Turnbull Wildlife Refuge
Friends Newsletter

Friends of Turnbull
Summer 2025

by Lorna Kropp

President's Report

Advocacy to support Public Lands – While the sale of Public Lands mentioned in the last newsletter is off the table, the status of the Land and Water Conservation funds has been cut by 50%. The LWCF are an annual designation of $900,000 from Oil and Gas leases, to be used for public land purchases and other projects has been drastically cut. Turnbull NWR has benefitted in the past years from the LWCF moneys to purchase additional land for the Refuge.

Resignations, firings and retirements have taken an additional 25% leaving approximately 1750 staff to run the entire Refuge System as of June 2025. No refuges are fully staffed, and more than half of refuges have zero staff on site. Many refuges are closed to the public and are completely unmanaged.

Check the National Wildlife Refuge Association for more advocacy information:
https://www.refugeassociation.org

Board News: The Board completed the discussions and writing a process in collaboration with Refuge staff for funding requests from the Refuge.

The mission of the Friends of Turnbull National Wildlife Refuge (FOTNWR) is "To advocate for and support the mandate of the Turnbull National Wildlife Refuge to protect and enhance wildlife and their habitats through education, research, habitat preservation and restoration and compatible public uses." In accordance with its mission, requests for funding support from Turnbull National Wildlife Refuge (TNWR) staff to the FOTNWR Board should be in direct support of environmental education, research, and habitat preservation and restoration on the refuge.

We have designated two occasions during the budgeting year when projects for funding are presented to the Board Meeting for action.

At the May Board meeting, we received a request to purchase additional PPE equipment for Refuge Planting and Potting Workdays (work gloves, smaller shovels, etc.) The April/Earthday event pointed out the need with larger groups coming to help. Almost 200 volunteers helped pot up 7500 baby trees and shrubs for planting later this year. The trees included: 2500 Aspen, 1800 Cottonwood, 500 Hawthorn, 500 Woods Rose, and 1000 Red Twig Dogwood, and some Alder. There was such enthusiasm for volunteering that the potting task was completed in one month rather than the two months projected! Thanks to everyone who pitched in to help!

At our April Quarterly Meeting, the Board had the chance to meet Declan Ramírez, an intern with the Maintenance and Infrastructure Fellows Program (MIFP), who was close to finishing his 12 month assignment at Turnbull NWR. His project entailed 1) hiking to and describing every wetland on the Refuge in terms of plant dominance, evidence of animal use and other observations and 2) to document every ditch, water structure, and culvert on the refuge,

The data he collected will be used to provide management with information to make decisions on which wetlands to focus on for active restoration and management and those more appropriated not managed and left to their current transition path. The data also provides important information for decisions on using limited resources which control structures are the priorities for repair or replacement. There was a Wetlands Planning and Strategy meeting in June at the Refuge.

(Cont. on page 2)

See the Refuge Report from Cassandra "Cassie" Roeder, Refuge Manager, Deputy Complex Project Leader for more results of the Wetland Restoration Planning and project that will be soon underway.

The Board meets quarterly with Refuge staff to hear about their work and have a chance to ask questions. Friends of Turnbull NWR members are welcome to attend the Quarterly meeting sessions with the Refuge staff reports. Watch the Website calendar for more information about the times. Normal Board meetings are held the 3rd Thursday at 4pm at Wren Pierson Community Center in Cheney. The Quarterly Board Meetings are held on 3rd Fridays at 10am, at the Refuge Conference Room. (October, January, April, July)

May Visitor's Service Community Partners Scope Meeting "Visitor Services Action Plan"– community partners represented: FOT, The Lands Council, EWU, Spokane Tribe, Spokane Audubon, WA Department of Fish & Wildlife, WA State Parks, Spokane Conservation District, Pacific Education Institute, NEW ESD 101, and USFW staff from the Regional Office in Portland. The topics of discussion included: Building Capacity (aka doing more with less); Strengthening Partnerships, and Environmental Education at Turnbull NWR.

It was a good opportunity to hear about how each of the partner groups currently interacts with the Refuge and identify potential groups not being reached. We expect to hear more soon as the report from all the discussions is shared.

May 24, our featured Activity was a Wildflower Walk on the Refuge with leadership from the Eastern Washington Native Plant Society. Alejandro Torres led a group on a trek that stopped at every flowering plant to identify and admire. We saw May flowers: Camas, Desert Parsley: big and small and Nine Leaf, Triplet Lily or Triteleia, Larkspur, Old Man's Beard or Prairie Smoke, Whitestem Frasera, Golden Currant, Strawberries, Miner's lettuce, Sticky Geranium and more, including swans!

Find new items in the store: new Moose, long-sleeved, hooded T-shirts, Family STEM kits for Owl Pellet activity, and Bug Soother natural bug/tick spray. Also, we have a revised version of the T-shirt we call the "poster" shirt – the amount of screen print has been reduced to allow the shirt color to come through. Our 3rd brochure – Wildflowers listed by month they are blooming, is now available in the Nature Store for a suggested donation of $1.

Looking ahead to Fall, the "Find Your Wild" Fundraising event and The Friends of Turnbull Annual Meeting will be October 11, 2025

The Fall Planting Day (end of September-beginning October) will be held at the Jolly Jack unit on the Refuge – Cheney-Spangle Road. Watch for the date and join the work party!

It is annual Membership Renewal Time!! Did you remember to renew your membership at the end of June 2025 or the beginning of July. If not, it is easy to do – send a check to the PO Box 294, Cheney, WA 99004; or go on line to the membership page on the website and use the paypal app to renew your membership. https://www.fotnwr.org/membership.html

We received word that a longtime EE volunteer and wildlife photographer at the Refuge, Chuck Kerkering, has died. (April 20, 2025) We recently received a memorial gift in his memory. Thank you to the family and we are sorry to hear the news. A Celebration of Life will be held – August 5, 2025.

John Charles Kerkering "Chuck"
Service of Remembrance:
Celebration of Life
August 5 (Tues.) 2:00 p.m. - 4:00 p.m.
Rockwood South Hill Event Center
2903 E 25th Ave, Spokane, WA 99223

In lieu of flowers, donations can be made to Friends of Turnbull Wildlife Refuge at www.fotnwr.org.

Chuck's love of the outdoors never waned.
Photo by Sandra Rule

Carlene's June Jaunt

Almost 100° today, but there were many nice, cool mornings in June to walk at Turnbull and photograph the animals. On Winslow Pool, I observed that there were at least 7 turtles on what I call "turtle island." They were basking in the morning sun - a way to regulate their body temperature since they are cold-blooded reptiles. And farther along the trail was still a splash of color with the wild Sweet Pea flowers

As I looked out over Middle Pine Lake, I saw a Great Blue Heron waiting patiently for its next fish meal. It remained motionless in the shallow water for quite some time as it waited for a fish to come within striking distance.

On the far side of Middle Pine was a pod of American White Pelicans constantly gliding around to capture their next meal in their pouches. While I was watching, other Pelicans flew in to join them. The pods seem to be moving a lot from lake to lake on the refuge. Its nice that many visitors have an opportunity to see them.

For the first time this summer, I spotted an Osprey, also known as the fish hawk, and in its talons was a fish! It has specialized barbs on it's pads, hooked talons, and a reversible outer toe so it can easily grip a slippery fish with two toes pointing to the front and two pointing to the rear.

I am happy to announce that on June 24th a pair of Trumpeter Swans on Kepple Lake had a cygnet! Swans typically lay 3 to 8 eggs per clutch so I was pretty surprised to see only one. The cygnet has grown quite a lot in nine days. Currently there's a swan family on Cheever AND one on Kepple Lake!

One day, when I was near the end of the Pine Creek Auto tour there was a Great Blue Heron perched on the top of a log overlooking a small pond. It was probably scanning for fish or maybe just resting. The Heron sure makes a striking picture!

Refuge Updates 7/17/2025

Cassie Roeder

Upcoming events:

As we get closer to fall it is time to get ready for construction on the refuge. This year we have three restoration/ enhancement projects we are working to implement (see the map).

Beaver Pond Enhancement: The most visible to the public will be work on Beaver Pond starting in August. This small wetland is just downstream from the Kepple Lake. It was treated with a prescribed burn in March and will be mowed soon in preparation for construction. Visitors will see us moving dirt to provide greater water holding capacity and encouraging desirable vegetation. We will install a small water control structure on the south end to help manage water levels and allow water to be drained for future management needs.

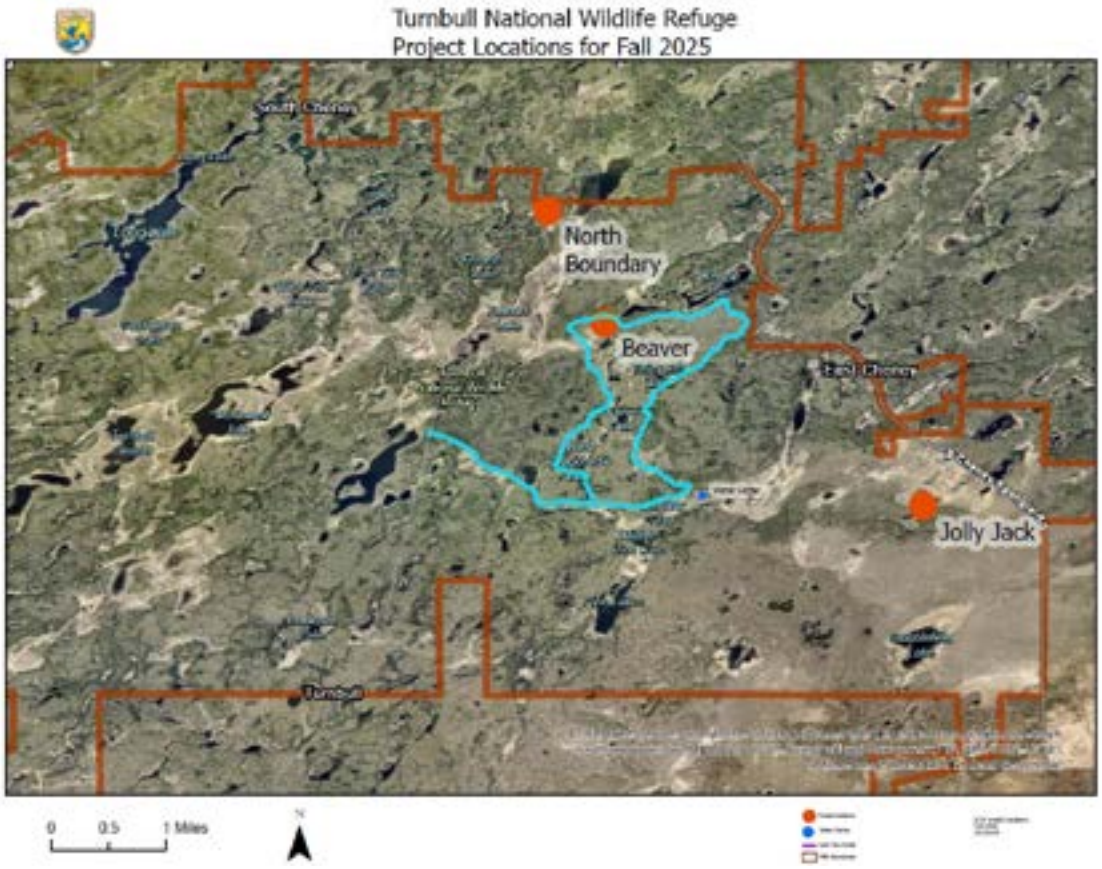
Jolly Jack Restoration: In early September we will start work on the Jolly Jack wetland restoration. This project will also include a water control structure and moving dirt to increase water holding capacity. We also plan to hold this year's community tree planting day at the Jolly Jack unit.

North Boundary: Lastly, we will be working on a small wetland along our north boundary. Over the past two winters we have had commercial harvest activities along the north boundary of the refuge and into Reeves Lake. It is important that we evaluate the remaining habitat and take on additional restoration projects that will complement the existing management work in the area.

Fall will also bring the **Community Tree Planting Day**, as I mentioned above, we have decided to move the work of this event from the riparian at the office out to Jolly Jack. The event will take place on a Saturday between the end of September and Early October. FOTNWR, The Lands Council and the refuge will begin planning in a couple weeks. Volunteer sign-ups should be out mid to late August.

DOI request for feedback:

Some of you may have noticed a new sign up at the entrance kiosk and in the Visitor Center requesting feedback on the refuge. (per Executive Order #14253) It asks for comments on areas that need repair, services that need improvement, and any signs or other information that are negative about either past or living Americans or that fail to emphasize the beauty, grandeur, and abundance of landscapes and other natural features. I would encourage members of the Friends group to respond to the request for feedback.



FOT/Rabe Research Grant

Lorna Kropp and Peggy O'Connell

FOT/Rabe Research Grant Committee awarded two grants for the 2025 field season to two students for two projects which will be very helpful to the Refuge management. This year the committee received 3 proposals and after careful consideration decided to ask the Board for additional funds to award both. This year's awards go to two students from WSU for the first time.

The first will examine the pollinator landscape and floral resource-pollinator ecology of the TNWR. Plant resources will be identified, quantified in three different habitats on the refuge and pollen collected from plants for nutritional analysis. Pollinators will be collected at the same sites, photographed for identification, and released. The project will be conducted for a year excluding winter months. This project will contribute to a nationwide bee nutrition database for North America, including other wildlife refuges. Pollination ecology is an increasingly active area of research on TNWR, through coordination and collaboration with other pollination studies on the refuge that have different approaches, this study will provide the refuge with additional insight into this topic that is important for both management and restoration.

The second addresses the effects of timber management, specifically soil compaction and fire, on soil properties and water chemistry. In addition, it will examine the effects of management-impacted soils on mosquito development and behavior. Insects can be useful bioindicators of water quality and understanding how management practices affect them is important because they transmit pathogens such as West Nile Virus. Soil samples will be collected from sites representing three treatments, compacted, burn, and control, and analyzed for chemical and textural composition. Mosquito larvae will be raised on soil extracts from each treatment as well as on standard water used in mosquito lab studies. In addition, soil extracts will be provided to gravid females to compare oviposition preference. This study is noteworthy because it represents a collaboration between three area universities: Washington State University, Eastern Washington University, and Gonzaga University.

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Trumpeter Swan family
Photo by WDFW

Friends of Turnbull NWR - Pollinator Garden Update

Mike Borysewicz

This is year 3 of our demonstration Pollinator Garden, located in the strip within the parking lot of the Refuge Complex parking lot. Year 1 was devoted to weed control; Year 2 we added small plants both purchased from Plants of the Wild, Desert Jewels, and some gifted from the EWU prairie restoration project. About 40% of the plantings seem to be taking hold and surviving.

Now in year 3, we have added about 40 more plants (Wyeth Buckwheat, Sulphur flower Buckwheat, Lewis Blue Flax, Common Yarrow, and Showy Fleabane). The Pollinator Garden committee members have set up watering, done some weeding and other garden tasks. Other FOT members who are interested are encouraged to contact Mike Borysewicz to volunteer to join in the care of the garden.

When the whole Refuge is a pollinator garden, why are we adding more in this place? Is this garden really to help the bees? Well, yes, but it is more about helping visitors observe and learn about the native plants which are suited to our native pollinators. A lot of our "modern" horticulture has promoted exotic species to be planted in our home landscaping, and that is not great for native pollinators. So, this pollinator garden is really as much for our learning as it is for the pollinators! We hope to begin working on telling that part of the story in the next years of the garden development.

"Solo"
The unlikely legacy of a lone trumpeter swan, and the long journey to restore his species.
Apr 21, 2025
Written By

Laurel Smith

Solo (left) and his mate (right) at their nest site at Winslow Pool in 1986.

The two trumpeter swans were the last remaining breeding pair from a reintroduction project that began in 1963. In the spring of 1988, hopes of a decades long effort to reintroduce trumpeter swans to Washington's Columbia Plateau rested on a single breeding pair at Turnbull National Wildlife Refuge.

The pair attracted a lot of attention. With their bright white plumage and black bills, trumpeter swans were a rare sight. They were also huge - trumpeters are the largest living waterfowl in the world - weighing in at over 25 pounds and boasting a wingspan stretching 8-10 feet. This big charismatic pair had chosen a very public nesting site on an island in Winslow Pool, just 30 feet from the entrance road. The pen (female swan) could easily be seen incubating her clutch of eggs while the cob (male swan) stood watch.

The sight was short lived. Before any cygnets could hatch, the female was killed by coyotes and all their eggs were destroyed. The male escaped, leaving a small window of hope that he would find another mate and help restore the swan population. But those hopes slowly dwindled as he spent the next 21 years mostly alone. Observers affectionally nicknamed him "Solo."

Solo's story began decades earlier.

Nesting attempt by a three-year-old swan who was translocated to Turnbull National Wildlife Refuge in 1963.

The nest was abandoned later that season. The following year would mark the Refuge's first successful nest since the start of the Trumpeter Swan reintroduction project started in 1960.

Starting in the 1960's, Turnbull National Wildlife Refuge became the site of an ambitious effort to restore trumpeter swans to eastern Washington, (they had been hunted to the brink of extinction by the 1930's). Over a four-year period, 37 cygnets were introduced to the refuge, and by 1967, the first successful nests signaled hope for a growing population.

But despite yearly nesting successes, the flock struggled due to high mortality rates. Swans hit power lines, were shot, predated, or simply disappeared. By 1972, despite over 50 cygnets hatching from the original introduced birds, only 32 total swans were counted at the start of year.

An elementary school group observes a trumpeter swan at Middle Pine Lake in 1970. According to annual narrative reports, the trumpeter swans were very popular with visitors and students. |

In 1976 the supplemental feeding and pond aeration program that kept Winslow Pond from freezing and sustained a resident winter flock was discontinued to encourage the birds to migrate to better winter-feeding grounds. The swans dispersed as planned but each year fewer and fewer returned.

Adult trumpeter swan killed after colliding into a powerline in 1978.

Assistant Manager Jack Hagan and Clerk Rick Potter about to catch a trumpeter swan for banding purposes in 1978. Despite banding efforts and surveys in wetlands across the northwest including Canada, most of Turnbull National Wildlife refuge's trumpeter swan population vanished.

What happened to most of those swans remains a mystery. Some were found dead, but most simply vanished. Aerial surveys and Audubon Society observers scoured wetlands across the northwest including Canada, yet the birds were never accounted for.

By 1980 Solo and his mate were one of the just two nesting pairs that were reported on the refuge. The future of the reintroduction project looked bleak. In the Refuge's 1980 annual narrative report Refuge Manger Donald White stated, "future introductions (of trumpeter swans) would be futile unless high adult mortality can be controlled, or trumpeter swan distribution becomes more widespread."

Refuge staff band the last nesting female trumpeter swan part of a struggling reintroduction project that started

in the 1960's. The bird later was killed by coyotes while incubating her eggs in 1988. Her mate was dubbed "Solo" as he spent 21 years mostly alone after her death

Across the region trumpeter swans faced similar struggles.

By the time Solo's mate was predated in 1988, trumpeter swan reintroduction projects across the Northern Pacific Flyway (an area stretching from the Northwest United States to Alaska), were reporting similar struggles. Management plans from Pacific Flyway Council echoed Turnbull National Wildlife Refuge's setbacks. Across the Pacific Flyway, biologists were also seeing hunter-caused mortality and powerline collisions. Additionally poisoning as a result of lead shot being ingested by waterfowl,

including swans, was on the rise, with an increase in mortality documented in Washington State in particular.

Solo, but not alone.

Solo stretches out his wings in 2009, when he was estimated to be at least 34 years old.

Amid all the losses, Solo remained and became a beloved fixture at Turnbull National Wildlife Refuge. Though his identifying band had long since broken off, Solo was unmistakable. He remained a year-around resident if there was open water, and in years the ponds froze, he appeared within days of the spring thaw. Even more distinctive was his daily morning routine of flying up and down Pine Creek trumpeting. Staff and visitors alike expressed deep affection for the lone bird.

In 2009, refuge biologist Mike Rule estimated Solo to be at least 34 years old based on records that he was part of one of the 1980's breeding pairs. This was extraordinary as wild trumpeter swans were known to live just 20 to 30 years.

Despite his age, and to the surprise of Solo's devoted fans, that spring he and a new mate built a nest and hatched four cygnets - the first to hatch on Refuge since Solo fathered cygnets 21 years earlier.

Solo and his mate care for their five cygnets in 2010.

The event made headlines across the region, with newspapers like *The Seattle Times* and *The Oregonian* picking up the story. Solo became a local celebrity. Community members, refuge staff, and birders tracked the progress of his family with growing affection. The following year, Solo and his mate returned with three of their fledged cygnets and raised five more that summer. It was a second unexpected chapter in a story that had once seemed finished, and a spark of hope for the restoration of trumpeter swans in eastern Washington.

A new Beginning and a Tragic End

In January of 2011 a flock of 10 swans believed to be Solo, his mate, and their cygnets was spotted at Badger Lake just south of the refuge. One of the swans appeared sick. It was captured and taken to the wildlife veterinarian at Washington State University where the swan died from complications associated with chronic lead poisoning. The swan was determined to be male and while there were no identifying markers, Solo's disappearance that year all but confirmed that he was the poisoned bird.

While Solo's devoted supporters mourned his loss, they continued to visit the refuge and watch over his cygnets and his widow, who eventually found a new mate.

Today, Turnbull National Wildlife Refuge sees two or three pairs of trumpeter swans successfully nesting most years. While the swan population still falls short of the

(Cont. on page 10)

ambitious goals set during the 1960s restoration efforts, there is much to be celebrated.

Observed trumpeter swan mortality at Turnbull has declined in recent decades, thanks in part to a combination of policy changes, education, and habitat stewardship. In 1991, the federal government banned the use of lead shot for hunting waterfowl due to its devastating impact on wildlife, including swans. Long-term public outreach and environmental education have helped shift hunting practices and attitudes. Meanwhile, the refuge has continued to actively manage wetlands and remove hazardous powerlines wherever possible.

Refuge Biologist Molly Dixon works to restore habitat by planting native trees with volunteers at Turnbull National Wildlife Refuge in 2024.

Though Turnbull now supports a small but seemingly stable swan population these gains can't be taken for granted. According to the *2025 U.S. State of the Birds Report*, despite seeing increases in waterfowl and waterbirds over the last 50 years, there is now a downward trend in populations largely due to habitat loss and degradation.

Addressing these declines, especially among migratory species, is a complex issue. At Turnbull, refuge biologist Molly Dixon confronts these challenges daily as she monitors the health of the wetlands and wildlife species.

"Conservation requires cross-collaboration with agencies, groups, and individuals, all of whom may have differing priorities, goals, and resources," said Dixon in a 2025 interview. "Collaboration is critical - not just to improve habitat connectivity and quality, but for sharing trends and best practices. You can't do conservation in a vacuum - it just wouldn't work."

In the end, Solo's ability to inspire and bring people together may be his greatest legacy. The connections he sparked between individuals, communities, and the land itself may be exactly what trumpeter swans, and all our wetland species, will depend on to survive.

Once the display pond for the 1960 trumpeter swan reintroduction project, Winslow Pond at Turnbull National Wildlife Refuge continues to be managed today to provide high quality habitat for native species.

A trumpeter swan flies overhead at Turnbull National Wildlife Refuge in 2012.

New Biological Technicians at Turnbull NWR

Hello, my name is Weston Rantamaki, and I am a Biological Technician here at Turnbull National Wildlife Refuge this year. My primary focus and duties will be to control invasive and noxious weeds. I have lived in Northeast Washington for five years after having moved here from the Upper Peninsula of Michigan. I graduated from Washington State University with a Bachelor of Science in Biological Sciences, mainly focusing on Ecology. I have visited Turnbull a few times before coming to work here and love the refuge for the protection it offers to the diverse ecosystems we have. I came to work for US Fish and Wildlife after having spent time with Washington Fish and Wildlife. I plan to continue working in this field and hope to one day work in policy making and have a direct impact on wildlife and habitat conservation.

Weston Rantamaki

Hello! My name is Taylor Pazderski, and I am the Biological Science Technician (Wildlife) here at Turnbull NWR. I grew up in the Adirondack Mountains of New York, and I've long held a deep curiosity for both the living and non-living elements of the natural world. In 2023, I earned my Bachelor of Arts degree in Environmental Studies and Biology from The State University of New York at New Paltz.

I began my career with the Student Conservation Association (SCA) at Blackwater NWR in Maryland. During that time, I gained practical experience working on invasive plant species management and conducted a variety of biological surveys, focused on wading birds, deer herbivory, and insect pollinators. I continued my work with the SCA at the Sam's Point Area of Minnewaska State Park Preserve in New York, where I conducted ecological monitoring and research on Timber Rattlesnakes, Tiger Beetles, songbirds, and both endangered and invasive plant species, while also leading public educational tours. Most recently, I returned to Blackwater NWR, as a wildland firefighter with the US Fish and Wildlife Service, supporting prescribed fire operations for habitat management.

I'm incredibly excited to continue to expand my knowledge at Turnbull NWR and to explore its unique ecosystems and biodiversity further! The aromatic smell of the Ponderosa Pine trees on a warm day, and the ecological diversity of the refuge are my favorite aspects about this landscape. In the future, I aspire to become a Wildlife Biologist with the USFWS, working with a variety of different species across diverse environments.

Taylor Pazderski,

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