Volume 4, Number 4 **October—December, 2003**

Washington Butterfly Association

G'num*

The newsletter of the Washington Butterfly Association

P.O. Box 31317 Seattle WA 98103

*G'num is the official greeting of the WBA. It is derived from the name of common Washington butterfly food plants, of the genus *Eriogonum*.

WBA Meeting Programs

WBA meetings are held on the first Wednesday of each month. They are held at the UW Center for Urban Horticulture (3501 NE 41st Street, Seattle) and begin at 7:00 p.m. The first fifteen minutes are used for social reception and viewing of displays**.**

NOVEMBER 5:
"Habitat and Life History Study of Four Rare Puget Sound Prairie Butterflies"
Butterflies studied are:
Puget Blue *(Icaricia icarioides blackmorei*),
Taylor's Checkerspot (*Euphdryas editha taylori*), Mardon Skipper (*Polites mardon*), and
Valley Silverspot (*Speyeria zerene bremnerii*).
Ann Potter and Dave Hays of WSFW in Olympia.

DECEMBER 3:
"The Scientific Explanation of Metamorphosis"
Chemical changes taking place in a butterfly's life.
University of Washington scientist, Kiyoshi Hiruma.

JANUARY:
No membership meeting. There will be a Winter Party at the home of Jon Pelham. The exact date will be announced later.

FEBRUARY 4:
"Take a Walk on the Wild Side"
Mountain hiking for butterflies and blooms in Washington. Slides of their hikes over the past two years by ever popular Ian and Mary Young!

MARCH 3:
The president of the Eugene Oregon Chapter of NABA will speak at our meeting.

Nature and Garden Book Sale

At the November 5 meeting, there will be a book sale. Members may bring their own nature books to sell at any price indicated (at least $1 from each book sold is to be donated the WBA).

Books may also be donated to the WBA table. These books will be sold at excellent discounts with all money going to WBA. If you cannot bring them to the November meeting, please contact Idie Ulsh at 206-364-4935 or idieu@earthlink.net to arrange for their pickup.

Doors will be open at 6:20.

Fort Lewis Butterfly Survey

By Bob Hardwick

Under the direction of the Nature Conservancy, a group of WBA members had the opportunity to help in surveying butterfly populations on the Fort Lewis Military Reservation this year. WBA was assigned the northern most prairie which interfaced with McChord Air Force Base, off Military Road in Spanaway. This particular prairie was surveyed almost weekly from May through August. The interest in our work here was high, for I had many pilot observation and species accounts of this prairie dating back to the 1970s and 80s, when I had resided several miles away in Spanaway. Since I had frequented the prairie (known as TA7) often during those years, the Conservancy was very interested in my input of the changes of both flora and fauna that have taken place from then to the present time.

In the 1970s and 80s the central portion of TA7 was an absolute garden of wildflowers during May and June. Large numbers of two different species of Desert Parsley (*Lomatium*), Lupine (*Lupinus*), Balsamroot (*Balsamorhiza*), and a large variety of other prairie plants flourished. Surrounding this open area was an invasion of Scotch Broom which had consumed many acres of potential prairie land atthis time.

During the 70s and 80s large numbers of Silvery Blues (*Glaucopsyche lygdamus*), Boisduval's Blues (*Plebejus icarioides blackmorei*), Anise Swallowtails (*Papilio zelicoan*); and to a lesser extent, Edith's Checkerspots (*Euphydryas editha taylori*) all flew here. An occasional Tiger Swallowtail, Pale Swallowtail, Spring Azure were seen during the spring. Later in the year Great Spangled Fritillaries and Woodland Skippers were seen. On the Kinnikinnick patches Hoary Elfins were found during late April and early May.

Many changes have taken place within TA7 since the 80s. First of all, on the negative side, the central portion of that prairie that was so well colonized by butterflies is now a huge gravel pit, which seems to be expanding monthly. Thus, the best part of the prairie is lost to "progress". Second, on the positive side, the Fort and the Nature Conservancy have worked diligently to remove acres and acres of Scotch Broom that surround this gravel pit, opening up new area for butterfly colonies that did not exist during the 70s and 80s. Three methods of Scotch Broom removal have been used: burning, pulling plants, and mowing. We noticed during our surveys that all three methods have been used on various prairies on Fort Lewis.

I was very disappointed in our survey results on TA7. The only bright spot is the Silvery Blue population which is even larger than the population I had observed during the 70s and 80s. The Boisduval's Blues and Edith's Checkerspots are completely gone, and the population of Anise Swallowtails is quite low compared to observations made during past decades. One must be very careful, however, in forming conclusions based on one year's study.

Seven other prairies were also visited during the spring and summer study period. As with TA7, we were to document location, species and numbers of individuals of any butterflies we encountered. The Nature Conservancy was most interested in potentially endangered to endangered prairie species, such as the Boisduval's Blue, Edith's Checkerspot, Mardon Skipper, and Zerene Fritillary (*Speyeria zerene bremnerii*). Unfortunately, we found none of these "target" species during our survey period. We did, however, find healthy populations of Silvery Blues and Common Ringlets (*Coenonympha tullia eunomia).*

The Nature Conservancy is doing an outstanding job in restoring many of the prairies located on Fort Lewis. We were very encouraged by what we saw happening and the dedication these workers had to their cause. Many of the prairies that were previously overtaken by Scotch Broom are now clear and have been replanted with butterfly larval food plants. Only time will tell whether or not these restoration efforts will be rewarded with the return of the target butterfly populations.

The Nature Conservancy workers did find populations of the Boisduval's Blue, and Edith's Checkerspots near the artillery impact area, which was off limits to WBA members due to the danger there. Also near the impact area, a healthy colony of the Mardon Skipper was located for the first time. Later in the summer Great Spangled Fritillaries and the Zerene Fritillary were spotted at Johnson's Prairie.

I have requested reintroduction of the Boisduval's Blue at TA7, since lupine is even more abundant than during the 80s, but it is questionable that this will ever happen due to policies in place at Fort Lewis.

I want to thank Richard Lindstrom and Bill Yake for the great many of hours they spent with me walking these prairies during the spring and summer. I also want to thank Marty Hansen, Peter and Gavin Klein, Mary Maxwell Young and Ian Young, Cassandra Trimble, Phillip Charvet and any other WBA members that I might have omitted for helping in the study of the Fort Lewis Prairies.

Confessions of a Beginning Butterflier — by Tom O'Connell

What a group!

We drove 850 round-trip miles to see TWO butterflies! We had nothing but gray skies and rain instead of sunshine at our annual WBA conference at Metaline Falls in late June. Not only that: our principal guest speaker got pneumonia and couldn't come to enlighten us.

But were we disheartened, blue, out-of-sorts? No! Did we rebel and refuse to reelect our President Richard Youel if he couldn't get us better luck and weather than that? Not at all!

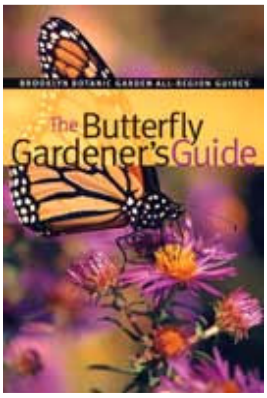
No, our thirty-plus conferees just shrugged, kept smiling, and made the best of it. We simply turned our attention to other insects and to birds and also to scouring cliffsides for fossils. Most of us came away with at least one fossil from upwards of ten million years ago. We got to know each other better (often one of the "uses of adversity.")

We got to enjoy two rather than just one scintillating, erudite presentations by our favorite lecturer, Jon Pelham. We watched Idie Ulsh's delightful and always new slide show.

We enjoyed bopping around Metaline Falls and Pend Oreille County (the county name comes from earrings worn by Native American women viewed by early French visitors—we learned that, too!) The region strikingly reminded me of Rip Van Winkle country. As many of you will remember, Rip's turf was in the Adirondack Mountains of New York state, nearly three thousand miles to the East. But it too is plumb up against the Canadian border.

Oh, yes! About those two butterfly species. They were a greenish blue and a garita skipperling. The skipperling was a new state sighting for me and several other loyal WBAs.

Butterfly Gardener's Guide



Our own WBA member, Claire Hagen Dole, is guest editor of the current edition of The Butterfly Gardener's Guide published by The Brooklyn Botanic Garden.

The 120 page book contains all-region information on North America's most common butterflies. It includes topics such as turning your yard into a butterfly sanctuary, the best butterfly and caterpillar plants, inviting caterpillars into your garden, helping butterflies to survive the winter, gardening with children, and making life easier for migrating butterflies.

If you are interested in a copy of this book, you may contact Claire at 206-783-3924, or email her at hagen.dole@att.net, or look for her at one of our meetings. The cost is $10.83. She will donate $1 of this to WBA.

Butterfly Destinations - Metaline Falls by Maureen Traxler

The weather didn't allow many butterflies to greet WBA during the 2003 Annual Conference, but, had the weather been better, these are the spots we would have visited.

Tiger Meadows. From Highway 31 southbound from Metaline Falls, turn west (right) at Tiger onto Highway 20. Turn right at Rocky Creek Road (formerly called Lost Creek Road). There is a nice meadow shortly after the turnoff. Other good butterflying spots are found farther along Rocky Creek Road. There is a quaking bog on the left that is a likely place to find *Boloria selene* when the sun shines.

Hanks Butte Road is the first right turn before Rocky Creek Road, and is another good area to hunt for butterflies. Look for *hesperidae* at a swale on the right about 1.5 miles from the junction. Pecks and tawny-edged skippers have been seen there, as well as the long dash later in the summer. Farther along the road you'll find meadows, patches of ceanothus, and powerline cuts. Any of these are good butterfly habitat, but watch for private property. Hanks Butte Road can also be approached farther north on Hwy 31 by turning right onto Greenhouse Road near the Ione Municipal Airport.

Bunchgrass Meadow. Bunchgrass Meadow can be accessed from Forest Service Roads 1935 and 1936 (these roads join to form a loop circling Molybdenite Mountain). To reach Road 1936, just south of Ione travel eastbound on Sullivan Lake Road. Turn right at the first road, which is Dry Canyon Road. In less than one-half mile, will be a sharp left turn to Road 136. The Road is unpaved, and is recommended for high-clearance vehicles after the first 5-6 miles.

To begin the loop from the other direction, turn east onto Sullivan Lake Road south of Ione, and continue past the Dry Canyon Road turnoff to Forest Service Road 1935. Turn right onto Road 1935 which follows Harvey Creek on the north side of Molybdenite Mountain. This road is also recommended for high-clearance vehicles after about five miles.

WBA Patches Are Available!

WBA is offering attractive logo patches for sale. They are fabric patches, 3 inches by 3-1/4 inches, with the WBA logo and name in green and white on a royal blue background. Many thanks to Mary Maxwell-Young for designing and acquiring the patches. You can order patches by sending $7.00 per patch to Washington Butterfly Association, P. O. Box 31317, Seattle,WA 98103. Make checks payable to Washington Butterfly Association.

Our Website

Have you ever forgotten where your last quarterly newsletter is? Wondering what the topic is for the next meeting? Lost your postcard for the annual picnic? Now you can find information online. Our website is: **http://www.naba.org/chapters/nabaws**

Species Profile

By Dave Nunnallee

Johnson's Hairstreak - *Mitoura johnsoni*

Our species profile for this issue is the Johnson's Hairstreak, *Mitoura johnsoni*.

Hairstreaks belong to the large worldwide family Lycaenidae, which also includes all blues, coppers and metalmarks. Hairstreaks are generally small butterflies, often with taillike extensions, or "hairstreaks", on their hindwings. In Washington State there are eighteen species of hairstreaks, three of them in the genus *Mitoura*. All *Mitoura* are generally rather scarce and highly sought by butterfly enthusiasts. All three species have a close association with evergreen trees, the larvae of one feeding on cedars or junipers (Cedar/Juniper Hairstreak), and the other two feeding on dwarf mistletoe growing on evergreens (Thicket and Johnson's Hairstreaks). All three Mitoura species have distinct white lines on their ventral hindwings, contrasting with a darker ground color of various brown or purplish tones.

This species is found only near stands of old growth Hemlock trees which are host to dwarf mistletoe. In these scarce areas of suitable habitat adult *johnsoni* sometimes venture to the ground to nectar where they may be found on any nectar-producing flowers which may be in season, or on damp ground or basking on rocks. Where they fly with their close relatives the Cedar Hairstreaks, *johnsoni* seem to nectar less and bask more than their cousins. When disturbed *johnsoni* tends to fly up into the trees.

Mitoura johnsoni is a strictly far-western North American butterfly, with a very spotty distribution from southern British Columbia to northern California. However due to habitat destruction it no longer occurs in many of the areas depicted on published range maps. In western Washington *Mitoura johnsoni* historically had a wider distribution, with records even from Seattle prior to the cutting of the last old growth forest. Logging practices have severely reduced its current range and while there are almost certainly a number of small remaining undiscovered populations, this species is seldom seen except in the area around Lake Cushman and other areas in and near the Olympic National Park. Rare individuals have been reported in recent years from Skamania County, also along the west slopes of the central Cascades. Intrepid butterfliers searching old growth stands in late May and early June may well extend our knowledge of this species' range.

The Johnson's Hairstreak life cycle is inextricably entwined with that of a species of dwarf mistletoe, *Arceuthobium tsugensis*, which grows as a parasite on Hemlock trees, and *johnsoni* apparently requires infested *old growth* Hemlock. As its host plant dies

back each year, Johnson's Hairstreak flies in mid spring, usually around Memorial Day at lower elevations, after the *Arceuthobium* has begun to sprout new growth. Adult butterflies usually come to the ground only to nectar, spending most of the time high in the canopy near their food plant. Adults are most easily seen on steep slopes, where the ground level is near the canopy-level of nearby trees. Eggs are laid singly on the dwarf mistletoe, often tucked deep into the many crevices of the plant. On hatching the tiny yellow-orange larvae blend extremely well with the similarly-colored host plant. The larvae cling tenaciously to the host plant; in nature a slip would probably be fatal.

On growing larger the larvae become beautifully patterned, albeit still in extremely well-camouflaged yellows and greens. The larvae eat the *Arceuthobium* buds using their extendable necks to hollow out the buds, producing a recognizable feeding pattern. On maturity the larvae move to an area of dense needles in or adjacent to the *Arceuthobium* where they pupate, still high in the trees, anchoring themselves only with a single thin silk girdle thread. There they diapause until the next spring when they will emerge and fly again. In Washington there may be a partial second brood, and further south the second brood is probably more pronounced.

The Johnson's Hairstreak, with its distinct jagged white ventral hindwing line contrasting with a dark brown ground color, can be confused only other species of *Mitoura*. Its western Washington range mostly overlaps only with that of *Mitoura grynea*, the Cedar (Juniper) Hairstreak, from which it is distinguished by Johnson's larger size, less jagged white line, and the absence of any purplish color on the ventral hindwing. In the very few areas where *johnsini* might overlap with the Thicket Hairstreak, such as Skamania County or eastern King County, *spinetorum* will be seen to have a more reddish chestnut-brown ventral hindwing compared to the subdued dark brown of *johnsoni*. Also *spinetorum* has dark submarginal spots around the entire periphery of

the ventral hindwing, while on *johnsoni* the spots are only on the rear half of the wing. Dorsally *johnsoni* is brown, *spinetorum* is blue.

Mitoura johnsoni is under consideration for listing under the state endangered species act.

WBA Mission Statement

The Washington Butterfly Association
is devoted to
scientific understanding and enjoyment
of butterflies and their ecology
through conservation and education.

Officers/Board Members

Richard Youel	President	(206) 282-3758	mmyarch@earthlink.net
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Jo Nunnallee	Hospitality	(425) 392-2565	davidn@nwlink.com
Carolyn Heberlein	Newsletter/Website	(206) 633-2313	diosa@nwlink.com

NonBoard Position: Bob Hardwick is WBA Research Coordinator, organizing WBA field projects. His phone number is (253) 858-6727.

Membership Application

Washington Butterfly Association

the Washington State chapter of
North American Butterfly Association (NABA)

Yes! I want to join WBA/NABA and receive *American Butterflies*, *Butterfly Garden News* and *WBA Newsletter*, as well as other member privileges.

Name: _____

Address: _____

City, State, Zip _____

Phone: _____Email Address:_____

Special Interest (circle): Listing, Gardening, Observation, Photography, Conservation, and Other_____

Dues enclosed (circle): Regular $30 ($60 outside U.S., Canada, Mexico)
Family $40 ($80 outside U.S. , Canada, Mexico)
Payment must be in U.S. dollars.

Mail application form to: NABA, 4 Delaware Rd., Morristown, NJ 07960

Further information: wabutterflyassoc@earthlink.net or call Idie Ulsh at (206) 364-4935.