



G'n^um*

The newsletter of the Washington Butterfly Association

P.O. Box 31317 Seattle WA 98103
www.naba.org/chapters/nabaws

*G'n^um is the official greeting of 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.

August 1

“Share the Wealth”

Last year's Share the Wealth was the best ever! Much learning and a lot of laughter! Bring your butterfly, moth, and dragonfly photos for show and/or identification and don't miss this one ... it's always informal, informative and fun! You don't need to contribute to the program to have fun and learn.

September 5

“Late Summer Butterflies of Western Washington.”

(Speaker to be announced)

Many species of butterflies don't even appear until July while some have two broods with the late brood appearing in late summer. This program will be a refresher on the identification tricks of these species and also talking about what happens to them during the winter.

October 3

“Lepidoptera and Bats...What is the Connection?” presented by *Barb Ogaard*, bat specialist and rehabilitator.

Once a year we have a program on predators of lepidoptera such as previous programs on Dragonflies and on Spiders. Barb will present a fascinating program on how bats catch moths and why they are so important in our ecosystem. She may bring live bats for an up-close and personal view.

Magnuson Park Butterfly Garden Groundbreaking

When: Saturday August 11 from 11am to 2pm

Where: Seattle's Magnuson Park

What: Come for a walking tour of the butterfly garden site, a short work party, and a picnic.

Directions to the site: Enter Magnuson Park on Sand Point Way at NE 65th Street. Drive until you get to the parking lot south of 65th near Lake Washington at Promontory Point. The garden site is up the hill above the demonstration gardens.

In order to spread the message of butterfly conservation to the greater public, the Washington Butterfly Association is taking up a butterfly gardening and restoration project at Magnuson Park in Seattle. With help from the Magnuson Environmental Stewardship Alliance (MESA), the Washington Butterfly Association will take on the restoration of Magnuson Park from fields of invasive plants to a thriving park full of wildlife. MESA already has many people helping for birds and native plants, and here we enter to help the butterflies.

Having encountered several folks who wished they'd known we exist, and especially since becoming your President, I've wondered how we might help more people enjoy butterflies. In Seattle, we have great programs at our monthly meetings, but for people in the rest of the State, attending is usually impractical. Our field trips have greater reach, but their leaders and participants are still mostly from the Puget Sound region. Only our annual conferences really reach out to the whole State. So, how might we draw and serve more people?

Here are some possibilities we might consider. Perhaps you envision others. Arrange some feature stories. Wenatchee World reporter Rick Steigmeyer's piece on our Annual Conference is a great example. Another might focus on our young people and their real passion for butterflies. One or more stories might focus on the real experts among us. (When describing WBA to others, I almost compulsively mention that our experts are not stuffy but are enormously enthusiastic and delighted to share their knowledge with the rest of us.)

Is there any point in having "chapters" or similar units that could have meetings, programs, field trips, etc. centered in other parts of the State? With or without such units, are there people in other corners of the State who could scout out and lead field trips that are perhaps a bit far away for most of us Puget Sounders but would serve local interests? Have some field trips specifically for beginners.

Thanks,

Al Wagar

Your new WBA President

September 9 - Bug Blast!

Sunday from 10am to 4:30pm
at the Burke Museum of Natural History and Culture
at the University of Washington.

Campus parking is free on Sundays.

Admission fees are:

\$8 general, \$6.50 seniors, \$5 students and youth (5 & up w/ID)

FREE to Burke Members, children 4 and under, and

UW staff/faculty/students

For more information, visit <http://www.washington.edu/burkemuseum/>

Bug Blast! is presented by Scarabs: The Bug Society

Friends of Rocky Prairie

I am working with the Friends of Rocky Prairie to help prevent development of the Rocky Prairie land that the Port of Tacoma purchased. Our next effort is to preserve it.

I am looking for other butterfly enthusiasts/scientists to provide information and perhaps assist in the formation of a Rocky Prairie Butterfly Preserve Proposal as an alternative to the industrial options.

I have a proposal writer and several biologists to assist in the research and fact finding for the proposal but was hoping to find some enthusiastic Butterfly folks.

This project is very exciting and already has much momentum behind it.

FORP

2007 General Membership Field Trips

Non-consumptive appreciation of butterflies is central to our purpose and basic to our approach. This is the guiding principal behind general membership field trips. Collecting of adult butterflies is not allowed on general membership field trips. Collecting of eggs and larval stages for rearing is accepted on the condition that individuals raised to adult stage are to be released at their original location.

Date	Destination	Trip Leader
July 21	Snohomish County – Monte Cristo Trail and Mountain Loop Highway	David Droppers
August 4	Kachess Ridge in Kittitas County	Dave Nunnallee
August 25	Snoqualmie Pass – Gold Creek	Dave Nunnallee

HOW TO SIGN UP:

Anyone can sign up for field trips at a WBA monthly meeting or by contacting WBA Vice-President:

WHERE & WHEN TO MEET:

Trips will depart from the Ravenna Park & Ride at 7:00 a.m. unless expressly stated otherwise. The park & ride is located under I-5 at Ravenna Blvd between NE 50th & NE 65th St. We meet in the north half of the park & ride.

On request will also stop at the Issaquah Park & Ride at 7:30 a.m. To reach the Issaquah Park & Ride, take I-90 east to Issaquah, exit to the south via Exit 16, and go 3 blocks. The Park & Ride is on the left.

If you live in another part of the state, contact the trip coordinator to make arrangements to meet the field trip group.

FIELD TRIP PROTOCOLS:

All field trips are conducted by carpool-without the volunteer participation of drivers the trips are not possible.

If you have a car that you are willing to drive, please have the gas tank full and ready to go. Passengers are expected to share gasoline expenses. It is suggested that each rider pay the driver ten cents per mile plus a share of any park entry fees, ferry fares, etc.

All WBA-sponsored field trips are fully insured through our parent organization, NABA.

Please tend to any personal matters, such as getting breakfast, coffee or gasoline, before the departure time so others are not delayed.

The trip leader will collect a voluntary donation of \$5 per person (children under 12 are free) for each field trip to help offset expenses of the organization.

SCHEDULING & WEATHER:

Weather is always a major factor for planning butterfly trips in Washington, particularly March through June. The key to dealing with weather is flexibility; our leaders reserve the right to make last-minute itinerary changes in order to provide you with the best possible butterfly experience.

On occasion it may be necessary to cancel or postpone an outing if the weather does not permit a viable alternative. The flow of the season is also important, and it may be necessary to adjust some trips to earlier or later dates to best match the seasonal weather patterns. WBA will make every effort to keep you informed of any changes.

CANCELLATIONS:

If you need to cancel, please remember to contact the trip coordinator as soon as you can so the group does not wait for you at the park & ride.

WBA Mission Statement

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

February 7, 2007, Mary Jo Anderson spoke to the WBA membership about the trials and tribulations of raising silverspot caterpillars. Here is an update on the project.

OREGON ZOO RELEASES RARE SILVERSPOT CATERPILLARS INTO WILD

Zoo and conservation partners hope to increase Oregon silverspot population

PORTLAND, Ore. -- For the first time, Oregon silverspot caterpillars raised in the Oregon Zoo's butterfly conservation lab have been successfully released into the wild, marking a significant milestone in the effort to save this endangered Northwest butterfly.

"In the past, we have released pupae at the various sites, but this is the first time we've released Oregon silverspot caterpillars," said Mary Jo Andersen, zoo butterfly keeper. "Within seconds of being placed on a western blue violet leaf, many caterpillars immediately started eating, despite the rain and wind!"

The release took place Thursday June 28 at a site south of Newport, Ore. The zoo hopes that releasing the large larvae instead of pupae will allow the butterflies to pupate and eclose on their own in a natural setting.

The zoo has been rearing endangered Oregon silverspot butterflies in its conservation lab for seven years in hopes of stabilizing the declining population. Each year, female silverspots are collected from Mount Hebo and induced to lay eggs at the zoo's butterfly-breeding facility. Last fall, the zoo got more than 8,000 eggs from 32 female silverspot butterflies. These eggs hatched into more than 6,000 tiny larvae/caterpillars, which were kept in refrigerators over the winter.

This spring, the caterpillars were removed from their winter hibernation/diapause containers and have been fed thousands of blue violet leaves propagated by zoo horticulturists. Each caterpillar needs up to 200 leaves to grow and pupate.

"The zoo has an army of summer interns and volunteers who are feeding and cleaning the thousands of caterpillars!" says Andersen. "It is a massive undertaking at a critical time for this species' survival."

The Oregon silverspot butterfly is listed as threatened under the U.S. Endangered Species Act. It was once found in coastal grasslands from northern California to southern Washington, but has since disappeared from all but a handful of sites along the Oregon coast due to habitat loss and the disappearance of its host plant, the western blue violet.

"This conservation effort is serving as a model for rebuilding an ecosystem," said Tony Vecchio, Oregon Zoo director. "Through the combined efforts of Seattle's Woodland Park Zoo, the Nature Conservancy, and the U.S. Fish and Wildlife Service, we hope to stabilize the butterfly population and bring it back from the brink of extinction."

During the preceding decade, monitoring at Cascade Head revealed a dramatic decline in the number of butterflies seen flying. In years prior to 1992, average numbers exceeded 1,000 adults, but in 1998, only 57 of the butterflies were found.

In 1999, in response to the dramatic decline in the butterfly population, the Oregon Zoo, Woodland Park Zoo, Nature Conservancy, Washington Department of Fish and Wildlife, U.S. Fish and Wildlife Service and others took action to save the threatened species and its habitat.

Currently, the Nature Conservancy, working collaboratively with U.S. Forest Service, is restoring the native butterfly's habitat through small, controlled burns. Scientists hope that by bringing back the western blue violet -- which silverspot caterpillars depend on for food -- the butterfly population can return to its historic numbers and natural habitat.

"Our cooperative conservation efforts are being seen more and more as part of the new zoo ethic," said Andersen. "It's becoming quite common for zoos to work outside their traditional captive programs to aid in the protection of species in their natural habitat."

The zoo is also involved with conservation projects involving Taylor's checkerspot butterflies and Mardon skipper butterflies.

According to Vecchio, butterfly populations throughout North America are in decline with 22 butterfly species listed as either endangered or threatened. To address this problem, the Oregon Zoo has supported the Association of Zoos and Aquariums' Butterfly Conservation Initiative, which includes nearly 50 national zoos and aquariums. The initiative is designed to bring together government and non-government agencies to aid in the recovery of imperiled North American butterflies.



photos by David Droppers

The 8th WBA Annual Conference was the best yet. We were at the Tierra Learning Center, a lovely 300-acre non-profit retreat in the Cascade foothills near Leavenworth. The weather was super and everyone seemed happy. The Tierra Center was wonderful, set in a woodsy area reminding many of us of camps attended in earlier years. The central lodge with its huge deck was a special hit.

Both evenings featured top speakers. On Friday, Dr. Don Rolfs, who has long been known as an authority on the butterflies of the Leavenworth area, talked about the best places to find them. The next day we all followed his routes to some of his favorite spots: through the Derby Canyon and along the Chumstick Ridge to the top. That mountaintop is surely one of the most dramatic places in our beautiful state.

On Saturday evening, keynote speaker Dr. Merrill Peterson from Western Washington University gave us a series of fascinating comments on the question “Why are caterpillars such picky eaters?” We also gave enthusiastic thanks to the WBA officers who had worked so hard and so well for WBA since last year’s conference, and elected a new slate under the leadership of President Al Wagar.

And butterflies? Yes! We saw lots of butterflies – 39 on just the first full day. Our total must have been around 50 for the weekend. The “best” butterfly we found? Dave Nunnallee said it was one found by a small group of us led by Dave on the Tierra Center’s own land, late Sunday morning: a Thicket Hairstreak. Modesty nearly prompts me to refrain from naming the member who netted this lovely butterfly but you, dear reader, deserve to know that it was I. (Reports that I nearly killed it in the process are greatly exaggerated.)

There was a new spirit at this conference. There were certainly a number of reasons for its energy – the superb weather, the charming Tierra Center, etc, but I thought it might have come from the sense that some new people, many of them younger, are beginning to be felt. For those of use who had been “present at the creation” this seems like a very healthy development. I heard our number one founder, Idie Ulsh, applauding it. There were more really young people, one baby and a number of “kids”. Hooray!

- Tom O'Connell



photos by Carolyn Heberlein

**Leavenworth Area – 2007 - Species List
Derby Canyon and Chumstick Mountain
June 30, 2007**

SPREADWING SKIPPERSPersius Duskywing- *Erynnis persius***GRASS SKIPPERS**Colorado Branded-skipper – *Hesperia colorado***PARNASSIANS**Mountain Parnassian – *Parnassius smintheus***SWALLOWTAILS**Anise Swallowtail - *Papilio zelicaon*Western Tiger Swallowtail - *Papilio rutulus*Two-tailed Swallowtail – *Papilio multicaudatus*Pale Swallowtail - *Papilio eurymedon***WHITES**Cabbage White – *Pieris rapae*Sara Orangetip - *Anthocharis sara*Becker's White - *Pontia beckerii*Western White - *Pontia occidentalis*Large Marble – *Euchloe ausonides***SULFURS**Western Sulfur - *Colias occidentalis***COPPERS**Purplish Copper - *Lycaena helloides*Lilac-bordered Copper – *Lycaena nivalis***HAIRSTREAKS**Western Green Hairstreak – *Callophrys affinis*Gray Hairstreak – *Strymon melinus***ELFINS**Brown Elfin – *Incisalia angustinus***BLUES**Western Tailed-Blue – *Cupido amyntula*Square-spotted Blue – *Euphilotes sp.*Dotted Blue – *Euphilotes columbiae*Arrowhead Blue – *Glaucopsyche paisus*Silvery Blue - *Glaucopsyche lygdamus*Greenish Blue - *Plebejus saepiolus*Boisduval's Blue - *Plebejus (Icaricia) icarioides***FRITILLARIES**Coronis Fritillary - *Speyeria coronis*Zerene Fritillary - *Speyeria zerene***TRUE BRUSH-FOOTS**Hoffmann's Checkerspot - *Chlosyne hoffmanni*Northern Crescent – *Phycoides cocyta*Field Crescent - *Phycoides pulchella*Anicia Checkerspot - *Euphydryas anicia*California Tortoiseshell - *Nymphalis californica*Mourning Cloak - *Nymphalis antiopa*Milbert's Tortoiseshell – *Nymphalis milberti*Satyr Comma – *Polygonia satyrus***ADMIRALS AND RELATIVES**Lorquin's Admiral - *Limenitis lorquini***SATYRS**Ochre Ringlet – *Coenonympha tullia*Small Wood-Nymph - *Cercyonis oetus*Common Alpine – *Erebia epipsodea***Additional Species July 1, 2007****Eagle Creek****HAIRSTREAKS**Thicket Hairstreak - *Mitoura spinetorum***BLUES**Anna's Blue - *Plebejus (Lycaeides) anna***FRITILLARIES**Callippe Fritillary - *Speyeria callippe***SATYRS**Great Arctic – *Oeneis nevadensis***Tierra Learning Center – Sunitsch Canyon****SATYRS**Common Wood Nymph - *Cercyonis pegala***TRUE BRUSH-FOOTS**Red Admiral - *Vanessa atalanta* (larva on nettles)**Tumwater Campground and Nearby Areas****GRASS SKIPPERS**Roadside Skipper – *Amblyscirtes vialis***PARNASSIANS**Clodius Parnassian – *Parnassius clodius***TRUE BRUSH-FOOTS**Green Comma - *Polygonia faunus***BLUES**Echo Blue – *Celestrina echo*

Total species count for 2007 WBA Conference: 49 species!!!



The “Columbia Blue” is a member of the family Lycaenidae, the large worldwide family of butterflies which includes all blues, coppers, hairstreaks and metalmarks. In Washington there are about 45 species of lycaenids, about 19 of which are blues. *Euphilotes columbiae* has no published English name; “Columbia Blue” is an interim common name. In Washington this species was long regarded as a subspecies of *Euphilotes enoptes* (Dotted Blue), but *E. columbiae* has now been elevated to the full species level. This species represents all *Euphilotes* from the “dotted blue group” in Washington except for one very localized population of *E. enoptes s.s.* recently discovered by Bob Pyle in western Yakima County. The name “*columbiae*” was proposed by Mattoni in 1954 but until now was considered conspecific with *E. enoptes*.

E. columbiae is widespread in Washington east of the Cascades and is one of our two most common *Euphilotes* species. The range of *E. columbiae* beyond Washington is still being determined, but at present is known to include all of the Columbia Basin in northern Oregon and eastern Washington, extending a small distance into westernmost central Idaho. *E. columbiae* is seldom found far from its larval foodplants, the buckwheats *Eriogonum compositum* (Northern Buckwheat) early in the flight period, then *E. elatum* (Tall Buckwheat) later in the season. The single-brooded adults have a long flight period from late April to mid August, thanks partially to this ability to exploit two buckwheat species with offset flowering.

E. columbiae adults fly and mate in mid and late spring, laying their eggs singly on or immediately beneath the flowers of the buckwheat host plants. The eggs hatch about six days after oviposition, and the tiny first instar larvae move into the complex buckwheat flowers. The larvae feed only on the flowers and fruits and apparently remain on the flowers during their entire development. When immature fruits (seeds) are available the larvae bore holes into them and hollow out the insides using their long

extendable necks; larvae feeding in this manner are not easily removed from the fruits. The larvae will continue to feed on the fruits after the flower petals have senesced, and by the time pupation approaches a significant percentage of the fruits may have been eaten. Coloration of the larvae appears to be closely linked to the color of the food plants; flowers with more pink coloration produce brightly colored larvae, while pale flowers produce pale larvae. The larvae do not construct nests at any stage, instead relying on camouflage for protection from predators. Development from egg to pupa is accomplished in about 5 to 6 weeks and overwintering occurs as a diapausing pupa, as in all *Euphilotes*. From our current knowledge it appears that no other *Euphilotes* feeds on either of the buckwheat species used by *E. columbiae*.

Adult *Euphilotes* are categorized into two groups, the *battoides* (square-spotted) blue group, and the *enoptes* (dotted) blue group, each including several western species. These two groups are reliably separated by differences in the male genitalia, those of the *enoptes* group having larger, more elongate valvae than those in the *battoides* group. Somewhat less reliable differences are found in the orange spot band along the margin of the ventral hindwing; in the *enoptes* group the orange spots are chevron-shaped and separated; in the *battoides* group they are fused together into a broad orange band. Additionally the ventral black spots in the *battoides* group tend to be more squared and blocky, while those in the *enoptes* group are more rounded or oval, however some individuals have intermediate spots. In a thorough analysis of the *Euphilotes* group Andrew Warren (2005) determined that in *E. columbiae*, as compared to *E. enoptes*, adults “average larger, males are more lustrous blue above, both sexes have more angular, less rounded wings and better developed, more prominent hindwing aurorae on females.” He also found that *E. enoptes* feeds on *Eriogonum nudum*, a different host plant. Warren regarded these differences as consistent, significant and worthy of full species status.

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Membership Application

<https://wabutterflyassoc.org/membership/>