



Washington Butterfly
Association

G'Num*

The newsletter of the Washington Butterfly Association

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

Thank you, Carolyn!



Carolyn with her husband,
Greg, in Egypt.

WBA is fortunate to have an outstanding newsletter - our informative, entertaining and educational, G'num. One reason it is so outstanding is that for the past 6 years each of those quarterly issues has been composed, printed and mailed by Carolyn Heberlein. She has assembled the various reports, stories, schedules and forms that inform us of field trips, programs, speakers, conferences, registrations, parties, species profiles and special events. Carolyn is a person who quietly, effectively and generously gets things done for WBA in many areas, not only producing the newsletter and being a member of the Board but handling publicity and our website.

She's done all this with enthusiasm, skill and good humor while working full time as a Senior Systems Analyst at Paccar Financial Services, birding, and gardening as well as traveling all over the globe. In the last 10 years she's traveled to the Middle East (Egypt, Jordan), Latin America (Mexico, Panama, Machu Pichu, Ecuador), Europe (Germany, Spain), Russia, and Japan.

Now she is taking a break from the board and newsletter but will still keep us in touch with the newspapers and maintain our website. As she hands off the baton, we all say thank you, Carolyn, most sincerely.

WBA Winter Party—January 16

The annual WBA Winter Party will be held on Saturday, January 16 at 6:00 pm. Our beloved Science Advisor, Jon Pelham, is again hosting our fun winter party at his home. Bring a main dish, salad, or dessert, your favorite beverage. Also bring a wrapped "white elephant" nature-related gift. (Note: Traditionally, a white elephant is something you no longer want or that you choose to re-gift.) The party is an excellent opportunity to better get to know fellow WBA members. Friends and spouses are welcome. Dress is casual.

WBA Meeting Programs

FEBRUARY 3—Butterflies, Bears, and 12-Foot Fennel: Exploring Sicily and the French Pyrenees—by Bill Yake

That triangular 'football' off Italy's toe? Sicily—an island of active volcanoes (think Etna & Stromboli), a deep history of invasive critters (humans included), and a surprising range of butterflies. In 2006 and 2009 Bill Yake and Jeannette Barreca explored the National Parks and waysides of Sicily while pursuing the history of Jeannette's family and their tasty holiday cookies. Also included—a side trip to the homeland of Cro-Magnon art—the French Dordogne and the Pyrenees Mountains—where other butterflies coexist with a remnant population of *Ursus arctos*, the smaller European version of the grizzly.

MARCH 3 — Identifying Hairstreaks of Washington—by Bob Hardwick

Bob Hardwick will review the hairstreak species of Washington butterflies. He will include photos and tips for beginners to advanced butterflyers on identification as well as the habitat in which they are found. Whether you are new to WBA or a long-time member, you will benefit from Bob's excellent teaching skills and infectious enthusiasm. He'll get you fired up for spring butterflying!

APRIL 7 — Hesperidae of Ecuador and Peru—by Richard Lindstrom and Shirley Sekarajasingham

Join Richard Lindstrom, a co-founder of WBA, and Shirley in the jungles of Ecuador and Peru where Richard has spent much of the past several years photographing and documenting the skippers occurring there. As Richard describes his extensive studies, be prepared to see superb photos of many of these beautiful and unique butterflies. Some of their photographs may well be the first of individual skipper species ever photographed in the wild.

First Field Trip of 2010—March 27

WBA's traditional first field trip of the butterfly season will take place on March 27, 2010. We'll expect to see green hairstreaks, desert marbles and more species, probably followed by a stop for ice cream (or coffee if it's too cold). If the weather stinks, the trip will be postponed until April 3. As usual, we'll carpool, departing Ravenna Park and Ride at 7:00 am, and departing Issaquah Park and Ride at 7:30.

It's not all about Butterflies

by Colin Doan



At the end of September when the leaves start to change to their fall colors it reminds me that the snow will soon be here, I actually would like it here by the 1st of September so I could go ski but that would cut into our butterfly trips. Sometimes we go into October on butterfly trips so I'm torn between the two my Dad says I can't have both. By the time February gets here I ask my dad to look up when the field trips start, March is the first trip, last week it looks like he says. One year it was so cold we did not start till the month of May. My dad tells me that year I was so upset missing all those trips I think that's when I found out my two favorite outdoor activities are butterfly trips and ski trips.

As I said before it's not all about the butterflies it's about the birds the cicadas the snakes the lizards the frogs and some stuff I don't even know about! Then there was the time we went to schnebily canyon, we saw about ten rattle snakes my friend Sarah was scared she adjusted about half way down. We also took some pictures of the snakes!

David Nunelle was our field trip leader. He told us about a petrified tree that was high up in the canyon we could see that someone had dragged it down when we saw it wasn't there, we also found small chunks of the tree on the way down. I also found a small dried up coyote body that had died over the winter and was almost freeze dried! It was in good shape Al Wagar said he would like to take it back to Seattle I asked why he told me that he had a friend at the Burk museum that takes in dead animals and samples their DNA and they can check how they died and what they eat in that habitat. Jo nunelle gave us a trash bag to put it in. Also it didn't smell one bit! Sarah and I caught some butterflies up on the top of the ridge. Sarah also caught her first Saras orange tip! We both caught a Varsity of marbles and whites. I also showed how to put the butterflies on her nose. All in All it was a good season, I can't wait to get into the field its so fun going out to do something once every couple weeks and I love spending time here and I love being part of WBA.

Can You Help Us Publish G'Num?

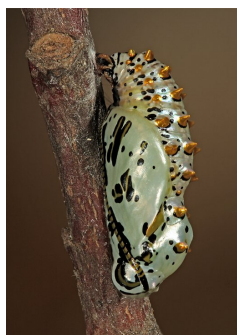
As you know from our lead story, Carolyn Heberlein is taking a break after editing our newsletter for many years. So, we're looking for someone to take on the job of *G'Num* editor. It's not a complicated job—*G'Num* is produced four times a year, it's done with MS Word, and all content is contributed by others so the editor isn't required to do any writing. The editor needn't live near Seattle. It's also possible that the effort could be divided among several people-- separate tasks could include collecting information and stories; formatting; printing; mailing. If you can take on one or more of these tasks, please contact any board member. Or, if you know someone who would be good at this but is a bit shy about it, let us know.

2010 WBA and LepSoc Joint Conferences at Leavenworth

This year our WBA conference (July 9 - 11) will be coordinated with the Pacific Slope Lepidopterist Society conference (July 8 - 11) in Leavenworth, with a joint dinner and speaker on Saturday night. The LepSoc conference theme is "The Young Ones," with presentations focusing both on immature stages of butterflies and moths, and on research by young and upcoming lepidopterists. Central to this are two symposia with invited speakers: 1) "The Young Ones: Research on Immatures" and 2) "The Young Ones: Youngling Research."

The LepSoc schedule will include both collecting and non-collecting field trips as well as blacklighting for moths. You need not belong to the Lepidopterist Society to register for its conference. Details and updates can be found on the web site

Variegated Fritillary – *Euptoieta claudia* (Cramer) by David Nunnallee



The fritillaries belong to the very large worldwide family Nymphalidae, the Brushfoots. Within Washington our fifteen species of fritillaries include the genera *Argynnis* (*Speyeria*), the greater fritillaries, and *Boloria*, the lesser fritillaries. But occasionally flying just beyond our borders and likely to be found here some day is a member of another genus, *Euptoieta claudia*, the Variegated Fritillary. This is a primarily tropical species intermediate between *Argynnis* and *Heliconius*, and is found as far south as Argentina.

In its breeding range the preferred habitat includes open sunny fields, prairies and roadsides, but *E. claudia* can be found everywhere except in deep forests. A variety of larval host plants are used including *Viola* (violet), *Linum* (flax), *Plantago* (plantain), *Desmodium* (beggar-ticks), *Portulaca* (purslane) and *Passiflora* (passion vine). Males patrol all day just above the ground for mates; a receptive female holds her wings mostly closed and abdomen

raised slightly. The male lands behind and flutters his wings, then mating occurs.

In the United States *E. claudia* is a permanent resident from southern Arizona east to North Carolina, flying all year with multiple generations. Highly migratory and opportunistic *E. claudia* ranges far to the north in summer, reaching southeastern BC and across Canada to the Atlantic. Unable to withstand freezing, northern populations die out each fall. This species has not been found in WA or OR but has been reported in BC very close to the northeast WA border, and there are records from the Idaho panhandle. During invasive years *E. claudia* reaches its northern limits in late summer, with records in BC from Jul 17-Sep 4.

Adults have no winter hibernation stage, passing the winter in their southern range as adults. During the summer there are at least three broods. Females lay eggs singly on stems and leaves of the host plant. Eggs hatch synchronously and young larvae feed on host leaves, grazing the mid-leaf surface half through in irregular patches and leaving translucent windows. Later instars consume whole leaves, producing large jagged holes from the middle or edges. Most feeding is nocturnal, the larvae often basking in the sun during the day. Development is rapid, as little as 19 days from egg hatch to pupation, and adults eclose 9 days later. There are 5 instars and no nests are constructed. Mature larvae make little attempt at concealment and may be aposematic. Early instars derive protection from chemical droplets on their setae (hairs), as well as concealment and nocturnal feeding, and later instars possess spines, intimidating anterior horns and a black ventral gland under the head which may emit defensive chemicals.

Dorsally the adults of *E. claudia* are burnt orange in color and are about the same size and fairly similar to our greater fritillaries, except their forewings are somewhat narrower. Ventrally they are very different however, entirely

lacking silvered spots, nor do they have the complex white markings which typify our lesser fritillaries. Instead the ventral wings are mottled cream and brown, and have several small dark "eye spots" near the periphery.



Bruce Spanwing Moth by David Droppers

It's December. It's dreary, cold, and wet. Nary has a butterfly been seen since early November, a foolhardy Cabbage White enjoying the last of our warmer fall days. It is at this time of year that many of us "butterfliers" go into winter dormancy ourselves, or we make up for the lack of flying, scaled insects with flying, feathered birds. I am now counting the days until the first Echo Blue breaks the news of spring, or waiting for a lucky day that a Mourning Cloak might take a saunter on a warm winter day. But now comes a warm spell after a series of cold nights that have brought frosts, and I am expecting the arrival of a dear friend.

There is one Lep that I can count on during this season; one that likes to meet at porches on mild winter nights. It eases my anxiety for the arrival of spring. *Operophtera bruceata*, The Bruce Spanworm Moth, is one of very few moths that fly specifically from late fall to winter. I have seen Ol' Bruce, as I call it, during the most miserable of conditions. It has endured through snow, wind and ice. I imagine that Bruce must have been an extremely hardy fellow, to have such a creature of resilience named after him.

In fact, if you see this moth at your doorstep, you are seeing an individual whose name may very well be Bruce; for only the males have wings. The females are small, brown cylinders without wings, emitting a blend of pheromones to attract the males. Once mated, they deposit their eggs into fissures in trees and shrubs, where the eggs will overwinter. The females are not particularly choosy about which tree or shrub, for when you are grounded, it is good to be flexible, as choices are few. The first instar larvae are also capable of throwing threads of silk into the wind and being carried to new hosts. These include maples, willow, aspen, oak and several others.

The natural history of this moth may be more interesting than its looks, depending on your point of view. It is mostly a drab brown moth, with small checks and dashes of black. There are also some subtle bands of cream mixed in. However, this species also has a darker form, one with almost entirely sienna brown forewings, with the tiniest of white flecks and a leading edge of golden and muddy brown. The hindwings are a pale, nearly translucent white. The males' wingspan averages just under 3 cm. It is a subtle beauty, and one made much more so after many Lep-less weeks. So look outside your porch on a mild winter night, and you may just find Ol' Bruce sitting on your doorstep, taking refuge from harsh winter weather. So thank this winter flier for visiting, and wish him luck in his search for his wingless mate.



WBA Outreach

With a view toward telling more people about butterflies and butterfly (as well as letting them know we exist and that maybe they should join us) WBA now has an outreach package. It's designed so one of us—maybe you—can give a butterfly talk without a lot of added preparation. It has 90+ slides and an accompanying script. The title is "The Lives and Times of Butterflies" and it takes 25 to 30 minutes to give. After noting the basic butterfly life cycle it focuses on the various strategies these warm-weather creatures use for getting through the winter as well as what they eat, how long they live, how they differ from moths, threats, and what we can do to protect them. Extra slides are included, and more can be added if someone wants to personalize the presentation.

Many groups are looking for "a program," with possible audiences for WBA's program including service clubs, church groups, scouts and other youth groups, environmental interest groups, and park visitor centers. For example, Seattle's Discovery Park Visitor Center has scheduled WBA's program for the evening of January 21 (with Al Wagar) and the Bellevue Nature House has scheduled it for May 8 (with Paul Doan). If you are interested in using this as a basis for butterfly talks, contact

DVDs of WBA Programs

The following WBA programs from our member meetings are available, for loan, on DVDs:

- Rearing Lep Kids (on working with youngsters concerning butterflies) Martha Robinson & INSTARS, October 1, 2009
- Talkin' the Blues: What are all these blue butterflies on the mud? (Identification & Clarification of the Blue Butterflies of Washington) Jonathan P. Pelham, February 4, 2009
- Butterflies of the Yakima Region (on the butterflies likely to be seen on field trips at our Yakima conference) David James, July 17, 2009 (at WBA Annual Conference in Yakima)
- Butterfly Conservation: Saving the Rainbow Resource (Keynote to WBA Annual Conference in Yakima) Robert Michael Pyle, July 19, 2009
- Using Conservation Detection Dogs for Surveys of a Threatened Plant: Kincaid's Lupine David G. Vesely, September 2, 2009
- The Naturalist's Field Journal: A traditional tool for learning (includes not only Libby's work but historic journals, as from surgeon-naturalists accompanying sea captains, etc.) Libby Mills, October 7, 2009
- Enjoying and Protecting Butterflies in Washington Ann Potter. November 4, 2009
- Basic Butterfly Biology Jonathan Pelham, December 2, 2009

Board Members

Al Wagar	President
Jennifer Kauffman	Vice President
Robin Lewis	Treasurer
Donna Schaeffer	Secretary
Maureen Traxler	Past-President
Jon Pelham	Science Advisor
Richard Youel	At-Large
David Droppers	At-Large
Paul Doan	At-Large
Carolyn Heberlein	Publicity/Website

Committees

Marty Hanson	Membership
Joyce Bergen	Annual Conference
David & Jo Nunnallee	Field Trips
Idie Ulsh	Programs

Membership Application

Washington Butterfly Association

The Washington State Chapter of the
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.