



The Pileated Post

Quarterly Newsletter Friends of the Little Pend Oreille NWR

Fall 2020

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

Number 74

From the President

The turning of the leaves, the golden colors of larch trees, warm days and cool crisp nights make Fall a great time to visit the Refuge. Colors are already starting to change, and many birds have started their southern migration. Migration season is a good time to look for birds passing through that are not commonly seen on the Refuge. Come out and enjoy the Fall season and escape technology for a short time and enjoy the peacefulness of this local treasure.

Time to talk, briefly, about what has been going on with the Friends of the Refuge. We have still been holding our monthly board meeting via Zoom. We do not have much to report on what is happening locally. As a volunteer group we have not been able to get out and do much this year.

As for fall activities we are still a no go. We have postponed our annual membership meeting and hope to roll it into our annual planning meeting in the winter. That is still a wait and see as we do not have any way of knowing what phase of Covid-19 recovery we will be in at that time. We will keep you posted.

On the National level the Service and Friends groups have been having conversations on better ways to welcome and accommodate diverse groups to our Refuges and the outdoors in general. It has been a touchy subject and there are many ideas on the table. This is an issue that Friend will be working hard on over the next many months and even years. There is no one solution but we must work to make the refuge a welcoming place for all people.

Have an enjoyable fall and stay safe and healthy. As always if you have any question or wish to become a board member feel free to email me.

Dan Price, President

Refuge Manager's Meandering

Let's get the dirty business out of the way first. The refuge restrooms are still closed due to safety concerns associated with Covid-19, both to protect refuge visitors as well as the staff who would be cleaning them. I don't have much more to say about that except that I am working on a plan acceptable to the Regional Office decision makers to re-open them. After over thirty years of natural resource management experience, here I am worrying about managing 12 outdoor privies. It keeps you humble.

I just finished submitting our annual report to the Washington Office about refuge visitor activities and estimated number of participants. This year I noticed a significant increase in the number of visitors hiking, biking and kayaking on the refuge. Judging by the number of kayaks I see on vehicle roof tops around town, kayaking seems to be all the rage and people are using them to explore Bayley and McDowell Lakes. I watch bicycles being unloaded at the headquarters kiosk almost daily, and hikers of all ages are common. I'm guessing it's tied to people's need for Covid-safe outdoor activities.

This is the second day Cliff Ridge has been obscured by smoke from the wildfires in Oregon,

Washington and California. I can't address climate change associated with global warming, that's way above my pay grade. But we continue doing things to make the refuge more fire resistant. We're in the initial planning stages of a new forestry project using commercial thinning to improve wildlife habitat and reduce hazardous fuels. It's centered on the Noman Creek drainage, a small tributary to the Little Pend Oreille River south of Refuge Headquarters. Initially a 780 acre project area, the final size and shape will evolve as the layout and marking is completed. I expect harvesting in the winter of 2021-22. Using a combination of refuge fire crew and a contract thinning crew we're pre-commercially thinning (removing trees too small to have commercial value) about 60 acres along the northern boundary near Narcisse Creek Road. And if the weather cooperates, we'll also broadcast burn a couple of hundred acres on the south side of Starvation Flat, tying into the prescribed burns we've done on the Flat the last couple of years. That will clean up a lot of fuel that's accumulated in the decade since the last broadcast burn while rejuvenating shrubs for winter deer browse. Late this fall the fire crew will burn slash piles left over from the Prospect thinning project. By the way, in October we'll also be planting 2500 blister-rust resistant western white pine seedlings in the Prospect sale area; the last step in that multi-year project. After that we'll just stand back and watch it grow.

Last year we hired a contractor to treat the European water milfoil infestation in McDowell Lake with a targeted herbicide. The lake was surveyed by scuba divers this summer, and while small pockets of milfoil remained, the project was largely successful. The same divers also surveyed Bayley and, drat it, they found milfoil there too. Frankly, I think we've been dodging the milfoil bullet in Bayley a long time seeing's how easy it is to inadvertently transfer some plant fragments from one lake to the other. We're awaiting a full report to begin planning our next anti-milfoil campaign. In the meantime, the unwanted tench and sunfish populations are thriving in McDowell Lake, prompting

the Washington Department of Fish and Wildlife to work with us on a rotenone treatment in mid-October to remove as many of those invasive fish as possible. This "cleansing" has become a regular activity occurring about every 5-6 years. Tench are a very tenacious problem, almost impossible to completely eliminate due to their life style. The sunfish are easier to control. The problem is some people want to enhance the lake's biodiversity by throwing in a bucket of sunfish from some other lake. Both tench and sunfish compete with trout planted for recreational fishing, ultimately reducing the trout population to next to nil. And the cycle repeats itself.

Warm days, cool nights, reddening shrubs and yellowing aspen makes autumn my favorite season on the 'fuge. Come out and enjoy it with me!

Jerry Cline, Manager, LPO

Refuge Biologist's Report

Wow, what an unusual year we have had so far. When this year started who of us even knew the word coronavirus. COVID-19 has certainly had an impact in our work and personal lives this summer. As a result I have had a smaller crew than I have had in several years this summer. Fortunately Morgan Bucher came back for a second season. Having someone already trained really helped with social distancing both in the office and in the field.

After several hot dry summers it was nice to return to a more normal weather pattern this year. Yes we had some hot days that topped 100 degrees but those did not dominate the way they have the last couple of summers. This made for more pleasant conditions for field work this summer than some we have seen.

We have had some great wildlife sightings. Fortunately the refuge has been spared the pine beetle outbreak which has plagued much the

region the last few years. When we have seen pine beetle attacks on the refuge it has generally been restricted to a few trees at a time. There have been several of these along the auto tour in the last couple of years. Most have only killed two or three trees. When these mini-outbreaks have occurred they have been magnets for black-backed woodpeckers. When outbreaks are small like this the trees' own defenses and the birds are able to keep the bugs in check. Black-backs in particular are pine beetle specialists and many a woodpecker nestling has been raised eating them.

Speaking of nesting birds we had a first on the refuge this summer. For the first time we had multiple bald eagle nests successfully fledge young this year. We have had 2 nests for 4 of the last 5 years but one always failed. Two of those were destroyed by thunderstorms and in the other two, chicks died for unknown reasons. This year though the nests at both Bayley and McDowell Lakes had a young eagle fledge. The osprey nest on Minnie Flats was also active this year and adults were often seen fishing along the LPO River right behind refuge headquarters.

Another interesting sighting this summer has been a yearling black bear that has been seen around the shop a few times. This is a good reminder that when you do visit the refuge make sure you secure your food and also your trash. To bears, human garbage is food. We have been fortunate to not have had many bear problems here. Some measures can keep it that way, so keep food and trash inside vehicles when you camp or picnic. If you do see a bear, make sure to give it plenty of space. Stay in your vehicle and do not approach closer than 200 yards if you see one when out of your car. Make noise when hiking, and hike with a group whenever possible. If you carry bear spray make sure you know how to use it before you need it. When you need it there is no time to read instructions.

One of the things you may notice this fall is some work at McDowell Lake again. Unfortunately sunfish and Tench are again taking over McDowell Lake. We are working with the WA

Department of Fish and Wildlife to control those fish in the lake. After this trout will be restocked in the spring. You may see activity there in October. There will be some area closures while the work is being done so if you plan to visit McDowell in mid-October it would be a good idea to call ahead and check on conditions or closures. Otherwise come enjoy fall on the refuge. By the time you read this it should be the beginning of leaf-watching time, with cooler weather.

Critter of the Season



This month I thought I would take a look at a common but rarely seen animal on the refuge. Shrews are small and nocturnal (active at night) animals. One of the most common in our area is the dusky shrew (*Sorex monticolis*). It may look like a rodent but they are not. Shrews are in an order of mammals called Eulipotyphla. This group also includes moles. They are only about 3.5 to 4 inches long with a 1/3 of that length being the tail. Like many long tailed mammals they are quite agile and acrobatic. They are gray to brown in color and they have a long pointed nose compared to mice. They have poor eyesight and like dogs, that long snout gives them an enhanced sense of smell. They are voracious feeders and feed on a variety of insects, spiders, worms and other small invertebrates. They have an incredibly high metabolism and their heart beats around 200 times a minute when they are active. They run quite fast and rarely sit still. Most of them I have seen were in the headlights running across the road. They are most commonly seen around conifer trees and they prefer areas with a lot of leaf litter and pine needles on the ground. They use this for hiding from owls and hunting for

insects. Because of that high metabolism they have to eat every few minutes when they are active. They need to eat about one and a half times their own body weight every day. In cold weather when insects are hard to find they may be active all day long. The females may have as many as 4 litters a year with 4 or 5 young in each litter. Out of these 20 or so young a summer only 1 or 2 live through the first year. They are a staple for many of the small owl species as well as weasels and other small predators. They can live as long as 6 or 7 years but the average is a little under 2 years.

So you may not see these tiny predators on your next visit to the refuge but they are likely all around you sleeping until the cover of darkness. When once again they will be running around the forest floor at warp speed chasing their next meal.

Mike Munts, Refuge Staff

Note from editor. This article is “fill” for the newsletter. Since so little to report on the Refuge has happened (thankfully, in regard to fires), there is less news from the refuge staff. They are simply trying to keep things together. I like to be sure that there are five pages of news. So you get to be exposed to the Fungus Kingdom.

I have been contributing quarterly to the North Columbia Monthly this year with articles about fungi. Based on my career history and what it took to teach a course that depended on real laboratory experiences, and to maintain a research lab with grad students, technicians and Post-docs, it is hard to conceive of how things have deteriorated at the universities due to the pandemic. It can't all be done with the internet.

If you haven't picked up and read a copy of the North Columbia Monthly, you might be in for a treat. Free at many locations in our towns.

Flowering plants as “saprophytes”

There are many flowering plants that lack chlorophyll, the molecule in nearly all plants that converts CO₂ into sugar, using sunlight as the energy source to produce the energy-rich sugars that are used to fuel plant growth. Animals cannot do this, and so are totally dependent on plants to provide the energy that they need to grow and develop. Chlorophyll makes the plants green, from the light that they cannot use and so reflect back to us. Plants that lack chlorophyll are not green. They produce no sugar. So how can they survive? Whatever strategies they use work for many; plants lacking chlorophyll can be found in several plant families that occur from the tropics to the arctic.

Early botanists assumed that such plants must be saprophytes—living on dead organic matter in the soil. They needed no sunlight and were often found in dark places. This was before the discovery of mycorrhizae—the close relationship between the roots of nearly all plants and soil fungi that assist the plants and the fungi to survive. It took a long time before this novel idea sunk in. The idea that organism did not just compete for space and nutrients, but instead established complex relationships to help in their survival, was a difficult one to fit into the simplistic early views of evolution. But, one needs to remember that these relationships evolved during hundreds of millions of years—lots of time for natural experiments to succeed or fail. What we see now is a snapshot of what has been going on for a long time. And it is appealing but wrong to assume this cooperation is altruistic—these organisms were always bent on their own survival, and they happened on strategies that helped them to survive and flourish, and if this helped other organisms of the community, fine.

Surprisingly, the idea that plants lacking chlorophyll are saprophytes still persists among botanists. For example, the otherwise excellent and popular Canadian plant identification books from Lone Pine Press still state that such plants

are saprophytes. The two books we would use in Washington are “Plants of the Pacific Northwest Coast” (1994) and “Plants of Southern Interior British Columbia” (1996). Some modern botany texts also make this mistake. This may be a symptom of the extreme specialization and fragmentation of biologists. Being a generalist is not the way to success in research these days. A comic view of this is that “we strive to know more and more about less and less until eventually we will know everything about nothing”.

Two common and conspicuous plants that lack chlorophyll, both of which can be found on the Refuge, are the Indian pipe, *Monotropa uniflora* (figure 1) and pinedrops, *Pterospora andromedea* (figure 2). Recent work on these plants provides evidence that Indian pipe is connected to some of the trees and shrubs in the area via mycelia of the mycorrhizal mushroom genus *Russula*. Pinedrops appears to utilize false truffles of the genus *Rhizopogon* and perhaps other false truffles. Nutrients (including and especially sugars) flow via the mycelial network from the nearby trees and shrubs to the chlorophyll-less plant, and not at all the other way. So these plants are true parasites on the trees and shrubs and perhaps even on the fungus. Not a simple give-and-take relationship. Clearly there is much more to learn about these associations. On the Refuge, Indian pipe can be found, often as dark brown masses of dead flowers from previous years in dark forests near watercourses, and Pinedrops, which is common, will be seen scattered in dryer forests. Keep an eye open for these two as you travel on the trails in the Refuge.



Figure 1



Figure 2

Newsletter Necessities

Number 74 - Jim Groth - Editor

To send comments, write articles for the newsletter, or to contribute items of interest, please contact:

Editor, *The Pileated Post*
P.O. Box 215, Colville, WA 99114
Email: larchsavage@yahoo.com

The Pileated Post is published quarterly and is mailed to all *Friends of the Little Pend Oreille National Wildlife Refuge*.

Calendar

September

9th - Board Meeting--6:00 p.m.

October

14th - Board Meeting -6:00 p.m.

November

11th - Board Meeting - 6:00 p.m.

Our Mission: The Friends of the Little Pend Oreille National Wildlife Refuge is an independent, nonprofit organization dedicated to promoting the conservation of native fish, wildlife, plants and their habitats on the Refuge, providing educational opportunities, and fostering understanding and appreciation of the Refuge.



Box 215
Colville, WA 99114

Friends of the LPO

Membership Application

Name _____

Address _____

City _____ State _____

Zip _____

Telephone _____

Email _____

Date _____

Annual Membership

____ I would like my newsletter emailed to me
____ Basic Member \$10 _____ New
____ Contributing Member \$25 _____ Renew
____ Supporting Member \$50
____ Sustaining Member \$75
____ Other \$ _____

Please mail, along with a check to:
Friends of the LPONWR
Box 215
Colville, WA 99114