



*G'nium**

The newsletter of the Washington Butterfly Association

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

*G'nium 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 / Events

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.

October 7 - "The Naturalist's Field Journal: a traditional tool for learning" by Libby Mills

As early as paper and drawing tools were developed, humans have used the two to record our observations of nature. From the 18th to early 20th century, naturalists accompanying world explorations wrote about and illustrated their finds in journals that are primary resources to this day of our understanding of that world.

Today there is value in taking the time to observe, write notes and illustrate them as a way to slow down and learn about the natural world. Libby will discuss using drawing as a tool to observe and understand anatomy of animals and flowers. Understanding structures and anatomy informs drawings, understanding and practicing the principals of drawing help us to see the structures and remember what we have seen and learned.

Libby will share some of her journals and drawings, her field experiences and books on the topic of nature journaling, maybe even a drawing lesson.

November 4 – “Enjoying and Protecting Butterflies in Washington” by Ann Potter

Ann will present a stunning assortment of Washington butterfly photographs and update us on the status/research on three species of great concern including the Island Marble in the San Juan Islands. As a wildlife biologist for the WA Department of Fish and Wildlife, Ann is responsible for coordinating butterfly state records as well as butterfly research. Prepare for a relaxing and informative program. Bring friends and family.

December 2 – To be announced. Please watch the web page.

Member Noticeline

Member Noticeline: This is an "opt in" service for WBA members in which announcements, butterfly related articles, and other WBA information will be sent to you via e-mail. We are very careful to not overuse this method but some very interesting and timely information has been sent.

The New World greater fritillaries have long been included in the genus *Speyeria*, however because of close similarities to European relatives they have recently been moved to the genus *Argynnis*, with *Speyeria* being reduced to sub-genus level. The greater fritillaries belong to the very large worldwide family Nymphalidae, the Brushfoots. In Washington we have nine species of greater fritillaries, all of which belong to the genus *Argynnis*. Most *Argynnis* have a similar appearance dorsally, showy tawny-orange to carrot-orange with a complex pattern of bold black lines and dashes. The greater fritillaries are generally large, and have oval spots, often silvered, on the ventral hindwing. These butterflies are fast, powerful flyers, but often pause at flowers to nectar. Thistle flowers are a favorite nectar source for *A. cybele*.

Our largest Cascadian fritillary, *Argynnis cybele* is found in many but not all mountainous and hilly areas, but is absent from the driest regions and W of the Cascades in BC. Beyond Cascadia the range includes most of southern Canada and northern USA. Preferring moist woodlands, meadows and riparian areas *A. cybele* occurs from sea level to 6000 ft, flying here from early June to early September. Larval hosts are violets including *Viola glabella* (Stream Violet), *V. adunca* (Blue Violet), *V. nuttallii* (Nuttall's Violet) and *V. sempervirens* (Evergreen Violet). The female lays eggs singly and haphazardly near senesced *Viola* host plants.

Eggs hatch in 10-12 days, after which the larvae congregate under cover and diapause through the winter as unfed first instars. The following spring the larvae grow to a large size of nearly 2 inches, feeding nocturnally and seeking cover during the day under

leaves, rocks or debris. Violet leaves are eaten from the edges inward, leaving large scooped-out holes. The larvae make no nests at any stage. Larvae L2 and older possess ventral glands which evert if the larva is threatened, emitting a musky odor. The handsome larvae are very dark, nearly all black, and have multiple rows of branched orange and black spines and the hanging pupa is dark brown with orange spines. Development from L1 to pupa takes an average of 44 days, females about a week longer than males, and adults eclose when the pupa is about 13 days old. The survival strategy is concealment (nocturnal feeding), physical protection with spines, possible chemical protection and camouflage. There are six larval instars and *A. cybele* is single-brooded throughout its range. The larvae of this species are most similar to those of other *Argynnis*, especially *A. egleis*, *A. hydaspe* and *A. hesperis*, all of which are also dark. *Argynnis cybele* has oranger spines than these three species, and only in *A. cybele* is the dorsal stripe completely lacking and orange patches on the larval head so strongly developed.

The Great Spangled Fritillary is the most easily identified of our greater fritillaries, this being our only *Argynnis* in which the male and female are clearly dimorphic (different). Dorsally the female is black (eastern WA) or dark chestnut (west), while the male is bright orange. Both dorsally and ventrally the inner 2/3 of the hindwing is dark reddish brown to black while the outer third is a broad band of contrasting pale yellowish (F) or orange (M). The ventral hindwing has widely spaced silvered spots which are dramatically smaller than in our other *Argynnis* species.



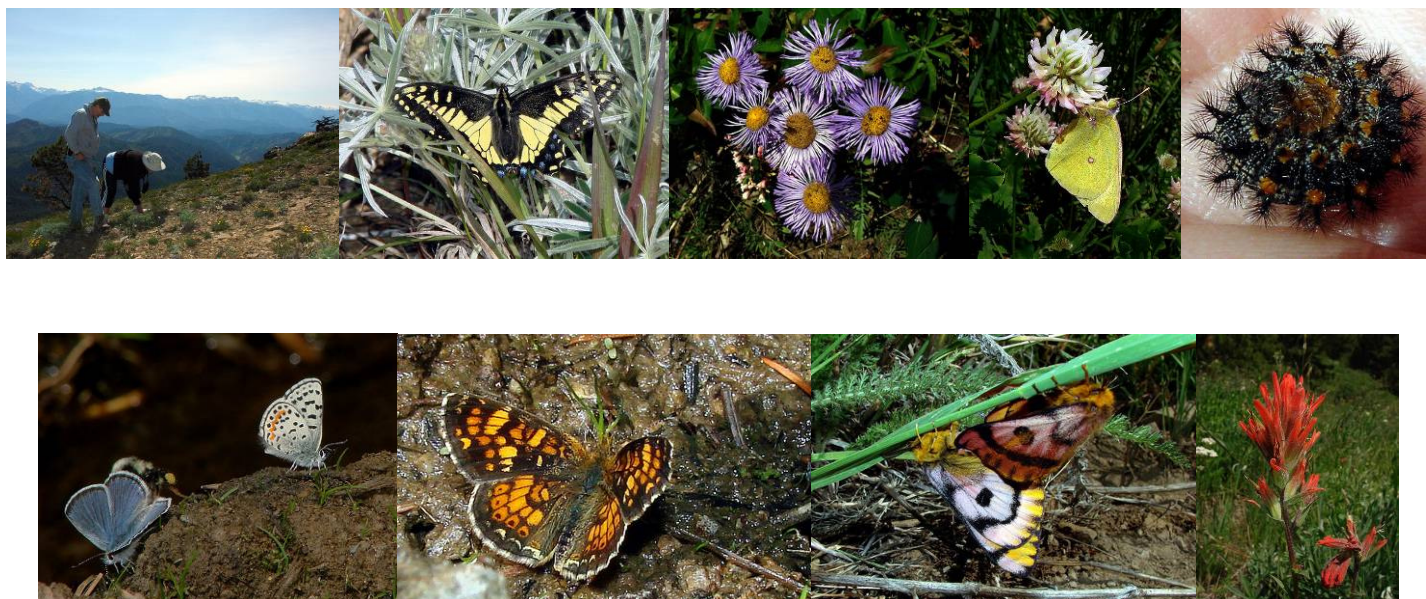
WBA Mission Statement

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

4JBC at Chumstick Mountain

Shirley Sekarajasinham

June 28, 2009: Chumstick Mountain is located in Eastern Washington in the area around the town of Wenatchee. WBA members conducted the annual Fourth of July Butterfly Count. Along the Derby Canyon Road on the way up to the top 5810 feet, many other wonders of nature, like other insects and wildflowers, were observed. A wonderful time was had by all on a gloriously lovely Pacific Northwest summer day. See more of Shirley's photos at <http://www.flickr.com/photos/grandma-shirley/sets/72157621133503162/>



Carkeek Campfire Day Camp – August 6



Al Wagar met with three small groups of Campfire youngsters today to talk about butterflies (photos attached). The kids were enthusiastic and responsive; with last group having the most fun because it was time to release the butterflies, and each had one on a finger for a few minutes.

He had caught a cabbage white & some skippers the last couple of days and had them in a cage. By third session, sun had come out and they netted a few more skippers at the park.



Moths and More!



WBA member John Davis lights the way to learning.

Imagine finding over 800 species of moths within 30 miles of your own home. WBA member John Davis has done just that from his home in Stevenson (Skamania County), WA.

John is a retired biologist, who has spent the better part of the last 30 years exploring the flora and fauna of the Columbia River Gorge area of Washington and Oregon. His wife Mary, who still teaches high school, often accompanies him. Both grew up in Texas, but have lived mainly in Washington since 1971. John loves to photograph his discoveries and to try and interest others in the many kinds of common and not so common flora, fauna, and scenic things he finds.

So why moths? After retirement, he started by photographing butterflies in his backyard. John has always loved lichens, fungi and other creatures from the forest. Perhaps it was the moth that looked like lichen that sparked his interest. After a presentation on moths by WBA member Tom Bouchet, John decided he had to learn more about the world of moths and photograph as many as he could find.

In the beginning, John had no idea that there are over 12,000 species of moths in North America (compared to an estimated 800 species of butterflies). Since he retired in 2004, he has photographed approximately 800 species of moths in his area of Washington. He attracts moths to a porch light or in the field with a light powered by a small generator on preferably warm, cloudy or moonless nights with little wind. (His lights can't outshine the moon). He spends the nights photographing the moths and days identifying his finds (sometimes very difficult with only a

photo). There are also quite a few day-flying moths, which are often very wary and hard to photograph.

He notes that different species of moths fly during all seasons of the year (a few even during winter on milder nights), and like butterflies, most moths live a few days up to several weeks. Many moths, like the pretty day-flying black and white Spear-marked moth (*Rheumaptera subhastata*) and the Isabella Tiger Moth (*Pyrrharctia isabella*) (wooly bear caterpillar) are common and widespread. Others are habitat specialists, like the some sphinx moths that look and feed like hummingbirds or bumble bees. Many species are not well known and some haven't even been named or described at all yet, which provides a lot of opportunities for new discoveries. Some of John's personal favorites are *Feralia deceptiva* whose colors and pattern mimic greenish lichens on trees, the colorful Underwings (*Catocala*), and many of the micro moths which, although small, often have very interesting colors and patterns. John has found several State records, many county records, and has found new locations for species recently or currently being described.

How far can he go? Despite his remarkable accomplishments, with an estimated 8,000 species of moths in the PNW to look for, he still has a ways to go. John says it all depends on how far he ventures from his local area and how much time he spends on the many micro moths (a few mm in size) yet to be photographed. His greatest pleasure is sharing information with scientists and other moth enthusiasts and helping to 'spread the virus' of moth learning and moth photography. John's excellent photographs of Moths of the Pacific Northwest can be viewed on his Web site:

http://www.flickr.com/photos/johns_pics/collections/72157602680911564/

Photos from Yakima Conference July 17 - 19



Butterfly List for Yakima Conference

English Name	Latin Name	Sat	Sun
Clodius Parnassian	Parnassius clodius	X	
Mountain Parnassian	Parnassius smintheus	X	
Anise Swallowtail	Papilio zelicaon	X	
Western Tiger Swallowtail	Papilio rutulus	X	X
Pale Swallowtail	Papilio eurymedon	X	X
Western White	Pontia occidentalis	X	X
Cabbage White	Pieris rapae	X	
Large Marble	Euchloe ausonides	X	
Sara Orangetip	Anthocharis sara		X
Clouded Sulphur	Colias philodice	X	
Western Sulphur	Colias occidentalis	X	X
Blue Copper	Lycaena heteronea	X	X
Purplish Copper	Lycaena helloides	X	X
Lilac-bordered Copper	Lycaena nivalis	X	
Mariposa Copper	Lycaena mariposa	X	X
Halfmoon Hairstreak	Satyrium semiluna	X	X
Western Tailed Blue	Cupido amyntula	X	
Columbia Blue	Euphilotes columbiae	X	
"Summit Blue"	Euphilotes glaucon	X	
Arrowhead Blue	Glaucopsyche piasus		X
Silvery Blue	Glaucopsyche lygdamus	X	
Anna's Blue	Plebejus anna	X	
Greenish Blue	Plebejus saepiolus	X	X
Boisduval's Blue	Plebejus icarioides	X	X
Lupine Blue	Plebejus lupini	X	
Coronis Fritillary	Argynnis coronis	X	X
Zerene Fritillary	Argynnis zerene	X	X
Callippe Fritillary	Argynnis callippe	X	X
Hydaspe Fritillary	Argynnis hydaspe	X	X
Mormon Fritillary	Argynnis mormonia		X
Western Meadow Fritillary	Boloria epithore	X	X
Hoffmann's Checkerspot	Chlosyne hoffmanni	X	
Field Crescent	Phyciodes pulchella	X	X
Snowberry Checkerspot	Euphydryas colon	X	X
Edith's Checkerspot	Euphydryas editha	X	
Satyr Comma	Polygonia satyrus	X	
California Tortoiseshell	Nymphalis californica	X	X
Milbert's Tortoiseshell	Aglais milberti	X	
Painted Lady	Vanessa cardui	X	
Red Admiral	Vanessa atalanta	X	
Lorquin's Admiral	Limenitis lorquini	X	X
Common Ringlet	Coenonympha tullia	X	X
Small Wood-Nymph	Cercyonis oetus	X	X
Great Basin Wood-Nymph	Cercyonis pegala	X	
Pacuvius Duskywing	Erynnis pacuvius	?	
Persius Duskywing	Erynnis persius	X	
Western Branded Skipper	Hesperia colorado	X	
Mardon Skipper	Polites mardon		X
Sonora Skipper	Polites sonora	X	X
Woodland Skipper	Ochlodes sylvanoides	X	

August 24 - Riverfest in Bothell



A cage full of butterflies was a hit with youngsters at Bothell's Riverfest, as were the stickers David Droppers got us last year. And a lot of youngsters were present. Our booth orientation made our exhibits face directly into the sun, making both our quizboard and a laptop almost useless. The laptop worked fine from a GOOD storage battery for a couple of hours before I decided no one was noticing it. Without its game feature, I still used the quiz board to show folks what larvae become what adults. A sprinkling of adults took our brochures, were interested in our programs, etc. A few asked if we gave presentations, or trip, for school groups.

September 12 - Bird Fest in Edmonds



The event, at least the tabling part of it, drew fewer people than I'd have guessed. But, a sprinkling of folks showed real interest and one lady joined us on the spot. I took along bird books left over from WBA book sale and managed to sell two at \$5 each. David was there for the morning and is really good at "taking it to them" rather than passively hoping they're interested. So, he'd start with "Have you heard of us before?" and then extol our programs and field trips while putting a brochure in their fat little hands. Paul and Colin were there for the afternoon and we rather much adopted David's approach. The event had a table set up for kids' activities and I contributed some coloring sheets and swallowtail cutouts to it. As the day progressed I was pleased to see that a few of the swallowtail cutouts were being used. Overall, I'd say it was well worth doing.

September 20 – Bug Blast at UW Burke Museum in Seattle



WBA was well represented, with Paul & Colin, Jennifer, Steward Wechsler, Ian Young, and David Droppers all participating somewhere in the total operation. We had a good crowd, a fair number of people showing interest in our group, and, we peddled a lot of stickers, swallowtail cutouts, and coloring sheets.

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	Newsletter/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.