

# Turnbull Wildlife Refuge Friends Newsletter

## Friends of Turnbull President's Report Winter 2023

by Lorna Kropp

### Getting Ready for Spring!!

Most of the activity for the Friends of Turnbull Board in the winter months was focused on getting ready for Spring! Decisions were made to fund two projects: 1) The seasonal FWS Biology Technician position with 50% matching grant for \$15,000, and 2) the Environmental Education Contractor to develop Fieldtrip curriculum modules that will be available to classroom teachers scheduling visits to the Refuge for \$9,000. (project to be started soon)

The Board received the first Quarterly Program Review during the January meeting through a presentation by Molly Dixon, Refuge Biologist, on the Refuge Biology Program. You can find a written summary of her report on page 4 of this Newsletter. Refuge Manager, Cassie Roeder, proposed that each quarter a major program of the Refuge give a report on their goals and scope of work to provide our organization membership with current and accurate information to help us with our advocacy role in supporting the Refuge's mission. The next reports will be from Brian Walker, Private Lands Biologist, and then the Fire Program, and Visitor's Services later in the year.

### On-going Friends of Turnbull Projects: Nature Store and Pollinator Garden and Activities

#### Nature Store

The Nature Store is hopping with new merchandise and new technology, a barcode scanner, to make processing sales much easier and more accurate. This is a perfect time to sign up and become a store volunteer. Being a store volunteer is also fun and very helpful to visitors to the Refuge and our Friends organization. So that is a win, win, win! We hope that about 10 more people agree to give it a try.

Here is a reason why: the sales in the Nature Store for the years 2018 – 2022 were roughly the same each year at \$8,000 - \$9,000, the profits went to project to support the Refuge, particularly the Environmental Education and Biology programs. Last year as we doubled the days the store was open from Sat/Sun to Friday, Saturday, Sunday, Monday the sales more than doubled to \$19,500. Now do the math – for four days and 2 shifts each day equals 8 volunteers (or at least 6 as some volunteers take 2 shifts on a day) each weekend and 4 weekends in a month = 24 – 32 volunteers. At present we have 16 volunteers (including the 4 vols who make up the Management Team) who have been trained and have taken on regular shifts in the store. Those volunteers have been very dedicated and took on more than the ideal of one shift each month. We want to do 4 days open again this year, so we need at least 10 more volunteers to achieve that.

Become an active member of the Friends of Turnbull NWR! Become a Nature Store Volunteer and get out to the Refuge regularly. Many volunteers take the time to do a hike before or after their shift, or take a drive on the Auto Tour route. You get a chance to meet interesting visitors, people come to the Refuge from all over. Please consider giving it a try. Sign up for a training session now. The next Nature Store Volunteer training will be April 20, 2024 at 1 - 2:30 pm in the store. Or you can request a training by contacting: [activities@fotnwr.org](mailto:activities@fotnwr.org).”

Sad News from Carlene Hardt – Heather Johns Bosch, who was an active Friends of Turnbull member and served for 2 years on the Nature Store Management Team from 2019 – 2021 passed away in March, after a 2-year battle with cancer. Condolences can be sent to her daughter, Mrs. Kaitlin Bosch, 9305 S. Spotted Road, Cheney, WA 99004

**Pollinator Garden Committee** – The Pollinator Garden committee members are eagerly watching to see what comes up in the garden space in the parking strip near the Administration Building. After applying mulch to the space for the Spring and Summer seasons of 2023, a number of native plants gifted from the EWU Prairie Restoration Greenhouse (narrow leaf milkweed, rose spirea, lewis flax, Giant Blazing Star, and Yarrow, Wavy leaf Thistle, Nettleleaf horsemint, and blanketflower to our project were planted in the space last Fall. In addition, seeds harvested by Lorna K. and Molly Z. from designated plants on the Pollinator Garden list (Yarrow, Buckwheat, Desert Parsley, Lupine, Gallardia, Balsamroot, and Giant Hyssop) on the Refuge were placed in the ground. The other half of the seeds harvested were placed in winter sowing containers in committee member’s yards and will be planted at the Refuge later this year.

Interested in helping nurture this garden, or helping on workdays, please contact Lorna K. ([activities@fotnwr.org](mailto:activities@fotnwr.org)) or Mike Borysewicz ([maborysewicz@gmail.com](mailto:maborysewicz@gmail.com)) to be alerted for the next group meetings or workdays.

### **Environmental Education Building/Program**

In February, 3 Friends’ group Environmental Education volunteers ( Lorna Kropp, Molly Zammit and Joyce Alonso) helped Jaelyn Wesche, the Americorps Volunteer Wildlife Educator, work on cleaning and sorting through the EE resources in the Classroom Building. The building is now undergoing a renovation to revise the former Office and Storage areas into a space that can be used by teachers and EE volunteers to have access to the Field Trip Resource tubs. As the Environmental Education program is revised and updated this building renovation will facilitate a better use of space and more welcoming use of the educational resources. The resource space is being painted this month and will be open later this Spring.

We have a new **Donation Box** in the entrance area of the Admin building - a bluebird box - beautifully crafted by Bruce Kessler for the Friends. Bruce is Lisa Langlier’s husband and a “friend” of Friends groups. He worked with Nancy Curry and met with Cassie Roeder several times over the last 10 months to work out the details of where the box could be mounted. It is available for donations when the store is not open. Starting immediately after the box was installed, it has received steady donations. **A Big Thank you to Bruce!!**

### **Upcoming events at Refuge:**

#### **April 20, Saturday, Earth Day Celebration Activities and Workday, 9:00 am:**

In cooperation with The Friends of TNWR, The Lands Council, Spokane Audubon, the Forest Service and Turnbull’s Fire Crew, there will be activities and work projects for volunteers and families. The work day projects suitable for all ages will include potting baby trees, removing cages around older trees in the riparian area,

**Tuesdays and Thursdays in April** – Tree Potting workdays half or full days to get ready for the Fall Wetland Restoration projects. Contact Ranger Josh, or show up ready to work at 8:30/9:00.

**May 11, 2024 – Cheney MayFest, 10am – 4pm** on 1st Street in Downtown Cheney. Volunteers to help with our booth welcome. Contact: [activities@fotnwr.org](mailto:activities@fotnwr.org)

**Monthly Bird Walks:** Spokane Audubon member, Joseph Cooney, will be leading Bird Walks at the Refuge on the first Saturdays of May 5, June 1, July 6, Sept 7, and Nov 9. Meet in the Administration Parking lot at 8:00 am.



# Turnbull Trip Report

by Joseph Cooney

On Saturday, March 4th, I conducted a Field Trip at Turnbull NWR. It was well attended, there were seven participants. Some of them had been to our March meeting and had learned a few things about the refuge. We started shortly after 8 o'clock in the Headquarters parking lot. While waiting for any late stragglers I was talking to them about a few birds I had seen earlier that morning from the parking lot. One of which was a Say's Phoebe. We had a quick laugh while trying to explain the call and fortunately after playing the call for them, the Say's Phoebe called back. It landed on the fence line and so everybody was able to get a look at it, in addition to hearing its call.

We started the walk on the Stubblefield Trail and followed that to the turnoff for the Pine Lakes Loop Trail. Once I pick up the Pines lake loop I follow that around and then back to the parking lot. It is still a little bit early, but things are definitely moving about. The walk covered almost two miles and we recorded 17 species. The highlights for me were watching the Marsh Wrens chase each other through the reeds. It was then our attention was set on the sound of Tundra Swans flying our way. We were treated to a low pass of over of 50 Tundra Swans, heading in a northerly direction. One of the gentlemen on the walk got several photos and another was able to record them. I just love the way they sound when they are flying.

I am planning on doing this walk on the first Saturday of the month for this year. This would give folks an idea of when the different species arrive and depart the area.



Turnbull NWR--Pine Lakes Loop Trail and Winslow Pool, Spokane, Washington, US  
Mar 4, 2024 8:01 AM - 9:53 AM

Protocol: Traveling

1.83 mile(s)

17 species

- Canada Goose 9
- Trumpeter Swan 1
- Tundra Swan 50 Fly over
- Gadwall 1
- Mallard 8
- Hooded Merganser 6
- Red-tailed Hawk 1
- Northern Flicker 4
- Say's Phoebe 2
- Common Raven 1
- Pygmy Nuthatch 6
- Marsh Wren 4
- European Starling 3
- Western Bluebird 2
- American Robin 5
- Song Sparrow 13
- Red-winged Blackbird (Red-winged) 75 estimate

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# Biology Program – A Summary of the Report

## by Molly Dixon, Refuge Biologist, to the Friends of Turnbull Board.

*The major programs of the refuge: Biology, Fire, Private Lands Biology, Visitors Service will each make a presentation of the current work, projects to the Friends of TNWR Board and membership through the Newsletters.*

Turnbull Refuge is currently 23,000 acres with public access limited to 3,300 acres. They are acquiring new parcels from sellers who come to them willing to protect and sell their land which is inside the boundaries that are established for acquisition.

The Refuge Biology program is directed by Molly Dixon, with seasonal staff, sometimes interns, and Refuge and FOT volunteers, plus help from almost everyone at the Refuge assisting. The 2024 Seasonal Biology Tech is being 50% funded by The Friends group.

The direction and goals of the Biology program work is determined/informed by the official CCP (Comprehensive Conservation Plan) for the Refuge. There are two additional plans which help inform what projects are worked on/completed; the Habitat Management Plan and the Fire Management Plan.

### **Wetlands Management:**

The CCP Goal # 2 is to “Provide habitat conditions essential to the conservation of migratory birds and other wildlife within a variety of wetland complexes”.

- We have many wetlands at the refuge – more than 130. Twenty-two of these have water control structures, which allow us to manipulate the water levels. Many of the others dry up in summer dry spells.
- Many wildlife use these wetlands, including waterfowl, amphibians, moose, etc., and many plants are dependent on healthy wetlands (e.g. the recently delisted water howellia).

These wildlife and their habitat are at risk due to several factors, including altered hydrology (historical), climate change, and non-native invasive species (like reed canary grass).

### **Restoration and Management of Wetlands**

Molly and other staff are using several techniques to improve the habitat: Strategies to improve wetlands and minimize threats are dependent on the tools that we have.

For example, water level manipulation is dependent on having water control structures. Different types of wetland restoration are dependent on our ability to use heavy equipment (like an excavator or tractor/disk), or for the fire program to have the time and resources to be able to execute and prescribed burn.

### **Monitoring Wetlands**

We must monitor wildlife to inform management actions, and we must monitor wildlife after management actions to make sure that what we did was beneficial, or if we need to change strategies. We can't monitor every type of wildlife, but some waterfowl species are good indicators of wetland health.

Turnbull is an important breeding spot for waterfowl, so we monitor breeding pairs in the spring by going into wetlands and counting breeding pairs of different waterfowl species. We also record water level and vegetation characteristics. We can look at waterfowl trends and how that relates to wetland conditions.

Working together in the complex (along with Little Pend Oreille Refuge and Kootenai Refuge) we are partnering with the Kalispel (project lead), Coeur D'Alene, and Kootenai tribes on a regional waterfowl study to understand wetland use along this part of the Pacific Flyway. This will involve banding and GPS backpacking. The project is beginning this year, but efforts won't begin at Turnbull until 2025.

Turnbull has a number of wetlands which have filled in over the last decades and are in need of wetland restoration to benefit wildlife in the future. Recent restorations include the McKinlay Wetland Restoration Project (2023/24), the Frog Pond Restoration Project (2024) along the Auto Tour Route, and beginning in the fall of 2024, the Finger Ponds Restoration Project.

The McKinlay example of a wetland restoration began in Fall 2023 and will be completed in Fall 2024. It was previously reed canary grass monoculture and didn't hold much water. It had a non-functional water control structure between the wetland and Philleo Lake. The work planned to restore the area was:

1. Disked the reed canary grass bottom to control it;
2. Excavated deeper pools to and increase open water habitat for wildlife and promote growth of other wetland species like cattail and bulrush

3. Hope to promote climate resiliency and better water holding capability.

4. Replaced water control structure to control reed canary grass - we are trying to drown it by holding water at a certain depth.

Recently, Cassie and Darold completed restoration of “frog pond” along the auto tour route. This fall (2024), we will be restoring finger ponds. This will be followed by the FOT community tree planting at finger ponds.

### **Grassland & Shrub Management:**

1. Invasive species control (mechanical or chemical, where appropriate).
2. Seed areas with native seed.
3. We can (but do not currently) use prescribed fire to promote plant diversity and limit succession.

### **Monitoring:**

We map invasive species across the refuge to identify areas that need to be treated and we monitor areas that have been treated to identify success.

## **McKinlay Wetland Restoration (2023)**



Another CCP goal 3 involves the Aspen/riparian habitat Management: “Restore Refuge aspen and ponderosa pine forests to a natural distribution of stand structural and successional stages to benefit forest dependent wildlife.”

Restoration and Management of Aspen - Actions taken to meet this goal are:

1. We fence around some aspen clones or fell ponderosa pines into aspen clones to prevent over-browsing by elk.
2. We host an elk hunt to move elk around the refuge and prevent any area from being too heavily browsed.
3. We plant native trees and shrubs (e.g. at pine creek, finger ponds, McKinlay, all over.)

### **Monitoring:**

We monitor land birds by point counts (good indicators of habitat health). We use game cameras to understand behavior in felled ponderosa pine barriers. We use terrestrial LiDAR to quantify vegetation changes.

### **Ponderosa Pine Management:**

1. We thin areas that have become too dense = poor habitat and increased fire risk.
2. We use prescribed fire to reduce fire risk and change habitat structure (e.g. more bunchgrasses and forbs, less saplings and shrubs).

### **Monitoring:**

We monitor land birds by point counts AS THEY ARE good indicators of habitat health). We use terrestrial LiDAR to quantify vegetation changes.

We can use terrestrial LiDAR to monitor some changes in vegetation (more limited use in grasslands).

### **Management:**

**Spalding’s catchfly planting-grassland habitat restoration.**

This year, we will begin restoring a previous restoration attempt off of Rupp Rd.

### **Monitoring:**

Natural And Planted Populations.

We just began monitoring (2022) invasive species in planted populations so that we can identify invasive species that negatively affect Spalding’s catchfly survival (and can target those species for control). This is grant funded and is what will hopefully fund the rest of the biological science technician salary. The proposal has been submitted and we are waiting for the decisions. (The grant was funded and the Biology technician begins in April, 2024.)

Last year, we also applied for a federal recovery grant with another FWS biologist who does Spalding’s catchfly work at Fairchild AFB. The proposal was for funding a 3-yr pollinator study on Spalding’s catchfly. Funding would go toward a graduate student at WSU who will conduct the research. We received the grant and research will begin this summer!

# Great Success from Bumblebee Volunteer Effort

By Bea Harrison

Rich Hatfield, Xerces Society Bumblebee Conservation Lead, was a little teary-eyed when expressing his gratitude to the Bumblebee Atlas volunteers on the April 8th Zoom presentation.

The Atlas has been such an overwhelming success that he could hardly control his emotions, describing the impact that this amazing Community Science project has had. The over 42,000 bumblebee records collected since the start of the program in 2018 are already making a huge difference in conservation of pollinators in our region and the program is now expanding to 20 other states.

Hatfield's assignment in 2014, was to assess bumblebee status. He and his team began by using museum specimens. This meant looking at dead bees collected over the years and preserved in museums around the country. These collections were analyzed to determine which bumblebees were the most imperiled. They published the results and the Washington Department of Fish and Wildlife (WDFW) began using the data to better manage for pollinators.

But museum specimens had their limitations. There was no data on how much effort went into collecting them, what habitat they were in, and what flowers they were using. They were collected by just a few scientists and tended to be from just a few areas, leaving huge gaps of un-surveyed landscapes. More detailed information was needed.

They learned about a program in the Northeastern United States, where surveyors were killing bees and sending them in to be identified. This got a lot of data, but Xerces did not want to kill bees.

Xerces tried a different approach. They reached out to agencies, such as Washington Department of Natural Resources (WADNR) to send in bumblebee sightings. They put up posters in field offices and other places, asking for help from foresters and other scientists. They were rewarded with thousands of sightings, but still just in a few places. They knew they needed more.

This led to the idea of the Bumblebee Atlas. A map of Washington, Idaho and Oregon was divided into 50 kilometer squares, covering the entire area. When volunteers

were solicited, the response was overwhelming. Training sessions filled to capacity within days. Over 100 people showed up for one in Spokane!

I attended with my friends, and fellow Spokane Audubon members, Tina Wynecoop, and Lindell Hagen. Rich Hatfield was one of the instructors. After the classroom time, we went outside and learned how to capture bumblebees. In the months to come, Wynecoop and I selected a site and did some bumblebee captures and releases. We caught bees at a farm near Riverside State Park. The bees were caught, cooled down to make them calm and then photographed. The plant they were feeding on was recorded and photographed, as well and this and other specific information was then uploaded to the Bumblebee Watch website. We got a thank-you email for each bee we submitted. It was determined that photo-based data is just as good or better than dead specimen-based data. (And the bees fly away and continue pollinating!)



In that same time period, other volunteers were surveying bees all across Washington, Idaho and Oregon. By covering the entire state, all habitat types were surveyed. Some sites had no bumblebees, due to the habitat just being wrong, but that is good data, too

Volunteers also recorded bumblebee nest sites and this data was used to ascertain the ideal environment for nests and the importance of leaving areas for nesting and overwintering.

What got Hatfield so emotional, I think, was that not only did he get a great number of volunteers submitting good usable data, but that this data is already being used far and wide for conservation! Land managers, lawmakers, conservation groups and others are using the readily available data to plan and implement new strategies to save bumblebees. The interactive map that was developed is easy to navigate and full of useful information. The data is also being used to determine which bees need protection through the Endangered Species Act.

The program is now expanding to California, Colorado, Iowa, Georgia, Kansas, Minnesota, Missouri, Montana, North Carolina, North Dakota, Nebraska, Nevada, South Carolina, South Dakota, Tennessee, Utah, and Wyoming.

To learn more about Bumblebee Atlas or to volunteer, go to the Bumblebee Atlas website at: <https://www.pnwbumblebeeatlas.org/about.html>.



Photos by Bea Harrison

A colorful poster for Cheney Mayfest 2024. The background is dark blue with a central graphic of three overlapping ribbons in purple, yellow, and blue. The text is arranged in columns and sections. On the left, it lists the Friday event (May 10th, 6PM-10PM) featuring The Kelly Hughes Band, Lite Feet, Country, and Line Dancers. On the right, it lists the Saturday event (May 11th, 10AM-4PM) with activities like Cornhole Tournament, Car Show, Local Eats, Vendors, Live Music (featuring The Jim Bury Band, Alchemy, Hermano Kuya, Plaid Cats, The Sifters, Travis Henry &amp; Co., and Joe Tanguay), Petting Zoo, Kid Zone, Art Alley, and Spokane Aerial. The website CHENEYMAYFEST.ORG is at the bottom left, and social media icons for Facebook and Instagram are at the bottom right. The artist credit 'ART CONCEPT BY PEPPER SILVERS' is at the bottom center.

Friends of Turnbull NWR  
P.O. Box 294  
Cheney, WA 99004

*The Friends of Turnbull National Wildlife Refuge, a nonprofit organization, supports the mandate of the refuge to protect and enhance wildlife and their habitats through education, research, habitat preservation and restoration.*

Got email? Add it to your membership form for quick activity updates!

### Membership Application

YES! I want to support the Friends of Turnbull National Wildlife Refuge and its programs with my membership.

Name \_\_\_\_\_

Address \_\_\_\_\_

City, State, and Zip \_\_\_\_\_

Daytime Phone \_\_\_\_\_

E-mail \_\_\_\_\_

#### Annual Membership: (Circle one)

Individual \$15

Family \$25

Business/Group \$35

Patron \$100

Benefactor \$500

Donation \$\_\_\_\_\_

Endowment Fund Donation \$\_\_\_\_\_

Amount Enclosed \_\_\_\_\_

New \_\_\_\_\_ Renewal \_\_\_\_\_

I would like to volunteer \_\_\_\_\_

Nature Store \_\_\_\_\_

Committee \_\_\_\_\_

Environmental Education \_\_\_\_\_

Where needed \_\_\_\_\_

My check is enclosed payable to

Friends of Turnbull N.W.R.

P.O. Box 294

Cheney WA 99004