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Les Ferge, Editor

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Les Ferge

INSECTS PLACED ON THREATENED/ENDANGERED LIST

Eleven insect species are among a number of invertebrates designated as threatened or endangered species in Wisconsin by the DNR's Bureau of Endangered Resources. These include the Pecatonica River Mayfly (<u>Acanthametropus</u> <u>pecatonica</u>), the Giant Carrion Beetle (<u>Nicrophorus americanus</u>), the Anomalous Snaketail Dragonfly (<u>Ophigomphus anomalous</u>), Howes' Snaketail Dragonfly (<u>Ophigomphus howei</u>), and seven species of Lepidoptera, treated in more detail below. Collecting of listed species is prohibited, but may be allowed under special permit if specimens must be taken for bona fide research purposes. Individuals interested in studying any listed species are encouraged to contact Bill Smith, Bureau of Endangered Resources, Dept. of Natural Resources, Box 7921, Madison, WI 53707; phone (608) 266-0924. The Bureau would also like to obtain data from existing specimens of listed species, in order to more fully document past occurrences of these insects.



Populations of the Powesheik Skipper (Oarisma powesheik) are known only from two State Natural Areas in Waukesha County. The small size, inconspicuous dark color and fast darting flight of this butterfly make field observation difficult. It is a highly localized, sedentary species, not straying from the few acres of wetmesic prairie supporting the colonies. The flight period is short, from the last of June through early July. The larval foodplant in Wisconsin remains unknown, but observations of egg-laying in Michigan point to Spike-Rush (Eleocharis elliptica) as a possibility, as related by Holzman (1972).

The Silphium Borer Moth (<u>Papaipema silphii</u>) is also an inhabitant of wetmesic prairie. Currently known from two localities, it may be found in more sites in southeastern Wisconsin. The larva bores in the roots and stems of Prairie Dock (<u>Silphium terebinthinaceum</u>), the only hint of its presence being one or two withered or dead leaves, and droppings expelled from a hole low on

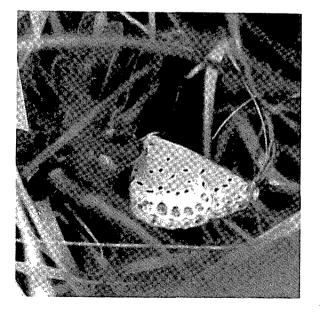
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The Newsletter of the Wisconsin Entomological Society is published three times a year, at irregular intervals. It is provided to encourage and facilitate the exchange of information by the membership, and to keep the members informed of the activities of the organization. Members are strongly encouraged to contribute items for inclusion in the Newsletter. Please scnd all news items, notes, new or interesting insect records, season summaries, research requests etc. to the editor: Les Ferge, 7119 Hubbard Avenue, Middleton, WI 53562.

the stem. However, another related moth, <u>Hydraecia immanis</u>, bores in corn and other thick-stemmed plants, including Prairie Dock, confusing the detection of Silphium Borer by plant damage alone. The brownish-gray adult moths emerge in late September and are attracted to ultraviolet lights. The winter is spent in the egg stage, rendering the species vulnerable to spring and fall prairie fires.

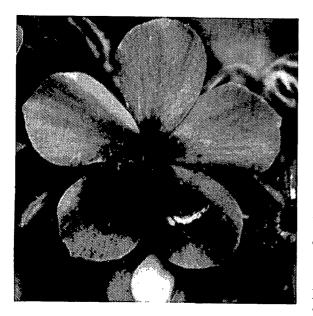
The Swamp Metalmark (<u>Calephelis muticum</u>) has long been known from several sites in southeastern Wisconsin. The failure to find populations in some of the known localities has caused some alarm. Its only larval host, Swamp Thistle (<u>Cirsium muticum</u>) should occur in bogs and fens in much of eastern Wisconsin, giving hope that a thorough survey of known Swamp Thistle localities will uncover more metalmark populations. The mid-July flight is very brief, possibly lasting less than two weeks. The small, metallic-speckled dull red adults may be found nectaring on the flowers of Shrubby Cinquefoil (<u>Potentilla fruticosa</u>).

The Regal Fritillary (Speyeria idalia) has declined precipitously in much of its range, with the stronghold of the species being centered in the prairie states. In Wisconsin, populations remain in the largest areas of preserved dry prairie habitat, located in Green and Sauk Counties. About 15 years ago it was reported in numbers in and near Governor Dodge State Park, and a few were seen in northwestern Wisconsin also around that time. Birdsfoot violet and other prairie violet species are the larval foodplants. The Regal Fritillary has a very lengthy flight season compared to most butterflies, extending from the end of June through early September. It is critical that this long-lived and wideranging species has a constant and dependable supply of nectar sources to sustain it during its flight and assure energy for reproduction. The loss of large contiguous tracts supporting a variety of natural vegetation and plentiful favored native flowers such as butterfly weed and blazing star appears to be a major cause of decline. The eggs are laid very late in the flight season, apparently haphazardly near patches of violets, and the winter is spent as first-stage larvae. These overwintering larvae are believed to be vulnerable to prairie fires.



The Northern Blue (Lycaeides idas nabokovi) is currently found in two localized centers of population in northeastern Wisconsin, in Oconto and Florence Counties. The reason for its restricted occurrence and rarity became apparent in 1980, when Nielsen and Ferge (1982) reported oviposition on dwarf bilberry (Vaccinium caespitosum) in Florence Co. At the time, this plant was thought to be extinct in Wisconsin, and in a novel turn of events, the butterfly served as a guide to locating dwarf bilberry in Oconto County. The habitat is restricted to small sandy barrens openings and along roadsides. The flight occurs in late June-early July. Males are often found "puddling" along dirt roads, and females nectar at dogbane and yarrow flowers.

The Frosted Elfin (<u>Incisalia irus</u>) is the rarest of the five species of Elfins found in Wisconsin, and may be easily confused with the more widespread Hoary Elfin (<u>I. polios</u>). It is known from four widely scattered sites in the Central Sands region, where it is closely associated with Lupine (<u>Lupinus</u> <u>perennis</u>), its larval foodplant. Elfins are among the first butterflies of spring, emerging as early as the first week of May. Why the Frosted Elfin is seen in such small numbers is a puzzle. Two other Lupine-feeding butterfly species, The Persius Dusky Wing (<u>Erynnis persius</u>) and the Karner Blue (<u>Lycaeides</u> <u>melissa samuelis</u>), are much more widespread and numerous in Wisconsin. However, the open savanna habitat needed by the sun-loving Lupine and its associated butterflies is threatened by shading from the increasingly dense growth of Jack Pine and Oak. Nearly all the open habitat remaining consists of narrow strips persisting along roadsides and railways, and maintained in power line rightsof-way.



The Phlox Flower Moth (Schinia indiana) would be expected to occur throughout the Central Sands region, but is known from a single locality in Eau Claire County, as related by Balogh (1987). The habitat is a power line right-of-way through a pineoak barrens having an abundance of downey phlox (Phlox pilosa), the larval foodplant. The tiny purplish moths rest by day on the phlox flowers, where it takes a very sharp eye and much patience to find them. Being a member of a predominantly day-flying moth group, S. indiana is not known to be attracted to light. This species would be sought from late May through early June. The larvae feed on the seeds of downey phlox, and enter the soil to pupate. Most specimens in museums originated from the Hessville, Indiana area, where the species was first found.

LITERATURE CITED

Balogh, George J. 1987. New Localities for <u>Schinia indiana</u> (Smith) (Noctuidae). The Ohio Lepidopterist 9: 15-16.

Holzman, Richard W. 1972. Eastern Range Extension for <u>Oarisma powesheik</u> Parker (Lepidoptera: Hesperiidae). Great Lakes Entomologist 5: 111-114.

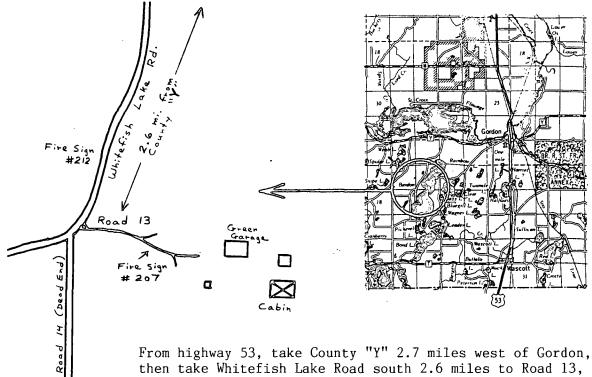
Nielsen, M. C. and Ferge, L. A. 1982. Observations of <u>Lycaeides argyrognomon</u> <u>nabokovi</u> in the Great Lakes Region (Lycaenidae). J. Lepid. Soc. 36: 233-234.

FROM THE EDITOR

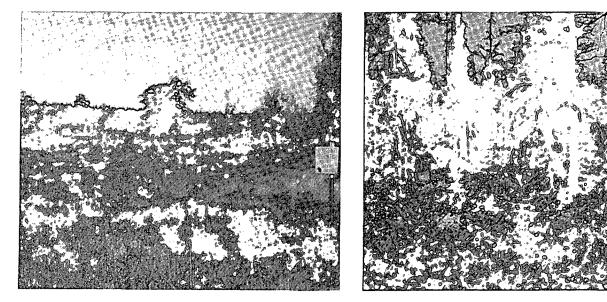
The next Newsletter will be published in October, after the field season slows down. As always, short notes, photos, unusual finds or any items of entomological interest are wanted for the Newsletter. Contributions received by September 30 will appear in the Fall issue. W. E. S. FIELD TRIP IN DOUGLAS COUNTY 26-28 MAY

Jim Knudson will be hosting our spring field trip at his cabin near Gordon on Memorial Day weekend. The cabin, located on Bardon Lake (= Whitefish Lake) has sleeping room for 6 or 7 people. Bathroom facilities are primitive--a onehole outhouse. Since this is tick country, be sure to bring your repellent.

Beside the sandy scrub oak habitat around Jim's cabin, extensive areas of bog and barrens are found within a few miles. A diverse array of northern Lepidoptera is expected to be on the wing, and beetles are usually abundant at UV light at this time in sandy habitats. Bardon Lake and the nearby St. Croix river offer opportunities for aquatic insects.



follow Road 13 past Fire Sign #207 to the cabin.



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XERCES SOCIETY NORTH AMERICAN BUTTERFLY COUNT - 1989

The 15th annual Xerces Society North American Butterfly Count will take place this summer. Participants select a 15-mile diameter count area and conduct a one-day census of all butterflies sighted within the circle. The published results provide important information about the geographical distribution and population size of the species counted. Comparison of the results year-to-year enables monitoring of the changes in butterfly populations and the study of the effects of weather and habitat change on the different species across the continent.

Dramatic changes in butterfly populations from 1987 to 1988 were demonstrated in the Midwest count results. For example, under the hot, humid conditions of 1987, the Monarch butterfly thrived. This species was found on 13 of the 14 counts held that year in the Midwest, with a total of 259 Monarchs seen. By contrast, the following year was plagued by record heat and drought. Although 18 Midwestern counts were held, only 11 found any Monarchs, for a total of 66 individual butterflies.

No matter how much or how little butterfly watching you've done, the results of butterfly counting can be surprising and fascinating. In 1988, three counts were conducted in Illinois, two in Iowa, three in Michigan, three in Ohio, and seven in Wisconsin. For more information on how to conduct a count, contact either:

Dr. Paul A. Opler, Count Editor		Mrs. Ann B. Swengel, Midwest Editor
5100 Greenview Court	or:	315 Fourth Avenue
Fort Collins, Colorado 80525		Baraboo, Wisconsin 53913

WISCONSIN BUTTERFLY TASK FORCE

Ann Swengel

In December 1988, a meeting of Wisconsinites interested in educating the public about butterfly gardening and conservation convened near Milwaukee. Several Master Gardeners and naturalists had discovered that they were each developing materials on the subject, and wanted to pool their resources and handouts. This group has evolved into an informal task force on butterfly gardening and conservation, and also includes a nongame biologist from the Wisconsin Department of Natural Resources, professional entomologists and amateur lepidopterists. The group is always on the lookout for more materials, either to be used directly in public presentations or to serve as models from which additional handouts, brochures or projects may be develpoed. Inexpensive material that photocopies well is most useful, since members of the group have little if any funding for this work. Please send any material suitable for educating the publis, form childern to senior citizens, about butterflies to:

Butterfly Task Force Milwaukee County - UW Extension 9668 Watertown Plank Road Wauwatosa, Wisconsin 53226

NATURE CONSERVANCY FIELD TRIPS

Ann Swengel

Among the field trips that the Wisconsin Chapter of the Nature Conservancy is offering this summer are two trips highlighting insects. These trips will go ahead rain or shine, unless the weather is hazardous. Wear clothing appropriate to the weather and activity, and bring camera and binoculars if you wish. Participants are responsible for providing their own food, drink, insect repellant and sunscreen. Please do not wear footwear having cleats--they are harmful to the preserves.

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W. E. S. members active in the outdoors are already informed about the hazards and prevention of Lyme disease, but it never hurts to be reminded. Ticks, which occur throughout Wisconsin in a variety of habitats, spread this disease. Your best defenses are: wear protective clothing (long pants, especially helpful if tucked into socks), use a tick repellant, and check yourself carefully after the outing. Consult your doctor if you think you may have contracted this disease--it is easily treated in its early stages.

FAMILY TRIP ON BUTTERFLIES AT BAXTER'S HOLLOW Sunday, July 16 from 1:00 to 5:00 PM

Young and old alike are invited on this trip, led by Ann Swengel, which will highlight the many butterflies inhabiting this Baraboo Hills preserve. We will learn about these beautiful insects and explore the forests and fields through activities designed for fun and family interaction. Adults that are young at heart are also welcome! The preserve is handicapped accessable.

Meet at Baxter's Hollow. From Highway 12, drive west on King's Corner Road (opposite the north end of Badger Ordnance). After 1.5 miles, turn north on Stone's Pocket Road. After another two miles, park off the road where it bends sharply right (north) at the old wooden gate.

THE INSECT WORLD AT SUMMERTON BOG Saturday, July 22 from 12:00 noon to 4:00 PM

Dan Young, professor of entomology at UW-Madison, will explain what flies by, crawls around, bores into plants, and burrows underground at this preserve, which also protects an oak forest "island" and sedge meadow. Since the bog specialists will be highlighted, please wear rubber boots or shoes that can get wet. Be prepared for hummocky, mucky terrain, and watch out for poison sumac!

Meet at Summerton Bog. To receive directions to this preserve, contact the Nature Conservancy, 1045 E. Dayton St., Room 209, Madison, WI 53703; phone (608) 251-8140.

MADISON AUDUBON SOCIETY FIELD TRIPS

Karl Legler

The Madison Audubon Society will hold two field trips this summer of interest to W.E.S. members. Any adult having an interest in entomology is welcome.

BUTTERFLY WATCHING AT WALKING IRON PARK Saturday, July 15, from 10:00 AM to 12:00 noon

Ann Swengel will lead a butterfly walk at this Dane County park near Mazomanie. Bring binoculars if you have them. To get to the park, take Highway 14 to $\frac{1}{2}$ mile west of Mazomanie. Turn north onto Mahocker Road, then left on Hudson, and right on Beckman Road. Park in the lot on the east side of the road.

THE TRUTH ABOUT INSECTS

Saturday, August 19 at 2:30 PM

Phil Pellitteri and Dan Young will lead a 2 or 3 hour insect walk at the UW Arboretum in Madison. Meet at the McKay Center.

NEWS AND NOTES

Dan Benjamin sent a short note and newspaper clipping regarding the Monarch butterfly overwintering area controversy along the central coast of California. "Monarchs assemble in several eucalyptus plantings from Santa Maria and south, and as building progresses, these trees may be eliminated. Obviously, this is of concern to many, including environmentalists, tourists, and local biologists. Generally, the realators ignore the subject - except the Hyatt hotel people, who are attempting to leave the trees."

"My home is at the edge of Santa Maria, and has a border of eucalyptus on the adjoining property. Every day Lil and I observe a few Monarchs - it is part of our retirement enjoyment. Now these trees are threatened. We do not expect that the builders will respect a few butterflies, and really do not see any logical reason to object."

"We continue to enjoy Santa Maria. Spring is here and my battle with the whiteflies has begun."

Jim Mertins, the first W. E. S. Newsletter editor when he was at UW-Madison, writes that he recently began a new job after several years in the Entomology Department of Iowa State University in Ames. He is now with the USDA, APHIS National Veterinary Services Laboratories/Pathobiology Lab and is the resident entomologist providing identification services for invertebrate parasites of domestic animals and wildlife nationwide.

A collection of 36 paintings of moths by Dr. John Cody is being displayed in C5/2 Skylounge Gallery at the UW Hospital and Clinics in Madison through May 31. The artist has been referred to as "The Audubon of Moths" and has produced some very striking and beautiful works.

A new Wisconsin map book is a most welcome and useful publication for those active in the field. The <u>Wisconsin</u> <u>Atlas</u> and <u>Gazetteer</u> is published by the DeLorme Mapping Company, P. O. Box 298, Freeport, Maine 04032; phone 1-800-227-1656, ext. 6100. It is available at \$12.95 at most bookstores, or may be ordered by mail for that price plus \$2.50 postage.

The book is the size of a large road atlas, and contains detailed topographic-style maps. It appears that even the most obscure back roads and trails are included on the maps, as well as lakes, rivers, streams and wetlands. Forested areas are indicated by green shading. Unlike true topographic maps, contour lines are omitted.

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