Facebook: Washington Butterfly Association. Instagram: #washingtonbutterflies (anyone can use this hashtag)

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

In this issue:
- Field Trip Reports p 2
- Watching Washington Butterflies p 4
- Moxee Bog Update p 7
- Florida Panhandle Butterflies p 8

Upcoming Programs

Wednesday Dec. 5, Seattle: Jim Reed on Teaching the Next Generation of Entomologists in High School Biology. Join veteran science teacher, Jim Reed, as he shares his experience in teaching high school entomology and general biology for 42 years in remote Klickitat High School in south central Washington. Spend an evening with Jim as he shares some of the challenges and the rewards of his unique class. He will be presenting over the internet from his home in Klickitat.

No Spokane meeting in December.

January, Seattle: Winter Party, to be scheduled.
Slate Peak, July 28
Melanie Weiss

Around 25 WBA members went to the North Cascades to visit Slate Peak under the guidance of Dave Nunnallee and Jim Reed. Three participants camped at Hart’s Pass for the weekend, where the Meadows campground was alive with Vidler’s Alpines. Those who stayed in Winthrop began the weekend with a Mexican dinner generously hosted by Joyce Bergen and Larry Lund at their beautiful home high above the town. On Saturday we all headed up to Slate Peak, at 7,488 ft. above sea level. Slate Peak was originally leveled by the Air Force to use as a radar site, which was never built. A fire lookout now sits at the location. The road to Slate Peak is the highest maintained road in our state and it, along with the Hart’s Pass road which accesses it, is listed on a "dangerous roads of the world" website. Most of the group was relieved at the journey's end!

But the view was worth it! There are several butterflies that are biennial, rare to our state and known to fly primarily in this remote area. One of our group netted the Astarte Fritillary, which was one of the target species we had hoped to see and was a new species for many of us. We spent time in a lush meadow a bit below the peak that had dozens of Vidler's Alpines, along with many other species, and kept us busy for the rest of the afternoon. Scholarship winner Morghan Livingstone brought a young cousin, who caught many butterflies with a tiny toy butterfly net. On Sunday those staying in Winthrop went to Whistler's Meadows near Washington Pass. The scenery was stunning with craggy peaks above, a waterfall at the head of the meadow and, of course, flowers and butterflies. The Sonora Skipper and Arctic Skipper were highlights for many members. We owe special thanks to Cheryl Bellin and Jim Rauh for the scouting work they did prior to our arrival which helped guarantee that the weekend would be a success. This was our fourth overnight trip for the season! Forty six species for the weekend, between Slate Peak Saturday, Whistler’s Meadow Sunday, and a Sheridan’s Hairstreak at Slate Peak on Sunday for the campers.
Upper Crab Creek-Rocky Road, Aug. 25
Melanie Weiss

David James led the last WBA field trip of the season to upper Crab Creek-Rocky Ford, a site we had first visited in early June. It was a bit cool, and the sky was hazy with smoke! But we were a hardy lot and set out across the dry scablands in the hope of seeing the second generation of the Silver-bordered Fritillary and possibly the Coronis Fritillary. We did find the Silver-bordered Fritillary and twelve other species including: Becker's White, Orange Sulphur, Melissa's Blue, Acmon Blue, Purplish Copper, Northern Crescent, and Western Branded Skipper. The site where the SBF was flying was surprisingly green with a variety of flowers still in bloom. There were also many Common Ringlets throughout the area. They were lighter colored than those in the spring, blending in well with the grasses. It started clouding over in the early afternoon, so we ended the day with conversation and lunch in the parking lot, quite satisfied with what we had seen in the field.

The Cascade Butterfly Project, a citizen science project monitoring specific butterflies and plants in our high mountain meadows, has now ended its 8th season. We monitor 1,000 meter transects on trails at both Mt. Rainier and North Cascades National Parks, and a few additional locations. Many of our WBA members, seven this year, volunteered on the Naches Loop transect at Chinook Pass in Mount Rainier National Park. In addition, some of our members volunteer on the other transects being monitored. After eight years enough data has been collected that analysis has begun. Our team of volunteers also has kept an eye out for the tagged, or color-marked as they were this year, Coronis Fritillaries for the migration study of David James. We begin our inventories each season as soon as the trails melt out. This year at Naches, we were there from July 20 through Aug. 31. We have a lot of fun, and the high mountain meadows, butterflies and views are stunning! Check the WBA website for more information, and consider this for next year.
Number Thirty-five

Reflections on the Washington Butterfly Big Year

Having conducted the first U. S. Butterfly Big Year in 2008 (*Mariposa Road*), and feeling like I'd like to do it again (but not THAT big!) I decided to do a Washington Big Year in 2017/2018. I have reported the results in the past three columns. Now, a few months out, I'd like to share some thoughts in the aftermath that might be helpful to anyone contemplating her or his own big year (God save them!), and may be of interest to others in their regular watching.

First, to update my results: in the last column, # 34, I reported that I'd tallied 127 species out of our currently recognized total of 153 residents and regular or occasional visitors. Since then, I have sat down with Jonathan Pelham in the Burke Museum to certify my results. We examined all of my records and voucher specimens. (I counted mostly by sight, catch-and-release, or voucher; having helped to pioneer butterfly photography in *WWB*, I gave it up when it went digital. I find life simpler this way, and records are incontrovertible with a voucher behind them.) Commander Pelham confirmed nearly all of my voucher specimens (which then went into the Burke collection), including both Northwest and Atlantis Fritillaries and my Okanogan County record of the Long Dash Skipper, all from Moses Meadows. But a couple of specimens failed the Pelham-o-meter, costing me one species to be deducted from the tally. Most regrettably, that species was the Nevada Skipper, which I thought I had found for my first time in Washington, at the classic locality on Umtanum Ridge. That followed the most vile drive of the year, of many horrid drives. I was appalled when JPP took a look and declared my voucher to be a male Juba Skipper, with a slightly more offset terminal spot than most. Well, rats. I almost destroyed the Subaru for a Juba. But, on the plus side, I'd also found Western Green Hairstreaks (*Callophrys affinis*) up there, and I have *Hesperia nevada* to look forward to. Next time I'm going to make Jon take me up there himself, in his Jeep!

So I lost one species, but I'd done my arithmetic wrong anyway, so I still end up with 127 species: 21 of 29 skippers, 9 of 9 swallowtails, 14 of 18 whites and sulphurs, 5 of 7 coppers, 16 of 18 hairstreaks, 17 of 19 blues, 1 of 1 metalmark, 1 of 1 milkweed, 15 of 16 fritillaries, 12 of 16 true nymphs, 9 of 10 checkers and crescents, and 7 of 9 satyrs. So that's 26 species to go for when David Branch and I try to find "the ones that got away" in 2019, and a bar of 127 species for anyone who decides to try to surpass it—which shouldn't be all that hard.

Why do a Big Year? After all, it takes a lot of planning, time, gas, and effort. One must organize life around this one goal, to do a proper job of it. So what's in it for you?

For some, it is the draw of competition, breaking a record, and meeting a goal. You get a sense of that in the book and movie, *The Big Year* (Steve Martin and Jack Black playing bird tickers?? They actually do a darned good job.) Competition didn't interest me, and in fact I had none, neither nationally nor for the state year, since no one had done them before. My only competitors were the calendar, the clock, and the clouds. But if you enjoy a good competitive game, I have given you something to shoot for: 128 or more species.

For me, the greatest virtue of the Big Year is the accelerated learning curve it both provides and demands. I learned so much on both of my Big Years, U.S. and home state. I know all these butterflies, their behavior, distribution, and ecology, better than I did before. Second is being outside, seeing something beautiful and wonderful every day you go out. This is a gift of the Big Year. Though you don't need a Big Year to venture forth, being committed to one ensures that
you get your butt out there into the field, probably more than you would otherwise—and the beautiful and wonderful part just follows as a matter of course.

Third, getting to know the state we live in, study, and love. I drove Washington roads I'd never driven before (which are getting hard to find!), hiked trails I've never hiked (which is easier), and revisited beloved places not seen for a long time. Many of them brought back great trips I'd taken with Thea. I felt that I reconnected with Washington in a way I hadn't for years.

Fourth, health. I suffered a health crisis in the middle of my Big Year, and wasn't sure I would be able to complete it. But I did, was outdoors walking almost every day, and gained strength all along. I am much healthier for it now.

I'm sure there are many other compelling reasons as well as these. But in the remaining space, let me share some tips from what I did right and did wrong along the way.

a) Don't feel you must go January 1st-December 31st, the way most birding big years are conducted! For butterflies in the North, that makes no sense. Unless you are unusually good at finding immatures, the calendar year would make for a very boring beginning and ending here. My choice was to go between my 70th and 71st birthdays. I began with the capture of the Variegated Fritillary at 3 p.m. on July 19, 2017 in the Okanogan, and finished with *Hesperia comma* as the clouds cleared in the Olympics on the afternoon of July 19, 2018. A later starting date might be ideal, giving you more of the second summer to track down those that have eluded you so far.

b) Remember that you need an odd year to find the Astarte Fritillary, and an even one for the Great Arctic.

c) Use other people as well as digital aids to the extent you are comfortable with them. I gratefully accepted the assistance (= used) Caitlin LaBar, Dan Nelson, David James, Jon Pelham, David Droppers, and of course my field buddy David Branch, among others, in getting to key habitats and finding critical species. I dispensed with GPS, etc., in favor of DeLorme and UFS maps in the field, but I did employ Google Earth a lot in advance research. Suit yourself.

d) Sure, do visit tried and true places and famous localities where you know you'll be likely to tick off certain species. However, also be sure to try new places, where you can not only be surprised, but also come up with new records of occurrence that will make Brother Pelham very happy. A new county record puts a special glow on the end of a satisfying day in the field.

e) And as for those records, always keep *precise* notes of where and when you encounter each species. That way your observations become true data, not just ephemeral anecdotes or curios. Whether T/R/S, lat/long, or careful textual descriptions, capture as much location detail as you can. The goal is to situate the butterfly on the landscape with precision, and to be able to return to the same site. It may take a while to transcribe all your notes so as to turn in the records (I'm still working on it!), but *do* it. You will illuminate entirely new quanta of knowledge.

f) As for ID: Voucher specimens are the best and most definitive basis for records. But if you are disinclined that way, be prepared to take detailed notes of field marks, and/or get really definitive photographs, in the wild or in hand, both dorsal and ventral if possible. If your camera doesn't automatically record date and GPS reading for every image, then make sure that you do. That way, no argument. For example, see Melanie Weiss's fine cover photo of an apparent hybrid anglewing. This is an important finding that her careful photographic documentation makes possible to record. A voucher might allow DNA analysis as well, but the image alone tells the basic story clearly. Or how about David Branch's astonishing catch of a perfect female Coral Hairstreak atop Slate Peak in fierce wind, one of the true high points of the year? A picture was impossible under the conditions, but the voucher made the extraordinary record history.

g) Be aware that the weather, shifting flight periods with warming climate, drought, flood, fire, washouts, et cetera, et cetera, will let you down over and over. But don't let them *get* you down. Hope must spring eternal, or at least each morning. What will I find today? It could be good!
h) And just because the early spring weather is crappy, don't let it keep you from getting out there anyway! The greenies don't care—they'll pop regardless of early rain and wind on the steppes and coulees. I failed to cross the mountains early enough in April because of poor forecasts, and as a result I missed the Desert Marble—just as I had on the BIG Big Year ten years ago (you'd think I'd have learned better). You can bet I'll be out there this coming April, rain or no...and it's not that far off!

i) (codicil of d) Try to get into some unrecorded corners and wilderness areas, requiring some real effort but paying disproportionate rewards. Many off-road areas in Washington have simply not been sampled for butterflies. See my next column, expanding on this idea.

j) Be prepared to be surprised constantly, and make sure to have a lot of fun. It's just not worth doing if it isn't fun. Like when I had a four-Vanessa evening atop Steptoe Butte, every species of lady in the state swirling about me altogether at sunset—now, that was fun!

In short, I urge anyone to whom the idea appeals to try a Butterfly Big Year. You'll have a ball. Do I hear 130? 135? Good luck!

Help Wanted! Calling All Spokane Butterfly Enthusiasts!

These past three to four years, we have done a really great job at getting out the word about our colorful, varied and all too vulnerable area lepidoptera! Thank you all for being a part of what we do, whether as a volunteer, trip participant in the field, Monarch rearing specialist, photographer or pollinator gardener. Our WBA chapter has indeed come to life vigorously, with numbers of new Spokane members, four local Board members and a very active group of volunteers.

We will need to call on your energy and expertise more in the coming year. Back in 2015, I agreed to jump into the role of Board President for WBA state wide, answering our founder's summons. I am glad to say that with LOTS of help and a certain amount of forgiveness from our several years' worth of Board groups, I have been keeping up with an enormous amount of change in expanding WBA's reach to the entire state and initiating several new programs, yet I now need to focus even more in my business. WBA will therefore need more of your volunteer effort in the coming months to handle some exciting developments:

1- Planning speakers and agendas for monthly Spokane meetings starting in 2018. Someone who is willing to make some calls and write some emails to set our slate of speakers starting the 3rd Wednesday of January. The month of May is already set. I can definitely help with some leads and ideas.

2- Enriching our terrific outreach efforts at garden sales and events, and other gatherings. We generate a great deal of interest and enthusiasm through the efforts of Mary Schu, Lora Langford and many others by having booths of volunteers handy to display their butterfly and field trip photos, hand out brochures and answer questions asked by passersby.

3- Be a volunteer speaker at an area school, wildlife or conservation group. Our knowledge is being sought at many more venues and groups than I have been able to keep up with, and I have material I am happy to help you share with interested parties.

4-We will need further assistance continuing our Monarch butterfly rearing program. Ken Avery did an outstanding job starting this effort on the run this summer, and we on the Board know that he cannot do it alone. This can be an intensive mid to late summer activity, where many of our other efforts hit top speed in spring and early to mid summer.

It would be my fondest dream to see that our Spokane WBA volunteers comprise part of cadre of northwest US naturalist docents whose deep love of all wildlife and their ever shrinking habitats are ready to contribute their knowledge and enthusiasm to others who are seeking to discover the intricate beauty of our world.

Please contact John Baumann or any of our other local Board members if you are interested in making a valued contribution to our group!
The Nature Conservancy (TNC) sponsored a volunteer day at Moxee Bog on 13 October and boy howdy did we get a lot done! It’s astonishing what 10 motivated and strong volunteers can do. We cut back vegetation, cleared a path along most of the western fence line to provide better access to the property, cleared brush along the southern fence line, and cut back tules in the immediate area where violets were found earlier this year.

The property is south of Yakima, just northeast of the gap where the Yakima River, railroad and I-82 have cut through the basaltic fold of Rattlesnake Ridge. It’s also not far from the landslide discovered a year ago that continues to be monitored using multiple instruments. The Moxee Bog property is an 8-acre parcel that was acquired by TNC in 1966 after the butterfly Boloria selene, also known as Silver-bordered Fritillary, was found in abundance on the property. Although B. selene is not endangered in Washington state, it is found in small populations in only a few isolated locations. When the glaciers receded at the end of the Ice Age, the butterfly habitat became restricted to a few specific wet locations. Moxee Bog is special because it is a small wetland area in the midst of sage-steppe habitat where natural rainfall averages only 9 inches per year.

Once TNC had full ownership of the former pasture land, they fenced out the neighboring cattle, thinking to help preserve the host plant, Viola nephrophylla, or northern bog violet. Additionally, the hydrology of the area has changed as a result of regional water management changes. Regrettably, these changes have proven to be the demise of the butterfly, and very nearly of the violet. Cattails, tules, rushes, and willows have grown up and shaded the understory so heavily that the few remaining violets are struggling.

A partnership of TNC and the Yakima Native Plant Society located a handful of remaining violet plants this spring at the base of dense tules in a damp area of the bog. Dr. David James led a WBA field trip over the summer to see the violets on the property and to look for violets on a nearby property owned by the Bureau of Reclamation. Over the summer ~550 acres were assessed for likely habitat on the BoR land, and promising areas searched intensively. Especially thanks go to Cathy Reed and Ed Lisowski from YNPS who participated in multiple searches both at Moxee Bog and at the BoR lands. This search indicated that Moxee Bog and an adjacent private property are the only known sites of natural violet populations in the area.

The goal of the TNC volunteer day was to prevent further decline of the violet habitat as TNC examines the possibility of a potential restoration effort. TNC has hired a wetland restoration expert to identify outline courses of action that might be undertaken to restore the habitat to a condition which may once again be hospitable for the violet. That report will be provided to TNC later this year.

While waiting for this report TNC steward Nicholas Altadonna decided to organize an effort to give the remaining violets the best chance possible for the short run. We targeted a region of approximately 3300 square feet comprising the recent violet finds as well as regions where violets have historically been found. This encompassed a very wet area of dead tules growing through a mat of vegetation to the north and a dryer meadow area further south where violets were found in 2014 by Dr. David James and his colleague. The goal was to cut all vegetation to ~ 20" height, providing sun for any sheltering violets, but also shading them from the blazing heat next summer. The vegetation in the targeted area is patchy and the newly cut areas provide a range of habitats, some of which may foster violet growth and regeneration.
Florida Panhandle, a Biodiversity Hotspot

By Melanie Weiss

All photos by Melanie Weiss.

Earlier this fall I had the fortune to visit several areas in the amazing Panhandle of Florida only weeks prior to Hurricane Michael roaring through with all its fury. This narrow, northern section of the state is an area rich in biodiversity and varied habitats to explore.

The Hairstreak Chapter of the North American Butterfly Association in Tallahassee hosted a workshop with three field days in the Panhandle. I learned that this area is one of the five richest hot spots for biodiversity in all of North America. According to one of our evening speakers, Bruce Means, there is no area of comparable size in North America that has more species of frogs (27) or snakes (42), and it ranks about third in the world for turtles with 18 species. There are over 300 species of birds and the number of plant species is also high. While we were there, around 90 species of butterflies were flying, with half of these being skippers. A total of 88 species were detected at the various field trip locations by the end of the three days. Apparently September is an excellent time for butterflies in the Panhandle. The pink liatris, a butterfly magnet, blooms at this time.

There were nine field trip locations from which to choose with varying habitats and butterfly species specific to each. Many of sites were from the five units of Big Bend Wildlife Management area and from the Apalachicola National Forest, the largest national forest in Florida. All of the locations were within an hour and a half’s drive from Tallahassee.

On the first day my group visited Sumatra and Hickory Mound in the Apalachicola NF. This area has wet savannas containing bogs and carnivorous plants. We saw 34 species of butterflies including several of the large swallowtail species, the beautiful Little Metalmark, the Georgia Satyr and the Question Mark, the latter two being new species for me. We also saw a pygmy rattlesnake in the road, and spiders, spiders, spiders! The Green Lynx Spider was a beauty and very successful at capturing butterflies.

The second day’s trip took us close to the coast in the Hickory Mound Unit of Big Bend WMA. We traveled along dirt roads lined with wild flowers teeming with butterflies, 41 species by day’s end. There were several ponds with blue pickerel rush growing in them that were a magnet for Palamedes Swallowtails. We saw several skippers that were new for many of us including the Yehl, Byssus and Salt Marsh Skippers. The Juniper Hairstreak subspecies for this area, Sweadner’s, delighted all of us when it was spotted at the end of the day. We even had a wild boar cross the road! Apparently there was a 10 ft. storm surge over the dike along the gulf at this location when Hurricane Michael came through, and the water extended into this area.

We visited a very large and fairly wild suburban park on the outskirts of Tallahassee on the last day. In addition to 33 species of butterflies, we saw several Common Buckeye caterpillars and a chrysalis. However, we also saw a Common Buckeye get nabbed by a large praying mantis and eaten fairly quickly. There is so much life in this part of our country, that simply being out in the various habitats for three days gives you a ready view of the daily life and death struggles that occur here.

(Continued on page 10)
Annual Treasurer's Report FY 2018
Submitted by Regina Johnson

11/1/2017 to 10/31/2018

INCOME
Conference Auction 686.00
Conference Registration 2,747.00
Donations to WBA 965.93
Interest Income 106.32
Member Dues 3,792.09
TOTAL INCOME 8,297.34

EXPENSES
Conference Cost Misc 0.00
Conference Cost Speaker 327.20
Conference Cost, Food 1,289.03
Conference Cost, Planet Reg 72.62
Conference Rental 250.00
Donation from WBA 0.00
Fees & Charges 0.00
Forest Service use fee 0.00
Hospitality 61.21
Insurance 1,608.00
Meetup 89.94
Newsletter 499.37
Outreach 221.87
PO Box 166.00
Postage 0.00
Rent, Meeting Room 1,752.00
Speaker Fees 860.00
State Registration and Filing Fees 50.00
Website 142.94
Zoom software 99.00
TOTAL EXPENSES 7,489.18

OVERALL TOTAL + 808.16

Conference Total 1,494.15

I’ve been asked when the Conference, aka Butterfly Study Weekend, will once again be our major source of income. As you can see we did generate income this year, but in large part that was due to normal expenses not being incurred for one reason or another (such as people not asking to be reimbursed). And as you can also see, the income generated by the Conference did not match either of our two largest expenses, insurance and the Seattle meeting room; let alone both. These expenses were minimal back when the conference was our main fundraiser. The Silent Auction did very well—thanks everyone who donated items and who bid on items! Donations are good too, thanks largely to Paulette Murphy. It’s easy to make donations—go to the Membership tab on our webpage and donate through Paypal or a credit card. Or, if you work for or are retired from the state, you can donate through the Combined Fund Drive. Our Charity number is 1482351 and we are in the published list of charities this year. I’m not including the Idie Ulsh Young Naturalist scholarships as those expenses are covered by the Ulsh family.

The 21st Century brings us great technology, but not for free. The Zoom software detailed above allows us to conduct board meetings online, and to broadcast our speakers’ presentations to all our members, not just those who can drive to the meeting. Meetup gets our name and activities in front of potential members looking for something to do. Planet Reg is our conference registration software. And starting this year we will have to pay an annual fee to use our accounting software. I curse the day the software companies decided to rent their software rather than selling it but they don’t listen to me, so there we are.
There were a few homes that had trees fall on them, but the members are physically well. Regarding this diverse area, the comment was that it will recover in a year or two. If you consider visiting this location in the future, there is a good article on the area in “American Butterflies”, Spring/Summer 2015. I’m also happy to share information. It can be humid and hot in this part of the country, but I felt it was well worth the sweat!

I met Paulette Ogard at the Tallahassee butterfly workshop. She is a coauthor of Butterflies of Alabama and also the creator of the Alabama Atlas, a great online site for identifying butterflies from the area including the Florida Panhandle: [http://www.alabama.butterflyatlas.usf.edu](http://www.alabama.butterflyatlas.usf.edu/). She told me of an annual butterfly count at Delta NF in July in Mississippi where you can see many puddling butterflies, sometimes hundreds of Red Spotted Purples. That got my interest! And she kindly gave me the count leader’s name! Now that the rainy season is upon us here in the Northwest, we have time to look at our own photos, travel brochures, butterfly classes and plan trips for next year!