project addresses numerous problems faced by those interested in the aquatic stages of dragon- and damselflies:

1. Reviewing numerous sources from books and journal articles often unavailable to many without access to a university library;
2. Providing detailed figures as well as clear and unambiguous text in keys to assist in making identifications;
3. Summarizing habitat and state-wide distribution, and;
4. Doing away with frequent page flipping (especially aggravating when a hand is holding forceps) by having text, figures, definitions and bibliographic references ready at the click of a mouse.

Though there is light at the end of the tunnel, much still needs to be done. Almost all the keys have been written, and can now be accessed on-line at the Michigan Odonata Survey home page [<http://insects.ummz.lsa.umich.edu/michodo/mos.html>]. Specimens are being either photographed or drawn to provide figures to accompany the text. I encourage people to visit this site, use the keys, and to provide much-needed feedback. This is a time-consuming project: there is a need to borrow additional specimens to provide material for figures and to verify accuracy of keys.

By the beginning of next year (January or February), however, a majority of the figures will be finished.

Although the UMMZ has a large number of larval specimens, it is only since last year that the collection has been properly curated, sorted and identified, and cataloged. Consequently, we lack specimens from several genera from which I can examine and make figures for the key. Therefore, I would greatly appreciate receiving for a short-term (return within 3 months) loan the following specimens: *Gomphaeschna furcillata*, *Macromia taeniolata*, *Nannothemis bella*, and *Williamsonia fletcheri*.

OCTOBER RECORDS

Mark O'Brien

This year, we have had a wonderful stretch of late summer weather. September and most of October featured warm and sunny weather, which made up for the cool and wet August that we had. As a result, I was able to collect a bit later than last year, and collected in the UP in October for the first time.

OCT. 6: Washtenaw Co., Brown Park, Ann Arbor. 80°F, mostly sunny, 3:30 - 4:45 pm. *Tamea lacerata* (2 collected, 4 seen); *Anax junius* (1 collected, 5 seen; *Sympetrum rubicundulum* (2 collected). Both *Anax* and *Tamea* were hawking gnats in a wet depression not far from Mallett Creek.

OCT. 11: Mackinac Co., Scott Point, near Point Patterson. 65° - 70°F, partly cloudy, breezy. At least 5 *A. junius* and 4 *Aeshna* sp. were feeding on Bibionidae flies that were in mating swarms. Dragonflies were feeding in the open areas between the tree-covered dunes and conifer-dominated wetlands. All of the *Anax* were fresh-looking, whereas the single *Aeshna* female featured very worn wings and missing anal appendages.

OCT. 12: Emmet Co., Wilderness State Park, 65°F, sunny, turning cloudy as a front came through, 2 - 4 pm. I saw at least 6 *Anax junius* and numerous *Aeshna* sp., as well as dozens of *Sympetrum* spp. along the lakeshore and in the interior near the point. Again, the *Anax* were very fresh-looking whereas the *Aeshna* and *Sympetrum* were old and worn.

EDITORIAL EXUVIAE

This is the fourth issue of *Williamsonia*, and I'm pleased with our results so far. The aim of this newsletter is to showcase the activities of the MOS, and to promote the study of Odonata. I think we are heading in the right direction, and I thank all the contributors for their help with the content (and keep it coming!).

For me, it's been quite a year. I was really antsy to get started on collecting, and of course, we had a very cool and late spring. My first real collecting did not take place until Mike Kielb and I were on our way to Florida for the Dragonfly Soc. of the Americas meeting in Gainesville. Then of course, it was cloudy, but we had a good introduction to the fauna of the area and enjoyed ourselves immensely. Less than a week later, I was on my way to the UP to sample the Odonata of the Huron Mountains. We had great weather for that, as well as the collecting that took place on the way up. Ocqueoc Falls in Presque Isle Co. is a place that deserves more sampling!

The rest of the summer really flashed by, with some day excursions to Lenawee Co., Hillsdale Co., various areas in Washtenaw Co., and the infamous thumb trip, as well as the

August UP trip. As disappointing as the weather was for the week of the 11 of August, we had some good collecting for a day at Whitefish Point, and a great day in Patterson Point in Mackinac Co. However, the highlight of the week was the visit paid to us by Nick and Ailsa Donnelly from Binghamton, NY. We had told several people where we'd be camping that week, and it certainly paid off having a DRGNFLY license plate. Nick and Ailsa had some great stories about some of the collecting trips that they'd been on around the world, and their visit really helped pass an otherwise dreary day. A day later, Tim Vogt from Illinois stopped by and we briefly discussed collecting sites, and Wayne Steffins stopped by two days later, explaining his study and presenting me with the *Somatochlora hineana* for the UMMZ collection. On the day at Whitefish Point I ran into Ron Priest - a member of the Michigan Lepidoptera Survey, who was there on a bicycle tour. That week saw the number of entomologists in the UP grow significantly!

Fall came upon me all too soon, and I realized that I really had collected a lot of data and specimens over the summer. Being out in the field is one of the most enjoyable aspects of survey work. There is always something interesting to see, even if the odonates are disappointing. Now that it's late fall, I am looking forward to revisiting my trips as I identify the many Zygoptera that have accumulated from the summer, and the dragonflies that required more than an eyeball to id. There are records to enter into MOS database, and plans to make for the next year.

The best part about all this is that I am always learning something new, and that also makes it a lot of fun. I hope that you too, have had an enjoyable time working with Odonata. May the memories of them keep you warm during the winter months.

Mark

RECENT LITERATURE

- Brunelle, P. 1997. Distribution of dragonflies and damselflies (Odonata) of the Atlantic Provinces, Canada. *Northeastern Naturalist* 4(2):61-82.
- Catling, P.M. and V.R. Brownell. 1997. Damselflies (Zygoptera) in Ontario from 1900 to 1952: an atlas of E.M. Walker's distributional data for monitoring, and biodiversity and biogeography studies. Metcalfe, Ontario, CA. 53 pp. (available for sale by the authors [\$10]: P. M. Catling, 2326 Scrivens Drive, R.R. 3, Metcalfe, ONT K0A 2P0 Canada).
- Catling, P. M. & P.D. Pratt. 1997. An expanding "race" of the azure bluet, *Enallagma aspersum* in Ontario? *Argia* 9(3):16-17.
- McPeck, M. A. 1997. Measuring phenotypic selection of an adaptation: Lamellae of damselflies experiencing dragonfly predation. *Evolution* 51(2): 459-466.
- McPeck, M.A. , A.K. Schrot, and J.M. Brown. 1996. Adaptation to predators in a new community: Swimming performance and predator avoidance in damselflies. *Ecology* 77(2):617-629.



THE BATTLE OF HUDSONWATHA

K. J. Tennesen

By the shores of Itchee-Gloomee,
By the shining big lake water,
Flew the terrible piercing insect,
Flew the terrible Aedes,
From the dark and dreadful Hades,
Flew with two wings over the water,
Over the trees the dreadful buzzing,
Left the leaves and branches trembling,
Left fear in the hearts of animals,
Searching for the blood of animals.

Long the people of Mish-e-gon,
Heard the stories of piercing insect,
How the terrible Aedes,
Stalked the Deer and the Wabasso,
Sensed them from their place of hiding,
Flew on wings of drumming lace,
To pierce their hearts and take their blood,
Take their souls to the place of Hades,
And feed the children of Aedes,
To come in anger for the people.

So it was that Patrick Hudson,
Went before all Mish-e-gon;
Told them he would travel north
To the rippling big lake water,
To the stronghold of Aedes,
Battle there the piercing insect,
Go to slay the giant insect,
Break its long and piercing beak,
Draw its dark and magic power,
To save the animals and his people.

Far he stalked along the shoreline,
Till darkness came and rest was needed,
Dark around him rose the forest,
Rolled the mist from mighty Huron;
In his sleep he dreamt of insects,
Tiny flying buzzing creatures,
Flying in his ears and nostrils,
Singing songs in unknown language,
Probing him with claws and stinger,
Bringing signs of pain and danger,

When he woke the sky was light,
He felt the rays of the early sun;
Through the mist he saw the water,
Morning glistening on the big still water.
Loud he called to the great Aedes,
A challenge to the piercing insect,
"Here I am, like Ky-rha-no-mus,
Naked before the world of insects,

Barefoot and wielding insect net,
Prepare yourself to meet your doom."

Now the tranquil still-life morning
Filled with the sound of a thunderous drone;
He turned and poised his lacy lance,
Riveting his eyes upon the forest,
When down upon him from above
Giant legs and wings in turbulence,
Engulfed and pinned him to the ground;
Looking up he saw the huge proboscis,
Stained dark with the blood of others,
Aiming at his heart and soul.

Time suspended like his body,
He stared at the faceted compound eyes
Cold as steel and unforgiving;
Now he felt the fate of the animals,
Felt the claws and scales, the palps,
Probing for an entry place,
To take away his vital forces;
Stark the realization hit him,
That his very life be taken
To feed the children of piercing insect.

Then the sharp and stabbing beak
Broke and pierced his tender skin,
And as his blood was being taken,
The beginning of the end now on him,
He heard a different thunderous sound,
A greater wind now driven round them,
And from the side a tremendous form
Crashed into the giant Aedes,
Grappled with the piercing insect,
Crunching it with jaws like sickles.

As the colossal blue-spotted darner,
Bigger than the biggest pine tree,
Took the frightful piercing insect
Far out over the big lake water,
He realized that he had witnessed
What all the people thought a myth;
The protector of the big lake water,
The savior of the animals,
The dragonfly of the big lake water,
Known as Aeshna eremita.

Weak and wounded he gathered strength
To travel back to show his people
The giant Aedes wings left behind,
And tell about the great Eremita;
So the people raised their voices,
Rejoiced in the death of Aedes,
Honored all this Patrick Hudson,
Called him slayer of Aedes,
Called him saver of the people,
Called him Hudsonwatha.

An entomological chimera for Pat Hudson, my friend,
who's life hangs precariously in an illusory, mystical
world.



The Dragonfly Society of the Americas (D.S.A.)

The Dragonfly Society of the Americas was organized during 1988 by several US Odonatists. It is a non-profit society, organized as an independent affiliate of the Societas International Odonatologica. Purposes of the DSA are to encourage scientific research, habitat preservation and aesthetic enjoyment of Odonata through (1) cooperation and comradeship among odonatologists worldwide; (2) fostered interchange between amateur and professional enthusiasts; (3) establishment of publications to disseminate information relating to Odonata; (4) support for wetlands and habitat preservation as the most effective manner for odonate conservation; and (5) cooperation with organizations sharing common goals of environmental preservation.

Although membership consists primarily of US Odonatists, It serves all of North, Central and South America. It is open to anyone in the world, however, who has an interest in Odonata. The name was changed from the "Dragonfly Society of America" to the "Dragonfly Society of the Americas" to promote and welcome membership from Central and South America, as well as the rest of North America.

The DSA has an annual meeting and collecting trip, and various regional meetings.

MEMBERSHIP IN THE DRAGONFLY SOCIETY OF THE AMERICAS

Membership in the DSA is open to any person in any country. Clip off and mail, fax or e-mail the attached application.

MEMBERSHIP APPLICATION FOR DSA

Name _____

Address _____

City _____ State _____

Postal Code _____

(Circle categories that apply)

US, Canada, Latin America: Membership in DSA (includes ARGIA) -----\$15.00
Sustaining Membership in DSA (includes ARGIA) ----\$20.00
Institutional subscription to ARGIA. -----\$20.00
BULLETIN OF AMERICAN ODONATOLOGY (BAO).\$15.00
Institution or non-member subscription to the BAO ---\$18.75

Total amount enclosed ----- \$ _____

(Note: Checks, money orders, etc., must be in US funds)

For past issues of ARGIA and the BAO, contact Nick Donnelly. We will supply copies or make xeroxes of out-of-print issues.

Address: T. Donnelly, 2091 Partridge Lane, Binghamton NY 13093 USA
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Notes via e-mail

REQUEST FOR HELP ON ODONATA ROADKILLS

Sam Riffel

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I spent this past summer in the Upper Peninsula of Michigan during which I collected over 1,000 dragonflies which had been killed along a road running through a large marsh. I looked at species composition and sex-ratios among the casualties. There were substantially more males among the casualties (not surprising). I am currently writing this up, and I was wondering if anyone is aware of any published (or unpublished) data about mortality of adult odonates on roads. My searches of literature and databases has resulted in a big zero!!! I would also be interested in observations about road mortality which might be parts of articles about other aspects of odonatology (and thus I haven't found them), and in anecdotal data which could be a "personal communication".

PHOTOS NEEDED FOR FIELD GUIDE

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Hi folks, This is the last call for dragonfly slides for the field guide. I am hoping that you can fill in these last gaps. I have no slides of the following, so ANY slide of these species/sexes will do!

Anax amazili -- male

Aeshna tuberculifera -- male

Ophiogomphus occidentis -- male, female

O. edmundo -- male, female

O. susbehcha -- male

Somatochlora brevicincta -- male, female

S. ensigera -- need both male and female

S. septentrionalis -- male, female

Libellula composita -- female

Sympetrum madidum -- female

S. internum -- male of western form with red face

Erythrodiplax funerea -- female with spot at base of hindwing

Leucorrhinia patricia -- male, and female even more so

Macrothemis imitans -- female

While many photos currently in the field guide could and should be better, the following are particularly obnoxious and should be replaced for one reason or another, often not quite the right pose (apologies to photographers who have already sent me photos of these species):

Aeshna canadensis -- male

A. verticalis -- male

Gomphus quadricolor -- male

Stylurus intricatus -- male

Dorocordulia lepida -- male and female

Somatochlora cingulata -- male

S. provocans -- male

Sympetrum signiferum -- male

Brechmorhoga pertinax -- male

Celithemis verna -- female

Thanks for any help you can give me in extremis!

WISCONSIN WILLIAMSONIA AND T & E STATUS FOR CORDULIIDS & GOMPHIDS

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Speaking of *Williamsonia*, I found at least two new breeding sites for *W. fletcheri* in Jackson Co. Wisconsin this spring. The field work in Jackson Co. was part of a biotic inventory of the Black River State Forest conducted by the WI DNR's Natural Heritage Inventory Program with funding from the WDNR Bureau of Forestry. As part of this inventory we also found two potential breeding sites for *Somatochlora incurvata*. As the larva of this species is undescribed, larvae from these sites are being reared and with any luck a description will be forthcoming soon.

A new site for the Federally Endangered *S. hineana* was found in Door Co. A grant from the USF&W Service was secured by the Wisconsin Office of The Nature Conservancy to search for new *S. hineana* sites next year.

Proposed changes in our state E/T list was effective on August 1, 1997 and includes: adding *Somatochlora hineana*, *S. incurvata* and *Ophiogomphus susbehcha* as Endangered; adding *Aeshna mutata* as Threatened and changing *Ophiogomphus howei* from Endangered to Threatened.

NEW SOMATOCHLORA COUNTY RECORDS AND NOTES FOR THE UP

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S. forcipata, Mackinac Co. (2 sites, new county records). *S. walshii*, Detour State Park, Chippewa Co. (new county record). I netted 2 female *S. kennedyi* 500 feet west of the Mackinac Co. border, in Schoolcraft Co. (new county record). However, I did not collect a specimen, so I would call that ID tentative.

Two new sites for *S. incurvata* within Mackinac Co., including 1 oviposition observed. Oviposition in an alkaline wetland was observed which I believe is a first, and I hopefully will publish something on that later. The other site was a roadkill near Naubinway (not county records). I also observed *S. incurvata* as late as August 29, which is not unexpected but is a 22 day extension for Michigan.

1997 MOS SEASON SUMMARY

Mark O'Brien

I thank all of those who have volunteered their time for the MOS during the past year, as well as the providers of data and specimens. The MOS continues to pursue the goal of inventorying Michigan's Odonata fauna, and promoting the study and appreciation of dragonflies.

This year marked the first full year of MOS activities, and the results of our efforts are quite satisfying. We held two meetings - one in May with 20 attendees and one in September (combined with a collecting trip) with 15 attendees. The meetings have provided an opportunity for the less-experienced to learn and contribute. I am always amazed at some of the finds by people who are collecting for the first time.

I have been pleased with the contributions of specimens and data from the Michigan Natural Features Inventory as well as the Michigan Chapter of The Nature Conservancy.

We are still identifying and cataloging them. Several individuals have also contributed significant numbers of specimens to the effort: Tom Heatley, Brian Scholtens, Dick Taylor and Sam Riffell. Specimen data from Gogebic Co. was generously provided by Sean Dunlap from the Univ. of Notre Dame. Pat Hudson from the Great Lakes Lab in Ann Arbor provided specimen records from around the Great Lakes. Smaller, but nonetheless valuable collections were made by Paul Girard, Michele Jokinen, Elvera Shappirio, and Wayne Steffins.

In May, we distributed the MOS Collector's Handbook. This 70-page manual has been quite useful to many, and we had to do a second printing late in the summer. The manual is available for \$5.00 from the MOS [make checks payable to the Univ. of Michigan, and send to us at MOS, c/o Insect Div., Museum of Zoology, Univ. of Michigan, Ann Arbor, MI 48109-1079]. The MOS web pages have also been expanding and are continually updated [<http://insects.ummz.lsa.umich.edu/michodo/mos.html>]. Of particular note is Ethan Bright's key to the larvae of Odonata in Michigan, which allows one to identify larvae to the species level!

Our MOS database continues to grow. By the end of November, we will have catalogued 14,000 specimens, based primarily on UMMZ holdings. All specimens are given an MOS catalog number, to correlate each specimen with an entry in the database. The UMMZ larval Odonata catalog has grown to over 1600 records, and approximately 75% are from Michigan. Michele Jokinen, Laura Krueger and Mike Kielb have spent many hours on MOS data entry. Ellie Shappirio has been spending several hours a week as a volunteer working with the exuviae collection. Her effort is reducing the backlog of uncurated specimens from Kennedy and Williamson.

One of the missions of the MOS is of course, to document the distribution and abundance of species. New records are part of that process, and so is documenting what is here now, as opposed to 40 years ago. Some discoveries, such as finding *Stylurus spiniceps* in the Huron River (only a previous unverified vague literature record) are quite significant, since it's in our backyard, so to speak. Such finds underscore how little we really know about the fauna in most of our streams and rivers.

Other finds, such as the discovery of the federally-listed endangered *Somatochlora hineana* in Mackinac Co. by Wayne Steffins (US Fish & Wildlife Service- funded survey) was an outstanding example of preparation and a bit of luck. This really pleased me, as it shows what one can find when given the opportunity and funding to survey an area. Believe me, the UP is full of faunal surprises, and we are just beginning to really sample there.

We now have 157 species recorded for Michigan. Of these, there are about 2 or 3 for which we need to establish the veracity of the records by recollecting or authentication of the original collection. In the past year, 4 species have been added to the Michigan list, and one removed. I predict that a few more old records will eventually be removed as we do a more concerted sampling effort across the state.

Let's hope that 1998 will be even more exciting for all of us.

