



# The Ohio Dragon - Flier



*\* Newsletter of the Ohio Odonata Society \**

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## 2010 GLOM + OHIO ODONATA SOCIETY COMBINED MEETING & FIELD TRIPS? :

*By Bob Glotzhofer & Steve Chordas III*

The idea of a combined meeting in 2010 of the Great Lakes Odonata Meetings (GLOM) and the Ohio Odonata Society has been considered as a possibly good fusion by the individuals involved in organizing the events. We would greatly appreciate if you (our members) provide feedback, opinions, interest level and any other comments / concerns about this idea to the organizers of the meetings (click [here](#) to auto generate an e-mail feedback message to OOS President Brian Keas, OOS VP Erik Pilgrim, Bob Glotzhofer and Steve Chordas). The meeting would likely be in central Ohio, occur in late June or early July, span two days, include field trips (likely Big / Little Darby, Olentangy River), evening presentations, and our own OOS business meeting one of the days or evenings. This would take the place of our winter meeting that we have held around March for the past few years. Once we receive feedback from the membership, we will be better able to plan a productive meeting for all involved.

*Many Thanks in advance for your cooperation !*

**\*\*Announcement of the 2010 meeting will be made in the January 2010 newsletter. Watch for it!!**

DSA meetings were held in Missouri in June 2009, below is a group shot of attendees. Ohio was represented by two active and enthusiastic members, Bob Glotzhofer (right arrow) and Erik Pilgrim (left arrow, current Vice President of OOS). Do you recognize any other individual in the photo?



## DRAGONFLY: AN INTRIGUING MODEL TO STUDY HUMAN OBESITY

By Xueqing Liu & Steve W. Chordas III

Recent studies done in dragonflies have shown a link between gut microorganisms and the disruption of lipid (fat) metabolism in the muscle tissue of these insects. James Marden, professor of biology and an insect physiologist at Penn State, and Ruud Schilder, a postdoctoral fellow at the University of Nebraska, have for the first time shown that a non-mammalian species (a dragonfly) is suffering from metabolic dysfunction in ways similar to humans (link to press release at end of article). The dragonfly species that they studied was *Libellula pulchella* (12 spotted skimmer: Photo credit Dave McShaffery, image from the OOS webpage).



What they found is that disturbances in the microbial balance in the guts of these dragonflies triggered obesity. Further, it was discovered that an increased inflammatory response due to the infection of these microbes in dragonflies affected their metabolism and eventually lead to symptoms of obesity. This is really an important finding. A systemic and chronic inflammation has been identified in cases of human and other animal obesity. Strong biomedical evidence has shown that this obesity-associated inflammation plays a causative role in several metabolic disorders that are associated with obesity, such as insulin resistance and coronary heart diseases. In mammals, it is thought that the initiation of this systemic inflammation occurring with obesity is due to over-accumulation of fat in adipose tissue which leads to adipocyte (fat cell) dysfunction and macrophage (white blood cell) activation. As a result, systemic inflammation is mounted through circulation of pro-inflammatory factors released from adipose tissue. These factors, in turn, cause dysfunction of other tissues such as liver and muscle. For the studies done in dragonflies, the novelty really is that it points to another contributing source of inflammation associated with obesity, which is the balance of microorganisms in the intestinal tract. This

concept hasn't been studied intensively in the field of obesity. Marden and Schilder's study raises a fascinating idea for what may happen in human obesity. Changes in our life styles such as diet, physical activity, smoke and other factors that would affect the microbial balance in our guts, could consequently, contribute to obesity-associated metabolic disorders through an augmentation of systemic inflammation. In addition, as metabolism in muscles plays a crucial role in human obesity, dragonflies, which have substantial amount of muscles to support their flight, provide very good models for studying lipid metabolism in muscles. In animals, muscle tissue is often in very close contact with adipose tissue, so the behavior of fat metabolism found in dragonfly muscles can potentially be an analogy for human muscles. However, more studies need to be done before we are able to apply these observations from dragonflies to further understanding human obesity. One item in particular may be the full understanding of differences in the obesity-associated immune responses between dragonflies and mammals. Mammals have far more complex immune system than insects, which involves functionally differentiated immune cells such as macrophages, lymphocytes and others. Thus, it would be necessary for us to understand how the insects' inflammation response and associated obesity compares to that in mammals. ([link to press release here](#))

*Dr. Xueqing Liu* is currently a post-doctoral researcher at the University of Wisconsin, Madison, whose work focuses, in part, on the biochemistry of obesity.

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## DRAGONHUNTERS (*Hagenius brevistylus*), BASEBALL FANS?

*From: gl\_odonata@yahoo.com On Behalf Of john southwell*

Unexpected Dragonhunter sighting: 27 July 2009 night game at Wrigley Field (Cubs vs. Astros). Beginning at roughly 7:30pm and continuing to 9:00pm several large specimens of *Hagenius brevistylus* were seen patrolling and hunting above the stands behind home plate! We were in section 220, row 7. Without doubt they were Dragonhunters, obvious from their very large size and characteristic curled abdomen while flying. I had a difficult time watching the game, it was more fun to watch these special creatures hunt and fly between the people in the crowd. Has anyone else seen these unexpected baseball fans?

## DRAGON ALERT ! *By Larry Rosche*

✓ Copied directly from an e-mail by Larry Rosche received on 9-September-2009.

*Larry says* “Been getting some great reports, none more stunning than the Russet-tipped Clubtail photographed by Sally Isacco at Headlands Beach in Lake County today! Wow. Erie County had been the only county in NE Ohio that had previously hosted this species and none since 1930. John Pogacnik reported a Flag-tailed Spinylegs at Kelleys Island earlier (don't know if he got a photo). Lake Erie can really produce stray western species, so I am hoping to hear from folks from the Western Basin through Ashtabula County. Linda pulled a deceased male Laura' Clubtail out of the window netting at the West Woods. Rob and Sandy Harlan found the first record of Vesper Bluets for Cuyahoga County on the lily pads at Beyer's Pond in Cleveland Metroparks' Big Creek MP on 8/29/09 at about 6:30 pm. The only swarm of Mosaic darners was in Twinsburg a while back. Emeralds and cruisers have been spotty, but the previously mentioned noteworthy reports have my hopes up for some great September dragonflying. I hope some others can check on the Vespers at Big Creek. We could use a photograph for the state records committee.”

Editors note: Northeast Ohio is our most active area of Odonate enthusiasts, keep up the good work you NE folks ! - check out

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## TWO HAWAIIAN DAMSELFLY SPECIES UP FOR PROTECTION ! *e-mail from Bob Glotzhofer*

Two endemic Hawaiian zygoptera species have been proposed for listing as federal endangered species ([News release link](#)). Additional information can be found in the links provided here.

The two species are the Pacific Hawaiian damselfly (*Megalagrion pacificum*) [link Xerces society info](#) ([Link to species image](#)) and the flying earwig Hawaiian damselfly (*Megalagrion nesiotetes*) [link Xerces society info](#). The Pacific Hawaiian damselfly is known from less than 25 locations on 3 islands (Hawaii, Maui, Molokai). The flying earwig Hawaiian damselfly is currently known only from a single location on Maui. The federal register link can be accessed through the “link to species image” above. This document contains a large amount of excellent information on these species starting on page 32492.

## Calender of Upcoming Meetings / Events:

by editor *Steve W. Chordas III*

### *OSU Museum of Biological Diversity Annual Open House.*

First or second Saturday of February-2010 : 10:00am - 4:00pm. The Ohio State University Museum of Biological Diversity, 1315 Kinnear Road, Columbus Ohio. Exact date to be announced soon. **Open to the Public - free of charge.** More information and specific date of the open house is at <http://mbd.osu.edu/openhouse.htm>

**Ohio Natural History Conference** : Saturday, 20-February-2010. Location to be announced. Registration is required. Registration = \$20.00, student registration = \$10.00, (lunch will be on your own this year). One may either call to register at 614-457-8787 or inquire via email at [Ohiobiosurvey@rroho.com](mailto:Ohiobiosurvey@rroho.com)

**Ohio Odonata Society 2009 Summer field trip ???**

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## New Dragon-flier section ? ODONATA IN EVERYDAY LIFE ?

*By Steve Chordas III*

This section of the newsletter is intended to be a member driven / member contribution section. Where in your everyday life (i.e. your home, car, work, hobbies, etc) do odonates occur or are part of ?

For example:

- ✓ Do you have a favorite fire cured serving bowl that has Odonate decorations?
- ✓ Do you have placed pictures?
- ✓ Do you have Odonate kitchen fixtures?
- ✓ Do you have Odonate bathroom fixtures?
- ✓ Do you have Odonate wall decorations?
- ✓ Do you know where other members may obtain Odonate fixtures or the like?
- ✓ Do you have an Odonate room in your house - or would you like one?

Take a photo, send in a comment, make a comment, tell us where to get good Odonata “things”.

Lets contribute!! Send in your examples, comments, contributions, photos of favorite items, room photos, etc to the editor Steve Chordas III at ([stevechordas@sbcglobal.net](mailto:stevechordas@sbcglobal.net)) or snail mail at 1063 West 2<sup>nd</sup> Avenue, Grandview Heights, Ohio 43212.

\*\* There were zero contributions from may-September. *I have one request : Anyone know where to get Odonata hooks for hanging towels or coats or the like?*

# Have a great Autumn 2009 !



## PLEASE SUBMIT : **NEWSLETTER CONTRIBUTIONS !!**

From the editor, *Steve W. Chordas III*

Special Thanks to *Dr. Xueqing Liu, Larry Rosche and Bob Glotzhober* for submitting contributions to this newsletter!!

We are always looking for your thoughts / findings / Odonata related materials, announcements or general information to include in the Dragon-flier. We welcome submissions from our membership. Feel free to send your contributions, ideas, suggestions to Steve Chordas at ([stevechordas@sbcglobal.net](mailto:stevechordas@sbcglobal.net)) or snail mail at 1063 West 2<sup>nd</sup> Avenue, Grandview Heights, Ohio 43212.

## WHAT IS COMING IN THE JANUARY 2010 ISSUE OF THE DRAGON-FLIER ?

From the editor *Steve W. Chordas III*

Member contributions ?? 2010 OOS Annual meeting announcement, summer 2009 collection / photographic results from members? Dragonflies in the classroom at Ohio State, global gliders set record + Much more .

- ★ If you have announcements or event notification information to include in the “calendar of events section”, please send them to the editor at [stevechordas@sbcglobal.net](mailto:stevechordas@sbcglobal.net) for inclusion in the January 2010 newsletter. *Thanks !!*



Autumn species you may encounter !

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## OHIO ODONATA SOCIETY : 2010 DUES STATEMENT



Regular Membership = \$ 5.00  
Supporting Membership = \$10.00

           *(Yes) I would be interested in receiving the **Ohio Dragon-Flier** via e-mail as a PDF file, instead of via U.S. surface mail.  
*(Your e-mail address is required for this option).**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Phone (Optional): \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

E-mail Address (Optional): \_\_\_\_\_

\* Return this form with payment (cash encouraged - receipts will be sent) to :  
(Make checks payable to : Ohio Odonata Society)

- ★ Or bring this form with you to the 2010 Annual meeting and hand it to Bob at that time ! (We will also have blank forms available at the meeting).

**Bob Restifo**  
**Treasurer : Ohio Odonata Society**  
**274 East Torrence Road**  
**Columbus, Ohio 43214**