



G'n^um*

The newsletter of the Washington Butterfly Association

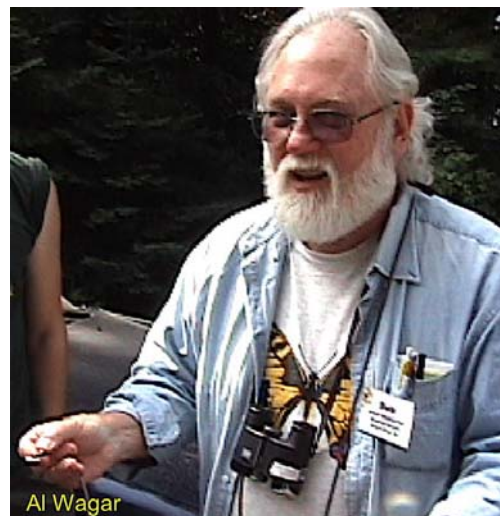
P.O. Box 31317 Seattle WA 98103

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*.

Recent Programs

For our February program, Dr. Bob Pyle presented a history of butterfly conservation. He discussed why some butterflies are common while others are rare, and what they need to survive. Bob gave a fascinating account of a range of conservation efforts, such as the reintroduction of the Large Copper in England in the late 1800s after its natural habitats were converted to tulip fields and other uses; the development of the "life table" of the Black Hairstreak and Large Blue for some of the first butterfly conservation and management plans; the inception of the Xerces Society in 1971; and the Green Hairstreak Corridor project in San Francisco—where small patches of habitat managed by volunteers are bringing back this butterfly, once thought to be extinct.



Al Wagar



Photo by Robin Lewis

In March, **David Droppers** unveiled a new tool he's developed: a dichotomous key to the blues of Washington state. He described a dichotomous key as a system of identifying an object, in which a succession of paired choices leads progressively to only one remaining correct choice. David presented photos of blues of our area, along with similar species that can cause confusion, and led us through using the key to identify them. David's Dichotomous Key to the Blues of Washington State is available on the WBA website on the Links and Downloads page. It will undoubtedly prove to be valuable this field season!

Recent Programs (Continued)

In April, **Jon Pelham** discussed the foundation of butterfly research, and those who built it. After giving us a grand tour of science through the ages, Jon led us through the evolution of both observation and science as applied to butterflies and other insects, discussing some of the giants who pushed them forward from 1635 on. These included Linnaeus, Darwin, Ulyssis Aldrovani, Maria Sibylla Merian (for her treatise on metamorphosis), Hans Sloane, George Edwards, and others.



Linnaeus



Maria Sibylla Merian

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.

May 4 – Bob Hardwick

Help is On the Way for Skipper Identification!

The skipper group is one with which many people struggle. Continuing in our ongoing review of identification skills, Bob will take on the skippers. We have all appreciated and enjoyed Bob's teaching techniques in attempting to hone our field skills. This comes just in time for us to practice all summer. This is a program none of us should miss.

June 1* – John Baumann

Butterflies of Washington's "Far East": Turnbull Wildlife Refuge, The Selkirks, and Spokane County

John Baumann, one of our long valued eastern WA members, will share photos and stories from field trips from his past three years in Spokane and Pend Oreille Counties. Those newer to butterflying will find encouragement in news of what sorts of contributions thoughtful novice "citizen scientists" can make to the study of lepidoptera; those with more experience may glean tips on some new Eastern Washington hot spots. Brenda McCracken will also share in presenting this program. All are invited to catch a few glimpses of butterflies and terrain we may visit July 15th-17th for WBA's 2011 conference.

* This program will be held in the Isaacson Classroom (across the plaza from the auditorium).

President's Message - from Richard Yonel

We look forward to seeing members from around the state at the WBA Annual Conference in Newport in July. Please see the conference information and registration form in this issue. This is the time when we can all get together in one place and enjoy the speakers, the field trips, and the good fellowship that characterize the Washington Butterfly Association. With such a state-wide membership, the Board recognizes that a Seattle area bias comes with officers, board members, board meetings and monthly membership program meetings all in Seattle. Although most of our field trips are in the more butterfly-rich east side of the Cascade crest, it's more difficult for people from those areas to sign up for the field trips. Admittedly, it is a big state and the practicalities of logistics certainly apply limits. We want to do what we can to make more of what WBA offers available to members state-wide. Do you have experience with organizations with officers and board members in different parts of the state, sharing programs, making participation in field trips easier? Is there something you would like us to do that would make your membership in WBA more rewarding? Please share your thoughts with me via email (cryouel@msn.com), or just talk to me at the Conference, on steps we might take to make membership more enjoyable and fulfilling for you. I look forward to seeing you in Newport!

Richard

Annual Conference ♦ July 15-17, 2011 in Newport, WA



Butterflying at North Baldy ♦ Photo by John Baumann



Blue Copper ♦ Photo by John Baumann



Fritillary at North Baldy ♦ Photo by Carol Mack

This July, the Washington Butterfly Association explores the Pend Oreille River area. Conference headquarters will be in Newport, with lectures held in the Pend Oreille Playhouse. The conference runs Friday, July 15 to Sunday, July 17. The registration form is included in this issue of G'Num.

The keynote speaker on Saturday evening is Jon Shepard, Lepidopterist from Nelson, BC. Jon will give us an historic view of butterfly research in the northeastern Washington, northwestern Idaho and Canadian areas. As author of the acclaimed Butterflies of British Columbia, he will share fascinating information about local butterflies.

For the Friday evening program, the WBA-east varsity team will present photos of butterfly spots in the area of the conference, photos of butterflies we might see, and facts about the area including geology, habitat, history, and other interesting tidbits.

The Pend Oreille River watershed is home to diverse montane forest and wildlife communities; there are mosaics of conifer forest, riparian thickets, and open meadows with streams, small lakes, and marshes.

Depending on the status of the blooming season, we hope to explore the high-elevation North Baldy area, at over 6,000'. North Baldy is famous for open, spectacularly-flowered meadows, stretching for nearly two miles along the ridgeline. Lupine, paintbrush, buckwheat, asters, and many other wildflowers should be blooming there.

Visits to roadside springs and seeps may reveal puddling blues, crescents, coppers, arctics, and much more. This whitebark pine/Clark's Nutcracker habitat affords beautiful views of the Pend Oreille River to the west, and the Selkirk Range to the east. We may glimpse pink-edged sulphurs or even an eastern tailed blue, depending on seasonal timing.

The Pend Oreille River is very popular with outdoor enthusiasts. Register for the conference and book your lodging now to ensure your participation in this interesting and fun exploration along the eastern border of Washington State.

Conference Lodging & Camping

RECOMMENDED LODGING

July is the busy season in this area and lodging is limited. Book early!

Prices subject to change without notice. **All prices listed include tax.**

Newport City Inn	509-447-3463	Email: gng28@frontier.com
220 N. Washington Ave.; Newport, WA 99156 AC, refrigerator, microwave, coffee maker. 13 rooms, \$52.60 – \$61.38		
DannyAnn's Bed and Breakfast	509-447-3787	Email: question@dannyanns.com
131 N. Spokane Ave.; Box 1903; Newport, WA 99156-1903 No AC but well-insulated; each room has a fan. Access to common microwave, refrigerator, morning coffee or tea. Price includes breakfast, which can be served earlier than 9 a.m. upon request. 3 double rooms, \$82.20 – \$120.56		
Inn at the Lake Bed and Breakfast	877-447-5772 509-447-5772	Email: info@innatthelake.com Website: www.innatthelake.com
581 South Shore Diamond Lake Rd.; Newport, WA 99156 7 suites: 5 with AC, 2 stay cool in the basement. Price includes sit-down breakfast served at 9 a.m.; before 9 a.m.: continental breakfast only. \$119.47 – \$207.15.		

CAMPING

A weekend event, "Poker Paddle," will fill campgrounds and resorts on the Pend Oreille River. You'll have better luck going inland (Browns, S. Skookum Lake) or beyond the dam at Albeni in Idaho, though all Priest River campgrounds are also busy in July. It's legal to camp anywhere on USFS land, but the sites listed below have facilities.

Reservation-Only USFS Sites:

877-444-6777 or reserveusa.com

Add one-time \$10 telephone reservation fee or \$9.00 online reservation fee to the site fee.

Campground	Distance	# of sites	Cost
Pioneer Park	10 min. from Newport	17	\$16
Albeni Cove	A few min. east of Newport	14	\$18
Priest River	10 min. east of Newport	20	\$18
Riley Creek	20 min. east of Newport	67	\$24 (includes electric)
Panhandle	45 min. north of Newport	13	\$16

First-Come, First-Served USFS Sites:

Campground	Distance	# of sites	Cost
Browns Lake	30-35 min. north of Newport, near Usk	18	\$14
South Skookum	30-35 min. north of Newport, near Usk	25	\$14

Watching Washington Butterflies with Bob Pyle

Number Five: The Next Six State Records

In my last column, I discussed the particular thrill of finding new state records, and told the stories of six such discoveries with which I have been lucky enough to be involved. For this installment, I promised to predict the next six state records I think we will discover. I can't say with any certainty, of course, that these will be **the** next six—they probably won't, since surprises always arise. But I do believe that these half-dozen butterflies all stand a good chance of joining our state roster in the relatively near future.

Our new state records will come from two distinct groupings of candidates. I will pick three top contenders, and name a few other possibilities, from each of these groups.

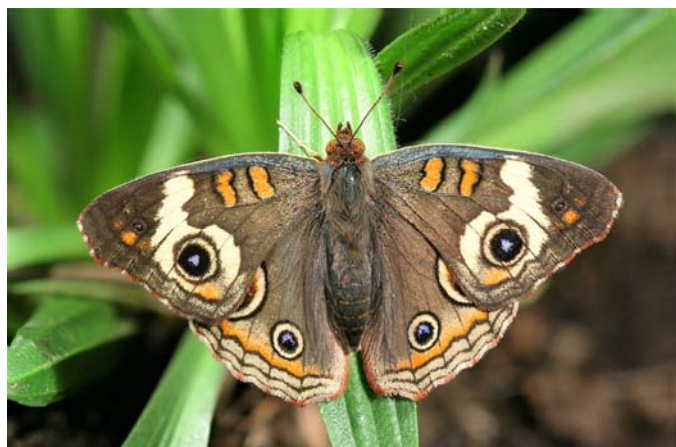
The first category comprises the nonresident immigrants, often called “migrants” or “strays.” These butterflies advance into the North from their Mexican or Southwest breeding grounds each summer, in variable numbers. They lack a hard winter diapause, but they are turning up farther north each summer as the climate warms. Their incursions depend upon weather as well as climate, as they need good nectar and favorable flight weather to make much of a run on the North. Therefore some years see many immigrants and other years few or none. The Monarch (*Danaus plexippus*) is our sole true, back-and-forth migrant in the sense of birds. Apart from that, our only more or less regular immigrants are the Painted Lady (*Vanessa cardui*) and other vanessas. We have recorded a few southern species just once or twice, such as the Dainty Sulphur (*Nathalis iole*) and Reakirt's and Pygmy blues (*Echinargus isola* and *Brephidium exilis*). These and other immigrants will usually be found in our southern tier of counties.

The second candidate group includes truly resident species that have simply been overlooked in the past, or that have recently colonized inside our borders. There can't be many of these left, but I'll bet there are a few yet to be found and more to arrive.

These new records will probably all turn up in the northern tier of counties, especially in the north-central and northeastern alpine regions, or else in the more remote Blue Mountains; and likely deep within seldom-butterflied wilderness or other neglected habitats.

My top predictions among the immigrants:

1) Buckeye (*Junonia coenia*): This gorgeous nymphalid is probably a year-round resident in southwest Oregon, and it has been recorded in summer to within one county of the Columbia River in



Buckeye (*Junonia coenia*)
Photo by Dave Nunnallee

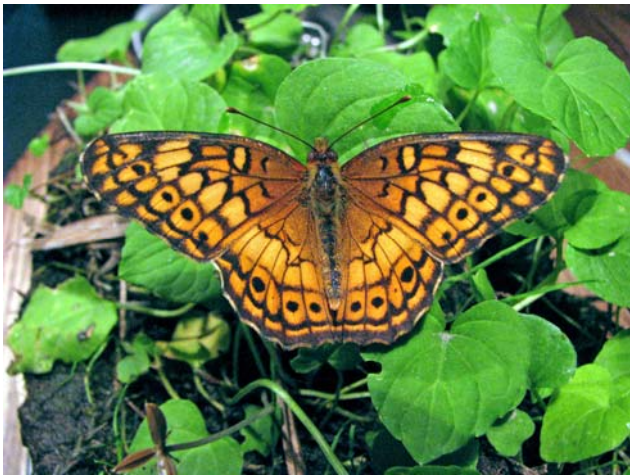
central Oregon. Actually, Barbara Laudan believes she saw a Buckeye in Kelso in 1953, and I think she is likely right in her recollection. But the record is too old to be counted in the absence of a voucher specimen or photograph. The confirmatory record could show up in almost any location or habitat, but be on the lookout for it especially in flowery, weedy areas along and near the Gorge.

2) Cloudless (Giant) Sulphur (*Phoebis sennae*): If you see a great big, untailed, clear lemon-yellow butterfly, it will be this one. Ubiquitous throughout the South, it is a common summer immigrant as far north as Connecticut, Colorado, and mid-California. Sight

records have been obtained in Oregon and Montana, and it will surely turn up in Washington one day soon. We lack its senna hostplants, so anywhere is about as good to watch out for it as anywhere else; but keep in mind that wanderers commonly follow watercourses. That certainly applies to coliadines (members of the sulphur subfamily).

3) Variegated Fritillary (*Euptoieta claudia*):

More than once I've thought I was on the trail of one of these long-distance movers, but it has always turned out to be a true frit or a worn Satyr Anglewing, except for one in Idaho that I really think was *IT*. *Claudia* vaguely resembles fritillaries above, but her longer,



Variegated Fritillary (*Euptoieta claudia*)
Photo by Dave Nunnallee

narrower wings are paler or reddish in color, and blurry-webby-mottled below. A generalist feeder, the species can reach and summer-breed in almost any open habitat. Numerous Colorado individuals appear from lowest plains to highest peaks. B.C. and ID records give us high hopes here.

Additional immigrants we should keep an eye out for, roamers that sometimes turn up in adjacent territories and are therefore plausible here, include the Fiery Skipper (*Hylephila phyleus*); the California and Southern dogfaces (*Zerene eurydice* and *cesonia*), the

Sleepy and Tailed oranges (*Abaeis nicippe* and *Eurema proterpia*), the Mexican Yellow (*Eurema mexicana*), the Great Purple Hairstreak (*Atlides halesus*), the Marine Blue (*Leptotes marina*), the Queen (*Danaus gilippus*), and the Pipevine (*Battus philenor*) and Giant (*Papilio cresphontes*) swallowtails.

As for new records among resident species, my hot picks are these:

1) Aphrodite Fritillary (*Argynnis (Speyeria) aphrodite*):

Our state hosts every far-western fritillary species except for three southwestern specialties and, apparently, this one. Actually Aphrodite is largely eastern and midwestern, but ranges through the Rockies too, and reaches northern ID and south-central BC. It seems highly unlikely that it won't appear somewhere in a fritillary-filled patch of thistles or mints in the Pend Oreille or Okanogan Highlands. Aspirants for this record should be prepared to examine closely lots and lots of frits, ever watchful for this goddess's particular markings.

2) Gillett's Checkerspot (*Euphydryas gillettii*):

With twinberries (*Lonicera* spp.) as its required hostplants, this Northern Rockies endemic is clearly not host-limited. Certain inscrutable factors keep it tethered to its narrow range and highly localized occurrence. I've seen what appears to be excellent habitat in the Salmo-Priest Wilderness Area in northeastern Washington, and there may be appropriate sites in the Blues. An old record from near Priest Lake, ID (Stan Jewett) and a recent discovery near Hat Point in Oregon's Blue Mountains (Harold Rice) give us hope that this exquisite red-banded checker could yet be found to exist in Washington.

3) **Draco Skipper** (*Polites draco*): A number of Rocky Mountain species of the arctic-alpine zone--arctics, alpines, lesser fritillaries--inspire wild ideas of finding them in the quite limited heights of the Selkirk Mountains in our northeast corner. Gypsy Ridge, between Sullivan Peak and the Salmo River, has always

struck me as a possible place to seek them. Probably the most likely Rockies resident to reach into Washington will be Draco, the Dragon: maybe named, and certainly distinguished, by the sharp, silvery tooth extending from its spotband below. Search for this bright skipper on high grassy slopes between Mount Spokane and the Canadian border: how about a search for this one as a group objective for the 2011 annual conference, based in Newport?

Other resident species we should keep our eyes out for along our northern frontiers include the Giant Sulphur (*Colias gigantea*), the Gray Copper (*Lycaena dione*), the Gorgone Crescent (*Chlosyne gorgone*), the Rockslide Checkerspot (*Chlosyne damoetas*), Macoun's Arctic (*Oeneis macounii*), and a confirmatory record for the White Admiral (*Limenitis arthemis*) for which our only record was likely a hitchhiker from the East rather than a Northwest native, which occurs in lower B.C. not so far away.

This is by no means an exhaustive list of potential new state records for Washington. I have little doubt that other species, which have never even occurred to me as likely, will turn up—that element of surprise is, after all, much of the joy of the pursuit! But this list may give you something to go on in your own explorations, and it will be fun to see whether any of it pans out in field seasons to come.

In order to prove your record, and have it accepted in the Northwest Lepidoptera Survey data base and added to the Washington State checklist, you will need to secure either a voucher specimen or an indisputable photograph. Sight records are generally unacceptable for significant records, unsupported by vouchers or definitive photos. Immigrant individuals and their offspring are unlikely to survive the winter, and any newly disclosed resident population can afford a voucher or two (especially males) without suffering harm to the population. Make sure that either specimens or photos are accompanied by precise data consisting of location, date, habitat description, conditions, and observer/collector/photographer(s).

Turn any new records in through the normal channels, to Ann Potter, Jon Pelham, Idie Ulsh, or me.

As a final note, I would draw your attention to the crying need for backpacking butterflies! We have not been the most adventurous lot in that respect, and almost every time folks with a net and a good eye for leps have ventured into unsampled wilderness, they have been rewarded by substantial range extensions if not county or state records: for example, Jon Shepard, Merrill Peterson, and the Vail family, in the Pasayten Wilderness Area; Ed and Cathy Maxwell, Sharon Colman, and Bill Yake, in the High Olympics; David James and others in the Blue Mountains; and so on. Do you know that the entire Pickett Range in North Cascades National Park remains *terra incognita* for its butterflies? And the same is true for many of our national park and national forest wilderness areas.

So, strap on your boots, gird your loins, and get *out* there. Good hunting!



Butterflyers on the Hunt on a WBA Field Trip
Photo by Idie Ulsh

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 required, trails or terrain are steep in places.
- 5 Very difficult, extended hiking on trails or steep terrain.

WHERE & WHEN TO MEET: Trips 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.

Please tend to personal matters such as getting 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.

June 4th Joint Trip with WNPS and Scarabs

Saturday, June 4, 8:15 AM Seattle / 9:00 AM Issaquah

Reecer Creek Plant/Insect Interactions Joint Trip with WBA, WNPS, and Scarabs co-leaders:

- Idie Ulsh, founding member of WBA
- Nelson Salisbury, WNPS botanist
- Sharon Collman, president, Scarabs, the bug society

This is a unique grouping of experts and a great chance to learn how to see plants the way insects do! Did you know that butterflies specialize in their use of plants: some are just for nectar but some are suitable for them to lay eggs and act as food for their caterpillars? Did you know that entomologists can sometimes tell what insects are around just by looking at the feeding pattern on plant leaves? And that some plants develop special mechanisms to attract ants and other insects they find beneficial? We'll make several stops along the Reecer Canyon road. Trip suitable for families. Bring water, food & dress for the weather, including sun protection. Meet at the Ravenna Park & Ride at 8:15 AM or at far-end lot of the Issaquah Park & Ride at 9:00 AM for carpooling.

Questions & to sign up:

Having just finished Bob Pyle's Mariposa Road, I can identify with the sting of missing "grail" species, those that we most hope to see. Fortunately, I'm not on a time limit to find my grails. I have been traveling to Las Vegas every spring break for the past few years to visit my in-laws, and have made it a priority to get at least one day of butterflying out in the desert. In doing so, I have developed a list of desert grail species, which includes the Desert Elfin (*Callophrys fotis*). With Washington State hosting four species of elfins, I have grown rather fond of them, and wished to discover the desert counterpart for myself. The search for this species has led me to several other desert specialities, including the Desert Sheridan's Hairstreak (*Callophrys sheridanii comstocki*), Desert Swallowtail (*Papilio polyxenes coloro*), Ceranus Blues (*Hemiargus ceraunus*), Southwestern Orangetips (*Anthocharis sara thoosa*), and many others.

However, my grail has eluded me for several years. I mostly attributed the elfin's absence to my early season searches. According to guides, this species is supposed to be a spring flier, but my searches are more often in mid-March, and I feel as if I am two or three weeks too early. My trips also have had the annoying habit of coinciding with less than favorable weather. George T. Austin's "Definitive Destinations" guide to the Spring Mountains states that this butterfly is common, and may be superabundant at times, which made my failure to find it even more perplexing and frustrating. How could I not find a superabundant butterfly?

Returning to Mt. Potosi Canyon Road along Highway 160 (one of my favorite haunts) this March, I checked once more for this elusive, yet supposedly common, elf of the desert. I checked the usual spots that I was recommend to look; perched on host shrubs, tapping junipers to startle roosting individuals, and nectaring on sumac flowers. I have usually had time restraints, only able to search the roadsides, lying in the bottom of a canyon. This time, I had the advantage of the whole day. So seeing not one butterfly, I decided to climb to the canyon ridge for the first time, where hilltopping spring emergents may be hanging out. Sure enough, when I reached the top, the butterflies made themselves known. A Desert Swallowtail circled the top, while darkly-marked Spring Whites partolled the edges. But still I waited, and no small dark shapes took form. As I walked the ridge, I tapped the occasional shrub with the end of my net. Out of a juniper fluttered a whisp of a wing, but enough for me to notice. Alighting back on the juniper was a gray and brown butterfly, one that will not likely make the commercial butterfly calendars. Sawing its hindwings of different shades of grays and browns, they hinted sheens of sage green and deep turquiose in the sun. Had this camouflage master been in my sight all these years? I determined not, as about a dozen more were encountered within a hour, all mint-fresh males (indicating that I had indeed been a tad early in previous years), perching and showing off their frosted hindwing edges. After years of searching, I had finally found the Desert Elfin, the pleasure of doing so amplified by the prolonged anticipation.



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Our species profile for this issue is the Mountain Parnassian, *Parnassius smintheus*.

Despite their superficial resemblance to whites, Parnassians are closely related to the swallowtails and are placed in the family Papilionidae. Characters which they share with the swallowtails include large adult size and, in the larvae, chemical-producing eversible organs called osmeteria behind the head for defense. In Washington we have nine species in the Papilionidae, including two species of parnassians (genus *Parnassius*) and the remainder all swallowtails (genus *Papilio*).

Parnassius smintheus is a single-brooded butterfly of the mountains, occurring from upper foothills to the alpine zone on both sides of the Cascades of BC, Washington and NE Oregon, also in mountainous areas of western N America from Alaska to New Mexico and California. Larval host plants are stonecrops including *Sedum lanceolatum* (Lanceleaved Stonecrop), *S. rosea* (Western Roseroot), *S. divergens* (Spreading Stonecrop), *S. oreganum* (Oregon Stonecrop) and *S. stenopetalum* (Wormleaf Stonecrop). The flight period is late May to early September, depending on elevation. The preferred habitat is usually a rocky open slope with abundant stonecrops, low shrubs and nectar plants but few trees, often at higher altitudes. Males cruise relentlessly in search of mates while females remain hidden in the vegetation or visit nectar plants. Mating lasts several hours during which the male secretes a waxy structure called a sphragis on the female's abdomen to prevent further mating. At Quartz Mtn, Kittitas Co, one female was observed visiting a small stonecrop plant, probing it several times with her abdomen. She then moved to a nearby blade of dead grass and laid a single egg. Eight more eggs were found nearby within an hour's search, most on small diameter (~ 1 mm) dead vegetation 1-2 inches above the ground and within 2-3 inches of stonecrop plants. Only one egg was found directly on a stonecrop. Adults nectar on composites, buckwheats and stonecrops. While Males of most species of swallowtails frequent wet spots where they imbibe minerals in "puddle parties," parnassians appear to shun this behavior.

Parnassian eggs are large compressed spheres with well textured surfaces. The egg with mature embryo is the overwinter stage, hatching very quickly, sometimes within only 2 hours of removal from refrigeration in captivity. Larvae have a foul-smelling bright yellow osmeterium behind the head which can suddenly be everted to deter predators. The dark larvae develop sharply contrasting yellow or gold spots in later instars. In the wild, larvae twitch violently when disturbed and drop to the ground as an escape response. Older larvae may bask openly or remain concealed among *Sedum*. Larvae feed mostly on leaf tips, and feeding damage is often obvious. Mature larvae weave a loose cocoon and pupate within it, and adults eclose after ~14 days. There are five larval instars and no nests are made. The bright yellow larval spots appear aposematic, so it is likely that the larvae are distasteful and possibly toxic. The Mountain Parnassian is difficult to rear from eggs, however later instars are easily found in the wild where they are most easily spotted by searching for bright yellow spots, rather than the black bodies.

Parnassians can resemble whites in flight, however whites are usually much smaller. No white in Washington has red markings on the dorsal (upper) wing surfaces as do parnassians. The two species of parnassians which occur here can be confused with each other, however there are easily observed differences. Neither species wanders far from its host plant; the Clodius Parnassian uses bleedingheart or steershead while the Mountain Parnassian uses stonecrops, and these plants usually do not overlap significantly, but there are places where both butterflies occur. The Mountain Parnassian has red spots on its dorsal forewings (quite limited in some males), while Clodius does not. And the Mountain Parnassian has black antennae with numerous white rings, while in Clodius they are solid black. In the Mountain Parnassian the female has stronger red markings on the dorsal forewing than the male; also the wingtips of the female's forewings have large unscaled areas which appear blackish, while such areas are more reduced in males.

Board Members

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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.

Washington Butterfly Association 2011 CONFERENCE REGISTRATION

Newport, Washington - July 15 – 17, 2011

Registration for Sat. dinner and sack lunches must be received by Wed. July 6. It's very helpful if conference registration is received by July 6, but registration will be available for walk-ins at the conference. If received by July 6, partial refund available in case of emergency. Sorry, no refunds after that date.

Make your check payable to Washington Butterfly Association, and mail it with this form to: **WBA, Attn: Al Wagar, P.O. Box 31317, Seattle, WA 98103**. Your registration will be confirmed by e-mail, telephone, or mail. For questions about the conference, please contact Al Wagar at 206/546-8251 or e-mail alwanwagar@gmail.com

Name(s) _____

Address _____

Please print

City / State / Zip _____

clearly

Telephone _____ E-mail _____

CONFERENCE REGISTRATION – Does not include lodging or meals.

Enter number of people and, if chosen, any meals below with totals and grand total in the right-hand column.

WBA MEMBERS

Full Registration includes Friday evening social hour, light refreshments, & lecture;

Saturday field trip & lecture; & Sunday field trip How many? _____ @ \$75.00 = _____

- Children 12 and under free but must be accompanied by a registered adult How many? _____ @ \$0.00 = _____

Partial Registration

- Friday evening social hour, refreshments, & lecture only How many? _____ @ \$20.00 = _____

- Saturday field trip only How many? _____ @ \$30.00 = _____

- Saturday evening lecture only How many? _____ @ \$20.00 = _____

- Sunday field trip only How many? _____ @ \$25.00 = _____

SPECIAL OFFER !! This year we offer **special discounted conference rates** AND a year's free WBA-only (not NABA) membership to these attendees:

- First-time WBA members; does not apply to renewals or lapsed memberships

- Juniors, 13 –17 years

- Students enrolled in academic programs

Please note that anyone under 18 must be accompanied by an adult registered for the conference.

Special-Rate Full Registration includes Friday evening social hour with light refreshments, & lecture;

Saturday field trip & lecture & Sunday field trip How many? _____ @ \$40.00 = _____

- Children 12 and under free but must be accompanied by registered adult How many? _____ @ \$0.00 = _____

Special-Rate Partial Registration

- Friday evening social hour, refreshments & lecture only How many? _____ @ \$10.00 = _____

- Saturday field trip only How many? _____ @ \$20.00 = _____

- Saturday evening lecture only How many? _____ @ \$10.00 = _____

- Sunday field trip only How many? _____ @ \$15.00 = _____

MEALS – Optional and not included in registration If you have special dietary needs, contact Al.

Saturday dinner includes corn, green salad, rice, roll, peach cobbler, and decaf coffee. Pick one entrée per person.

- Broasted chicken How many? _____ @ \$15.00 = _____

- Baked vegetarian rigatoni; red sauce with cheese How many? _____ @ \$15.00 = _____

Children's plates available for dinner only; specify here the number of children, but pay the caterer directly for the child's plate at mealtime, based on quantity desired. _____

Saturday and Sunday sack lunches

Saturday lunch includes sandwich with mayonnaise, mustard, lettuce, cheese, and tomato;

pasta salad; seasonal fruit cup; chips; and an oatmeal raisin cookie.

- Turkey sandwich How many? _____ @ \$9.00 = _____

- Vegetarian egg salad sandwich How many? _____ @ \$9.00 = _____

Sunday lunch includes a flour tortilla wrap with mayonnaise, mustard, lettuce, cheese, and

tomato; potato salad; seasonal veggie salad; chips; and a brownie.

- Roast beef wrap How many? _____ @ \$9.00 = _____

- Vegetarian cheese wrap How many? _____ @ \$9.00 = _____

Total, including conference fees and any meals \$ _____