



UDBG FRIENDS

UNIVERSITY OF DELAWARE BOTANIC GARDENS

November/December 2011

2010-2011 UDBG Friends Officers:
President: John Harrod
Secretary: Demaris Hollembeak
Treasurer: Charlotte McDermitt

Dragonfly Calendar by Hal White

Aldo Leopold says in his *Sand County Almanac*, "Tell me of what plant-birthday a man takes notice, and I shall tell you a good deal about his vocation, his hobbies, his hay fever, and the general level of his ecological education." I have four: skunk cabbage, lilac, golden rod, and witch hazel. I associate them with type specimens of a particular season—glorious days when all of my senses proclaimed, "It's a 10."

Perhaps a person with a better sense of plant birthdays than I could go to the University of Delaware Botanical Gardens and tell, without a calendar, what day of the year it was within a week or less of the actual date based on what is flowering. Nature is like that for the discerning observer. Whether it is plants,

birds, the sky, or water, subtle changes mark time. While I make note of plants through the seasons, I mark time with dragonflies.

For those like me whose excitement rises with the glint of sun off shimmering wings, the dragonfly years starts about April 1 with Green Darners arriving from the south before their overwintering brethren can emerge from local ponds and marshes. The Ode Listserv (Damsel fly and Dragonfly mail list) springs to life with sightings from Maryland, Pennsylvania, New York, and New England as these invaders arrive on warm southern winds.

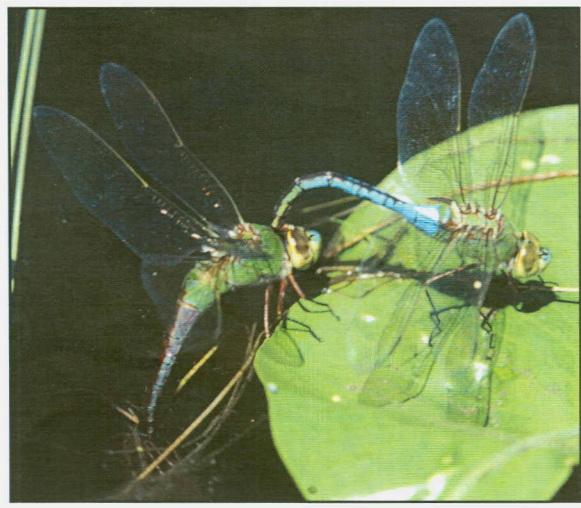


Jim White

A bright red male Autumn Meadowhawk warms himself on a small rock in the sun on a cool November day.

These large dragonflies with clear wings, bright blue abdomens, and green thoraces are the only species known to populate all 50 states. They fly throughout the spring and summer over smaller ponds with emergent shoreline vegetation. Green Darner females insert their eggs into aquatic plants such as those found in the UDBG's restored wetland.

(cont'd on page 6)



Jim White

A female Green Darner (left) lays her eggs in submerged vegetation while being escorted by a male that holds the top of her head with claspers at the end of his abdomen.

WE'VE MOVED!

**UDBG
HAS MOVED
ITS OFFICE!**

**We're now in the South
Greenhouse behind
Townsend Hall. Same mailing
address, just different locale.
Please come visit us in our
new accommodations.**

Dragonfly Calendar (cont'd)

Their predatory larvae feed on other aquatic insects, molt 13 times, and emerge as adults in late summer and early fall, often forming feeding swarms over fields as they prepare to head south. One Green Darner equipped with a miniature radio transmitter was followed by a light plane for 112 miles from central New Jersey across Delaware to Ocean City, Maryland in just a few days.

Folklore in the Western Hemisphere casts the Green Darner as sinister with nicknames like “devil’s darning needle” or “horse stinger.” But in Japan dragonflies are revered,

frequently appearing in visual arts and poetry. In this haiku, the poet Shirao reveals his own dragonfly calendar.

The beginning of autumn,
Decided
By the red dragon-fly.

The red dragonfly of which he speaks is a meadowhawk, related to species found here in the U.S. with the same seasonal flight period. One of our common species is called the Autumn Meadowhawk. Whereas the Green Darner marks the beginning of my dragonfly year, the Autumn Meadowhawk marks its end. In the fall, observers

around the northeastern U.S. vie to make the last sighting. The late date reported for Delaware is December 1, but years when hard frosts and snow have held off, there have been sightings on December 6 in New Hampshire and December 14 in Ohio.

Like Green Darners, Autumn Meadowhawks have colonized UDBG’s restored marsh, and one or two might be seen in south-facing, sunny spots, out of the wind well into November, long after the Green Darners have departed.

Jim White



Hal White in the field

The Green Darner and Autumn Meadowhawk are two of 130 known species of dragonflies and damselflies on the Delmarva Peninsula, which are discussed in Hal White’s recently published book, *Natural History of Delmarva Dragonflies and Damselflies*. The book is available at the Ashland Nature Center and the University of Delaware Bookstore, or it can be ordered through Rowman & Littlefield Publishers. Hal White is a professor of biochemistry at the University of Delaware and Director of the Undergraduate

Howard Hughes Science Education Program, and has written 32 publications related to entomology. See www.udel.edu/chem/white/cv.html#EntoPubs

