



The Pileated Post

Quarterly Newsletter Friends of the Little Pend Oreille NWR

Fall 2021

[http:// www.refugefriends.com](http://www.refugefriends.com)

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From the President

Our annual membership meeting has been postponed until further notice. With the high number of Covid cases along with low vaccination rates the board does not feel it is wise to have a large meeting at this time. Hopefully we will be able to combine the membership meeting with our planning meeting in the late fall or early winter. In late October there may, be some volunteer opportunities working on our new trail. We will keep you updated on Facebook and our website.

Fall at our sister refuges. If you find yourself near Cheney or Bonners Ferry visit one of or two sister refuges: Turnbull and Kootenai NWR's.

Turnbull offers plenty of hiking and wildlife viewing from their 5.5-mile auto tour. The refuge features many wetlands and upland pine forests and large meadows. It's also located in part of the channeled scablands. The floods that created the scablands also created the many wetlands in and near Turnbull. It is an excellent location for fall migration of waterfowl. Large aspen stands also provide nice fall colors.

Kootenai NWR is a small refuge with lots to see with some fantastic viewing of migrating waterfowl and other birds. They have even had the occasional sandhill crane. Kootenai features a nice short trail to a lovely waterfall along with a 5-mile auto tour around mainly large wetlands and meadows and is a great road for birding and wildlife viewing. Moose love the wetlands of the refuge.

Fall is a great time to visit all three refuges and any others you may be near in your travels. For more information on all our National Wildlife refuges visit: [National Wildlife Refuge System | U.S. Fish and Wildlife Service \(fws.gov\)](http://www.nwr.gov)

Have a great fall and stay safe and healthy.

Dan Price, President

Refuge Manager's Meandering

If you've been anxiously checking your actual or virtual mailbox every day, jonesing for your fall issue of the Friends newsletter, well, the delay is on me. I've been extraordinarily busy with a myriad of mundane as well as unique refuge issues this summer. The advantage to the delay is I can provide details on some refuge happenings and projects that have congealed in the last couple of weeks.

Let's start with the Spruce Canyon wildfire incident. On July 23rd a fire was reported on Washington Department of Natural Resources land near Spruce Canyon Road northeast of Colville on State Highway 20. Soon after it was reported, embers drifted across Hwy 20, east of Colville, on to refuge lands and into a tight spruce and larch stand with larger diameter slash 4-6 feet deep, the result of that microburst wind event about 6 years ago. The refuge portion of the fire rapidly gained intensity, readily spotting and torching so it was hard to hold in check. It wasn't far off the highway but across the Little Pend Oreille River, so it was a "you can see it but you can't get there from here" situation. The downed timber made it too dangerous to attack the fire with people on the ground so for

several days the fire's spread was moderated by the heavy use of water drops from both fixed wing aircraft like Fire Bosses and various types of rotary aircraft. A Type 3 Incident Management Team was brought in to manage the suppression effort, and a command center and base camp was established at the Colville Junior High School to support the 200+ people involved in the project. After utilizing dozers, timber harvesting machines, Hot Shot crews with chain-saws and lots of Pulaski and shovel work by federal, state and contract firefighters, the incident was deemed contained and reverted back to refuge management on August 3rd for mop up and patrol. The combined DNR and refuge land burned was about 130 acres, more than half on the LPO. That size footprint was a success. We were prepared to see a much larger portion of the refuge burned before it was controlled. Much of the forest was moderately burned, and will recover naturally by natural reseedling from surviving trees. However, about 40 acres on the refuge burned severely and will require replanting to recover within a few decades. We are applying for special burned area recover funding to replant the most severely burned area with western white pine and larch; this will accelerate recovery and provided more valuable white pine forest. Making lemonade out of a 3.5 million dollar lemon.

The prep work on the 721 acre Noman commercial thinning project recently started. Part of the work includes graveling the access road to the new River Gorge interpretive site to make it "Prius friendly". About a mile of Berg Lane and one mile on the south end of Rookery Road will be getting fresh gravel too. The thinning project site is southwest of refuge headquarters, south of the Rhymer Ridge road and east of Noman Creek. Harvesting will start about October 1st and continue through the winter with log hauling on Bear Creek Road past headquarters. The objective is similar to previous commercial thinning projects: improve forest health, increase quality wildlife habitat and reduce fuel loads to enhance resiliency to wildfires.

Two new parking lot/trailheads are under construction. The River Gorge interpretive site trail-

head is partially built and construction of the overlook with a rock wall supporting two interpretive panels begins soon. We're also building a new trailhead/parking lot/interpretive site called Homestead at the Bear Creek Road-Berg Lane intersection. Why? Since we were designing and building the River Gorge interpretive site it was economical to design and construct another auto tour site interpreting the Biarly Post Office, Bear Creek School and the refuge's old field management objective. It will also provide a nexus for additional recreational trails in the future. We've engaged a contractor to design, compose and fabricate three new interpretive panels for the River Gorge site and one panel at the Homestead site. Those will be installed next spring.

Finally, I'm excited to tell you about a project exploring the vast number of moth species inhabiting the refuge. I know what you're thinking: "Did he say moths? What's the point?" We've inventoried plants, birds, mammals, reptiles, amphibians, fishes and even butterflies and bees. But information about moth species inhabiting the refuge was almost non-existent until now. Moths, along with butterflies, belong to the Order Lepidoptera. The larvae (caterpillars) consume enormous amounts of biomass, recycle nutrients, help pollinate plants, and provide food for bats, birds, rodents, reptiles, amphibians and other insects. Since most moths are nocturnal their high density and abundance is under appreciated. We contracted with Dana Ross, aka Moth Man (he was OK with that!) a professional lepidopterist. Sampling 25 sites in mostly ponderosa pine and aspen communities using light traps during a new moon yielded 2,136 individual moths representing 153 species. This suggests a potential for 450 (!) species of moths on the refuge once sampling occurs throughout the entire season of moth activity (April-October). One species he captured may be the first found in Washington, and another species he caught was only the third time it's been documented in Washington. Honestly, they all looked the same to me.



First hour of Spruce Canyon fire



Severely burned area of Spruce Canyon fire



Moth trap

Jerry Cline, Manager, LPO

Refuge Biologist's Report

Another fall is upon us. I only hope that the fall will bring a little rain. Many of us remember the “heat dome“ that settled in over the Northwest in June. Temperatures on the refuge soared to as much as 115° and without rain for almost 2 months. We are coming off the driest and hottest summer on record for the refuge. The National Weather Service is classifying Stevens County as being in extreme drought, the effects of which have been felt on the refuge. Creeks have dried up that I have never seen dry and Potter’s Pond is all but gone. These conditions may be unpleasant for us but can be a matter of life and death for many wild animals and plants. Many wildflowers did not bloom this year losing an entire year of reproduction. Others bloomed earlier than normal or did not produce as many flowers as normal. Animals do not have the option to remain dormant and take the year off. Many may need to take unusual risks to find water. Despite the harsh conditions, life goes on. Deer have fawns, birds nest, and fish spawn and 2021 was no exception. One positive note was that for only the second time two bald eagle nests had young fledge. Two years ago, the eagle nest on Bayley Lake was damaged in a thunderstorm and the nestling died. The eagles built a new nest for 2020 and they have been successful both years since.

We finished the cooperative project with the National Resources Conservation Service at the Kaniksu Unit this year. Back in May and early June a contractor planted 2700 trees and shrubs along the creek both in the area that had artificial beaver dams and in the area where stream channel work had been done around 12 years ago. This closes out this project and hopefully over time the streamside woodland will grow back.

As fall approaches, I for one am tired of breathing forest fire smoke and welcome the return of cooler temperatures and hopefully some fall rain. One of the wonderful things about fall is the changing of the leaves. While we may not have the spectacular mountainsides of red and yellow of New England. Colors on the refuge can be quite nice. Whether the bright yellow of aspen and cottonwoods or the red of mountain maple and various shrubs, fall colors are a welcome sight for many. While many of us enjoy the fall colors, have you ever thought about why so many trees and shrubs shed their leaves in the fall? Scientists have several theories as to precisely why this happens, most theories coalesce around the thought that is a form of hibernation for plants. Most leaves have a lot of water in them and are subject to freezing, creating what is essentially frostbite. Most evergreens have a thick waxy coating on the leaves or needles that protect them from losing water but also from damage in freezing temperatures. Light levels are low in winter and cells in the leaf may actually use more energy than they produce, so dropping the leaves will save energy to keep the rest of the tree alive in lean times. The color comes from the biology of the tree. When fall comes, trees reabsorb the chlorophyll from the leaves. Chlorophyll is the chemical that converts the sun's energy into food for plants. It is green in color and it causes leaves in most plants to be green. Once it is pulled out of the leaves other colors show through. It is the same process that causes your grass to turn brown in the summer. What grasses don't do is the next step which is to cut off circulation to the leaf which is what causes the leaf to die and fall off. Once spring pushes out the hardships of winter, new leaves grow from buds and the cycle starts over. Fall color season is spread out on the refuge. Nine-bark shrubs turn red in mid-August while western larch and quaking aspen may not reach peak color until well into October. So, I hope you can get some fresh air and come out to the refuge this fall for some

leaf "peeping". If you want to get an idea of what is in color at any given time, please call us at refuge headquarters. We are more than happy to talk to folks about visiting the refuge.

Critter of the Season



In view of my discussion of fall colors above I thought I would look at one of our more colorful species. While the refuge and the Inland Northwest is best known for the variety of conifer trees, we do have a few deciduous trees. These include one true maple species. Mountain maple or sometimes called Rocky Mountain or Douglas' maple is one of 4 true maples that are native to the Pacific Northwest. Also known by its scientific name of *Acer glabrum*, it is the only native maple in Northeast Washington. Although mountain maple can form a small tree up to 25 feet in height, it is more commonly a large shrub with multiple stems up to 15 feet in height. It frequently grows along roads and streams but can also be found growing throughout the refuge wherever there is an opening in the trees. Like other maples they have the distinctive maple leaf shape. The flowers are small and green bunched in clusters of 5 to 10. The fruits are called achenes and are the classic looking winged maple seeds. When I was a kid this is what we called "helicopter" seeds.

Maples can be important to many wildlife species as well. Deer, elk and moose will browse on them. I recently read that over 300 species of caterpillars forage on maples. While not all 300

