



Washington Butterfly
Association

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*.

Upcoming Programs

WBA meetings are held the first Wednesday of each month 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.

September 7 – Sarah Moore

Managing a Tropical Butterfly House

Sarah Moore, Life Sciences Manager of the Pacific Science Center, will share the inside workings of the Seattle Science Center Butterfly House. How are the butterflies chosen and procured and how long do they live? Sarah will share photos of the many beautiful tropical butterflies you will see there. Join us for a unique and interesting program.

October 5 – David Droppers

Sphinx Moths of Washington

There are 19 species of sphinx moths in Washington. These are always attractive as many visit the same flowers at dusk as the hummingbirds and butterflies visit during the day... thus often being called "hummingbird moths." Many occur in all areas of Washington and this is your chance to learn them. David's programs are always fun and educational.

Upcoming Field Trip

Don't miss the last field trip of the season! It is scheduled for September 10. Destinations include the Ellensburg overlook, for metalmarks, and Snoqualmie Pass. Please see page 7 for details.



Butterfly enthusiasts enjoying a day in the field during the Hairstreak Blitz on July 9 • Photos by Robin Lewis

2011 Annual Conference

The WBA annual conference was held July 15-17 in Newport, WA. Once again, our conference was a resounding success, with great field trips, presentations, food, and camaraderie. And, much as we'd hoped, quite a few folks from eastern Washington participated. Saturday dawned overcast and threatening, with a flash of lightning and thunder clap as we gathered in the parking lot. It seemed cloudy in all directions, but we went to North Baldy anyhow, with the weather becoming marvelous and the trip providing many interesting species. Sunday's trip to Hog Lake again provided great weather and some additional species. With approximately 50 people participating, we saw over 50 species during the two days, including two likely new records for Spokane County: Ruddy Copper (*Lycaena rubida*) and Great Basin Wood Nymph (*Cercyonis sthenele*).

On Friday evening, John Baumann reviewed and showed photos of the butterfly species of the area and those we might see on field trips. Jon Shepard, Lepidopterist from Nelson, BC was keynote speaker on Saturday evening and spoke on **"Inland Empire - Lepidoptera and Lepidopterists"** with a historic view of butterfly research and distributions in the northeastern Washington, northwestern Idaho and Canadian areas. Jon is co-author of the acclaimed *Butterflies of British Columbia*, and he is currently contracted with the Colville National Forest to survey Lepidoptera of the area.

Kudos – As usual the conference's success resulted from the Herculean efforts of a few people. John Baumann, Brenda McCracken, Carol Mack, and John Stuart not only scouted field trip routes several times, but Carol Mack and John Stuart even did some road work to make the route to North Baldy reasonably (repeat "reasonably") passable for vehicles. Months ahead, Joyce Bergen had once again scouted out possible venues, lodging, and caterers and, thanks to her homework, we chose Newport.

A list of species seen and videos from the conference are available on the WBA website in the Annual Conference page.



Photo by Kim Kendall



Photo by Maureen Traxler



Photo by Kim Kendall

2011 Annual Conference



John Baumann ♦ Photo by Kim Kendall

A Note from John Baumann

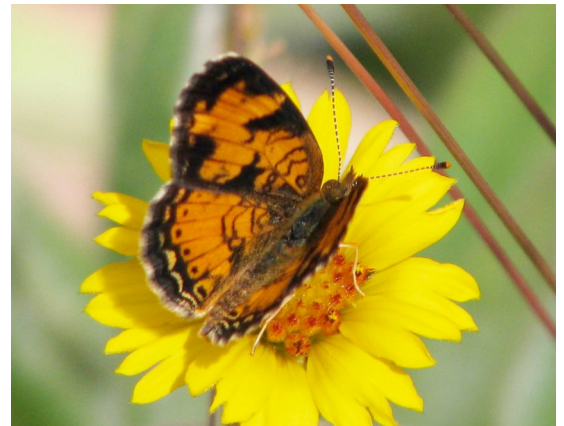
Thanks to the many WBA members who joined us for Wings Over Newport! To those who crossed the state to find us, thank you for sharing your expertise, enthusiasm and experience with butterfly watching! To those who joined us from Spokane and Pend Oreille Counties for your first WBA trip, thanks for bringing your questions and your own local observations: we are getting to know our own butterfly biodiversity better all the time. Special thanks to the conference organizers and planners, and to Carol Mack and John Stuart for their diligent field preparations. I was really excited to see that, even during a summer when the weather has been very challenging, we could have such a successful conference!



Ruddy Copper
Photo by Bob Hardwick



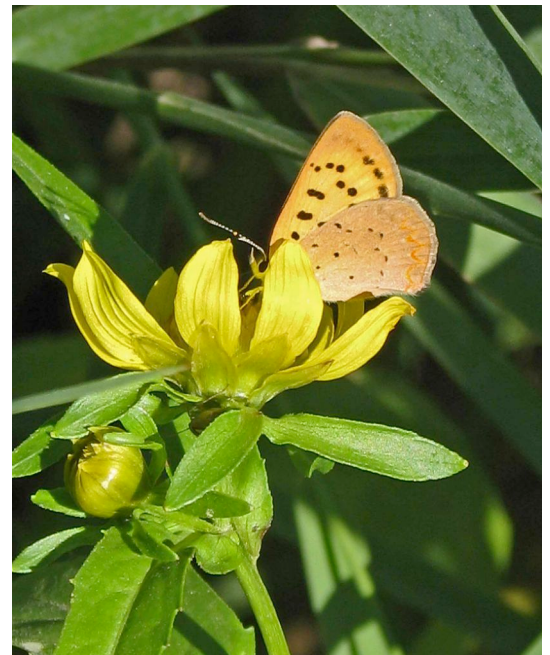
Mountain Parnassian Larva
Found and photographed by
Joe & Lila Bartoszek



Northern Crescent
Photo by John Baumann



Hog Lake ♦ Photo by Richard Youel



Purplish Copper
Photo by John Baumann

Watching Washington Butterflies with Bob Pyle

Number Six: “Astarte Arising,” an excerpt from *Mariposa Road*, with thanks to Houghton Mifflin Harcourt.

Nothing bloomed at Early Winters campground, where I turned to follow the Methow River up toward the crest. I stopped at Mazama store for a slab of sharp cheddar and a copy of *The Methow Naturalist*. Then up past the steep rock Goat Wall, like a mini-El Capitan. The farther up the steep dirt Methow, the narrower the road between cliff and precipice, and the moister and more flowery the roadsides. Between Harts Pass and Slate Peak, blues, checkers, frits, and parnos grew so thick as to practically halt my progress.

I arrived at the top of Slate Peak Road before three, in patchy clouds. Thrust up between North Cascades National Park and the Pasayten Wilderness Area, Slate Peak is to the North Cascades as Hurricane Ridge is to the Olympics: the easiest place to get into the high country. But Slate, in national forest, unlike Hurricane, is conducive to nets. This circumstance brought many entomologists over the years and led to some notable discoveries. The mountain became known as the most reliable and accessible place to find several butterflies rare in Washington. On this visit, I wasn’t going to hike to the top to look for lustrous coppers, as I’d seen them in both California and Colorado. My objective was the fabled Astarte fritillary, biggest of the *Bolorias*, represented in the Lower 48 only in the Montana Rockies and the North Cascades. One of the biennial species, Astarte flies here only in even years. In 2006, on my fifty-ninth birthday, Thea and I had seen a few fly by us here; but I’d never observed Astarte well up close.

As I began down the West Fork Pasayten River trailhead, the clouds closed in, the day cooled, and I feared for my prospects. Then I descried a person, prone, a couple of switchbacks down. I thought he might have fallen. But when I made out that he was alive, examining plants, and had a net, I knew in a flash that he must be St. Dave—Nunnallee, that is; unless he was Dana Visali, editor of *The Methow Naturalist*. He didn’t notice me till I’d tiptoed down the steep, rocky switchbacks and was upon him. With startling originality, I said, “Dr. Nunnallee, I presume.”

Talk about a happy “hail fellow, well met!” Up here on the remote rockslide yet. A retired state

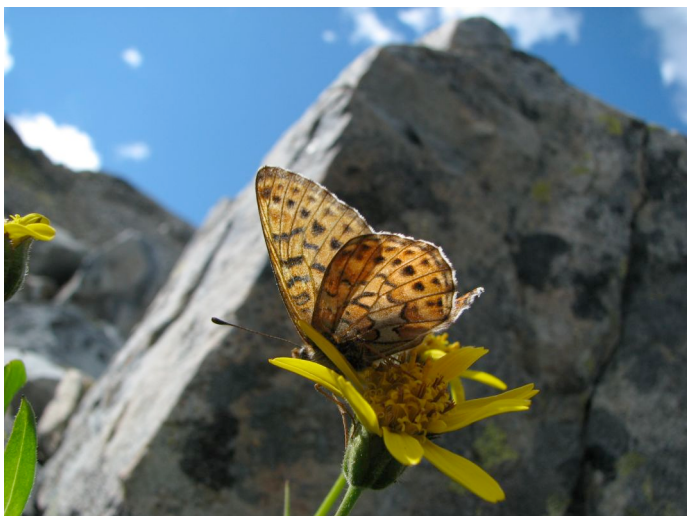


Dave Nunnallee
Photo by Robin Lewis

ecologist, Dave became enamored of the immature stages of our butterflies and had been rearing them with zeal and photographing every stage. A state entomologist named David James, who works on biocontrol in vineyards, shared a passion for this work. The two Daves were close to completing a photographic record of every Washington species’ development, from egg to adult, for what will be a stunning book. Already today, Dave had found three arctic blue eggs on spotted saxifrage. That’s the same plant Astarte uses, so we both trained our attention on the rockslide, in hopes of seeing one.

When the sun came back, we began to see Astarte coursing down the rocks, big, bright, and like nothing else. I would have been content with that, But Dave said, “Look!” and there was one alighted thirty feet away on a yellow daisy. I got great bino looks, first of the dorsum, with its unusual, salmony orange; and then the ventrum, both in direct light and as backlit stained glass, with its utterly distinctive mosaic of cream and rust. Astarte arose, then flew nearer, alighting in a classic position on the yellow

flower smack between two rocks, eight inches apart. It was very beautiful, and a very difficult net shot. But with Dave's consent, Marsha made the attempt and *got* it! So Dave and I were able to examine Astarte in hand, a perfect big female. Dave took some excellent pictures, both before and after we set her loose. In one of these, she perches with a rock



Boloria astarte
Photo by Dave Nunnallee

for a backdrop that looks in the image just like a major mountain rising behind her.

So then I needed to see *Erebia vidleri*, having bombed out on it in the Olympics. This was a scary situation: since the day and the flight season were both almost over, there would be little more opportunity, and I could not imagine our special Washington alpine absent from the list of the year's encounters. Dave thought the best chance for it was

down in the meadows toward Harts Pass, in the salad bowl of a valley above the horse lot. I remembered that green glacial cirque as a special piece of paradise. The two of us dropped down the loopy road to tramp those meadows for a late-day hour.

The wildflowers were superb. Little flew so late, but we were having a fine time talking butterflies and perambulating one of the most scenic alpine settings in the world, or anywhere else. Then I kicked up a Vidler's and cried, "There's one!" Dave spotted another, and there might have been a third. Mine settled, and I binoed it beside an *Elephantella*: round brown wings, yellow-orange eye-spotted patches, frosty band and white dash, huddled right up to a pink baby mammoth. It brought back an August day in 1970, up on Mt. Baker, when I finally got my photograph of a Vidler's alpine for *Watching Washington Butterflies*—also at the very last chance. So, once again, the neutron-butterfly-bombed Olympics notwithstanding, I didn't miss out on what Pyle (in *The Butterflies of Cascadia*) called "the most striking of American alpires."

As we walked down at almost 6:00 P.M., the sun again emerged, and butterflies erupted from the floral array—tiny Mormon fritillaries, both silvered and unsilvered, plus Anna's blues, a single arctic fritillary, and finally a bright little mariposa copper on wet sand by the brook at meadow's bottom. Dave said, "Where are you staying tonight? I've got a room with two beds at the Methow Country Inn." *That's* where I was staying, as it turned out. Dave also treated me kindly to a fine dinner and breakfast, in support of the project. I sang for my supper with the story of (and a peek at) the Ballard Dumpster butterfly fauna.



Bob Pyle
Photo by Robin Lewis

Species Profile: Sagebrush Checkerspot by Dave Nunnallee



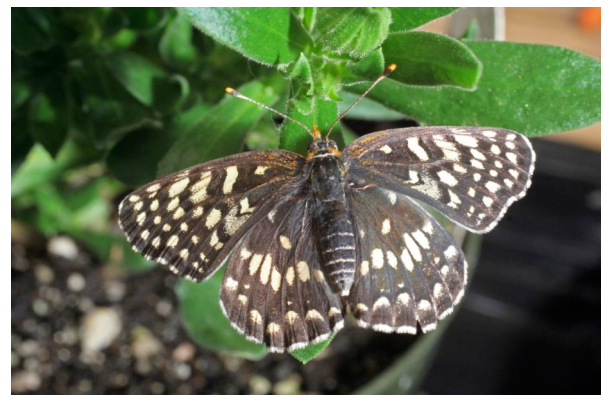
Our species profile for this issue is the Sagebrush Checkerspot, *Chlosyne acastus*.

In Washington State we have ten species of butterflies which are classified as checkerspots; a common character is the cancellate or squarish pattern of intersecting lines on the ventral hindwings. Our checkerspots are placed in three separate genera, *Euphydryas*, *Phyciodes* and *Chlosyne*. In our area the genus *Chlosyne* includes three species, while *Phyciodes* and *Euphydryas* have four and three species respectively. *Phyciodes* spp. have a distinct light crescent mark near the outer edge of the ventral hindwing (lacking in *Chlosyne*), and in *Euphydryas* the leading edge of the forewing is straight (strongly curved near the body in *Chlosyne*).

The Sagebrush Checkerspot is an arid lowland species of shrub-steppe habitats, ranging from southern and eastern Canada to Montana and south to New Mexico and California. In eastern Washington the flight period is early April to early July and is strongly keyed to the growth of the host plants. At Red Mountain in Benton County, WA, where spring typically arrives quite early, adults fly from early May to early June. However at Schnebley Coulee in Kittitas County, where spring arrives considerably later, adults fly earlier, about April 20 to May 10. Why these apparently reversed flight periods? This appears to be because different host plants are used at the two localities, the later-growing *Chrysothamnus viscidiflorus* (Green Rabbitbrush) at Red Mtn, but the earlier-growing *Erigeron linearis* (Linear-leaved Daisy) at Schnebley Coulee. The butterflies have significantly adapted their flight periods to coordinate with their host plants. While these two host plants are used by *C. acastus*, our other two *Chlosyne* species utilize different plants, mostly various tall aster species.

Chlosyne acastus flies in a single spring brood; males eclose about a week before females and are often worn by the time they mate with the fresher females. About 10 days after mating eggs are laid in large masses on the host plant, often 100-150 eggs, on the undersides of leaves or on stems. Eggs hatch after 6 days; the young larvae feed on host leaves and are highly gregarious, using delicate communal silk nests. These nests are abandoned by L3 when the larvae revert to spines and perhaps chemicals for defense. Larvae usually overwinter as L3, however they are flexible and opportunistic and at least in captivity with prime food available some have been found to attain L5 before diapause. Post diapause (spring) larvae are solitary, often feeding diurnally and resting or sunning openly on the host plants or adjacent rocks. Adults eclose about 18 days after pupation.

In cloudy conditions or at dusk both sexes often roost in small communal groups on shrubs, especially in canyon bottoms. Males establish territories along paths or on sage slopes, challenging interlopers and pursuing females. Adults show subtle wing pattern differences from the other *Chlosyne* species (Hoffmann's and Northern Checkerspots), but adult *C. acastus* are most reliably identified by their sexual dimorphism, males being orange and females black. *Chlosyne palla* (Northern Checkerspot) is the most similar, and black females occasionally occur in this species, but its range rarely overlaps with the shrub-steppe *C. acastus*, *C. palla* being a woodland-forest species.



2011 Field Trip Schedule

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

Date	Destination/Description	Difficulty	Trip Leader/Contact
May 21	Elk Heights and vicinity	2	Dave Nunnallee
June 4	Reecer Creek - Joint trip with Scarabs and Washington Native Plant Society (WNPS); please see description below	1	Louise Kulzer
June 11	Camas Meadows – Limited to 10 participants	2	David Droppers
June 18	Upper Manastash Ridge	2-3	Dave Nunnallee
June 26	4 th of July Count - Chumstick Mountain	2	Al Wagar
July 9	Hairstreak Blitz – Several locations in Kittitas County	2	Dave Nunnallee
July 15-17	Annual Conference, Newport	-	-
July 19	Hurricane Ridge – Joint trip with Olympic Peninsula Audubon Society	2	Idie Ulsh
Aug 13	Skyline Divide Trail	4	David Droppers
Sep 10	Ellensburg Overlook & Snoqualmie Pass	2	Al Wagar

HOW TO SIGN UP: Anyone can sign up at a WBA monthly meeting or by contacting the trip leader. (See Board and Committee list in this issue for contact information)

DIFFICULTY RATINGS:

- 1 Easy, mostly by car, minor walking along roads
- 2 Fairly limited walking, some slopes involved.
- 3 Moderate, up to 1.5 miles walking with moderate slopes
- 4 Difficult, hiking on trails or terrain are steep in places.
- 5 Very difficult, extended hiking on trails or steep terrain.

WHERE & WHEN TO MEET:

Trips will depart from the north half of 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.

On request we also stop at the Issaquah Park & Ride at 7:30 a.m. To reach the Issaquah Park & Ride: going eastbound on I-90 take Exit 15 (1st Issaquah exit). At exit stoplight turn right (south) and drive 0.45 mile to Newport Way intersection (traffic light). Turn left (east) on Newport Way and drive 0.1 mile to another light, and turn right (south) into the Park & Ride.

If you live in another part of the state, contact the trip leader to arrange where to meet the field trip group.

Tend to any personal matters such as getting breakfast, coffee or lunch food before departure time so others are not delayed.

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.

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

COSTS: Passengers are expected to share gasoline expenses. Typically this is \$8-10 each. Each rider should also pay a share of any park entry fees, ferry fares, etc.

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. For flexibility; leaders must have the right to make last-minute itinerary changes to provide you with the best possible butterfly experience.

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

CANCELLATIONS:

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

Board Members

Richard Youel	President
David Droppers	Vice President
Donna Schaeffer	Secretary
Al Wagar	Treasurer
Jon Pelham	Science Advisor
Kim Kendall	At-Large
Louise Kulzer	At-Large
Reg Reisenbichler	At-Large

Committees

Marty Hanson	Membership
Joyce Bergen	Annual Conference
David & Jo Nunnallee	Field Trips
Idie Ulsh	Programs
Carolyn Heberlein	Publicity/Website
Robin Lewis	Newsletter

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.

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

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