

Turnbull Wildlife Refuge



Winter 2016 4th Quarter

Friends of Turnbull N.W.R. Quarterly Report

Volume 19 Issue 4

Message from the President

Dear Friends of Turnbull Members,

I have been privileged to live near public lands all my life. My Grandfather and Uncle were career US Forest Service, another uncle and my father were smoke jumpers for USFS and a ranger for the Park Service at Glacier National Park. I grew up with the wonder of our nation's forests and parks. The United States led the world in conservation, which resulted in the Refuge System and National Parks Service. While these organizations have different missions they are jointly a legacy for our nation.

As a volunteer at Turnbull National Wildlife Refuge, I have grown to love what the Turnbull encompasses. A refuge for wildlife and a unique part of the Channeled Scablands preserved for our grandchildren. There is also a dedicated Refuge staff who work diligently to develop community partnerships, which benefit programs at the Refuge. In particular, the premier environmental education program under Sandy Rancourt's able hand reaches over 8,000 students in Eastern Washington. It is done with grants, funds raised by Friends of Turnbull and other organizations, the help of many volunteers! As a teacher, I appreciate the interns who came into my classroom and taught my students about taking care of the environment so their children could enjoy wildlife and open spaces.

We need to be concerned for our public lands. There is a small, but vocal group who would give or sell our public lands. Some currently sit in Congress. This morning I received the following email from the

National Wildlife Refuge Association, which is a call to arms. I have included the body of the email in its entirety:

As a new Administration comes to Washington, DC, on January 20th, now is a critical time for us to work together as refuge supporters and members of the Friends community to protect our National Wildlife Refuge System.

If we wish to galvanize support and make a difference in Washington, DC, it is essential to be familiar with, and have relationships with, your newly elected or re-elected congressional leaders.

As refuge supporters and members of the Friends community, what can you do to help?

- Subscribe to the Refuge Association's Monthly Flyer and Action Alerts to stay informed on refuge issues and find out how you can take action
- Learn about effective solutions to Make Your Voice Heard in Washington, DC

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Friends of Turnbull Nature Store

Marian Frobe

Another season has been completed. We have lost a few volunteers and gained a few, so hopefully next season will be as successful as this one has been. I see that April 1st and 2nd will be our opening weekend in 2017.

Our profit for 2016 was \$2339.83, which is almost our best year. Winterfest was a little more profitable this December. The store also took in \$215.00 in memberships and \$228.33 in donations. The donations were down from the prior year, but there were the usual activities, so I guess it was just a different year.

In the next few months before the store opens for the season, I will be reordering our stock of books and shirts. Many book titles need to be restocked, and we are very low on some of our T-shirts, so I will probably reorder all 3 designs that seem popular with our visitors. Some of the other things like FOT pins need to be reordered, and the Audubon bird toys. I also want to look into getting refrigerator magnets with scenes from the refuge on them. Visitors often ask for these.

I am still looking for that person who might be interested in learning the store operation. If you think that is something you'd like to do, it doesn't take a great deal of my time, but I'm thinking with new technologies, etc., it's probably time for a fresh look at how we do things. Call me if you are interested. Also, if you would like to volunteer to help out at the store, please call me, Marian Frobe, at 328-0621 or at rrfrobe@msn.com; or Lizzie Riesenberg at 991-2604 or lizzieries@gmail.com. Or check the "I want to volunteer" box on your membership form and we will contact you.

THANKS TO STORE VOLUNTEERS!

By Marian Frobe

Thanks to all our store volunteers in 2016. Our net profit was \$2339.83, almost our best year. It made a difference having the Volunteer Services person, Deanna, keep the store open during part of the time during the week. I am especially grateful to Lizzie Riesenberg, who continued to do an excellent job of the scheduling for us in 2016. The following people worked for the Store during 2016 and deserve our recognition and gratitude:

Joyce Alonso	Cathy Lauritsen
Barbara Arnzen	Jim McDonald
John Barber	Denise Mutschler
Kathy Barnard	Kevin & Mary O'Reilly
Pam Carsey	Joanne Powell
Nancy Curry	Lizzie Riesenberg
Pat & Jerry Johnson	Randy Saylor
Russ Johnson	Richard & Sandra Sollie
Polly Kaczmarek	Jo Trilling
Rymii Kaio	Kathy Wilkes
Barb Kehr	

I hope I have not overlooked anyone. You will notice a few new names this year. My thanks for all your help, and I look forward to another year of everyone's help in keeping the store open for the public. Remember, if you or someone you know would like to spend time at the refuge helping the Friends and the public, give me or Lizzie Riesenberg a call, or check "I would like to volunteer" on your membership application. See the Store News for contact numbers.

President: Molly Zammit molly.z@comcast.net
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Nancy Curry currynancy@aol.com
Kelissa Owens wildrefuge@fotnwr.org
Jo Trilling j.a.trilling@comcast.net

Visit our great website!
www.fotnwr.org

- Learn about the impact of the Friends community to protect and conserve refuges
- Mobilize members of your community to send letters to your congressional leaders about important refuge issues
- Make sure that your lawmakers in the House and Senate are subscribed to your Friends organization's monthly newsletter
- Congratulate your congressional leaders on winning their election and continue developing a dialogue to build strong relationships with them
- Schedule a meeting with your members of Congress to talk about your local national wildlife refuge, the importance of public lands, the values your refuge brings to your local community and its economy, and what your lawmakers can do to help
- Write Letters to the Editor in your local newspaper about the benefits your local national wildlife refuge provides to your community and the importance of public lands

Why are we talking about this now? Well earlier last week, the House GOP made a rules change that makes it possible for Congress to sell off public lands without considering the economic value they provide to the American people. Throughout 2017, we expect there will be many anti-public lands bills introduced in the House, and we need refuge supporters like you to let Congress know that the removal of public lands is not the will of the American people.

Thank you for standing up to support the National Wildlife Refuge System and all public lands.

Sincerely,
 The National Wildlife Refuge Association
 As a collective group dedicated to supporting our mission: To support the mandate of the Turnbull National Wildlife Refuge to protect and enhance wildlife and their habitats through education, research, habitat preservation and restoration, I am calling on everyone step up and to collectively let the public know that our public lands are in danger!

There are several ways you can do this: sign-up for the Monthly Flyer and Action Alerts referred to in the above article. Contact our members of Congress and tell them how important and valuable our public lands are to the nation! (Contact information is included at the end of the article) As you are able, volunteer at the Refuge! Learn what different Friends communities are doing to help the Refuge System. If we act as a collective group we can make a difference!

Molly Zammit

Cathy McMorris-Rogers:

Colville
 555 South Main Street
 Colville, WA 99114
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 Spokane, WA 99201
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Patty Murray

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Activities Report

Lorna Kropp

For activities or other information you would like to let Lorna know about, here is the link: fotnwr.org/activities.html

Spring Beginning Bird Watching Classes scheduled

The Friends of Turnbull will be sponsoring the series of Beginning Bird Watching Class outings again this year on the first Saturday of April, May and June. You can pick the date, which works best for you and your family and plan to join in the fun and adventure. Spokane Audubon Society and FOTNWR member, Joyce Alonso, will lead the classroom session followed by a walk on the Refuge to see which birds we can see.

Meet in the Classroom by 8:45 am and then the group will be walking from 10:30 – 12:00. Sign up through eventbrite – links will be on the website activity page.

Choose one: April 1, May 6 or June 3

Turnbull National Wildlife Refuge PHOTO CONTEST

Turnbull National Wildlife Refuge is seeking amazing photographs from amateur photographers showcasing the incredible wildlife and habitats found on the refuge. The winning photo will be featured on the face of the 2018 annual refuge pass.

For complete rules, go to...

www.fws.gov/refuge/turnbull

Contest Dates:

11/1/2016 –
10/31/2017



Wild Refuge Dinner and Auction “Songs of the Refuge”

March 11, 2017
5:00 p.m.

Buy tickets at Eventbrite:

Eventbrite - Wild Refuge Dinner and Auction

Earlybird tickets:

January - Feb 18 = \$40 each

After Feb 18 = \$45 each

At the door= \$50 each

Childcare tickets \$9 per child

Wren Pierson Community Center
615 4th Street
Cheney, WA 99004

Refuge Happenings

by Sandy Rancourt
Visitor Services Manager

Bitter cold weather is now upon us. Where does the time go? Since I last reported, staff and volunteers have been very busy working on multiple projects. There really is no down time regardless of the season. Life brought its usual treasures and heartbreaks. Here's what happening at the Refuge.

Riparian Restoration

Community Planting

For the past few years, our community planting events just seem to be getting better. We really had a great day working with the volunteers on October 15. Everyone worked as a team. Conditions were perfect for planting - an overcast, cool day with predictions of occasional showers. Regardless of potential rain, volunteers showed up and kept on coming until well after 10 am. One hundred twenty five volunteers worked with refuge staff, AmeriCorps interns and our long term volunteers on this event. Volunteers from EWU Honors Program, Fairchild AirForce Base, Cheney High School National Honors Society, Spokane Falls Community College Associated Students, Spokane Audubon Society, Friends of Turnbull, SFCC AmeriCorps, JUB Engineering, Inc., many Boy and Girl Scouts of America, and numerous individuals and family groups joined the fun. It was also a pleasant surprise when Michael Ploegman, last year's biological AmeriCorps intern, showed up to lend a hand. All told we planted 155 container grown native trees and shrubs and erected 525 feet of protective fence. FOT and SAS members Russell and Marian Frobe signed in all those volunteer groups. FOT President Molly Zammit lent us her fantastic grill for the day and board members Lorna Kropp and John Barber came to the rescue by helping to cook all the hamburgers and hotdogs for the well received potluck that follows the planting event. We are appreciative and thankful to Friends of Turnbull for supplying the donuts, meat, grill, and incredible cooks for this event that helps make it such a success!



A very efficient day of planting and erecting fence.
(S. Rancourt)



From Left to Right- Turnbull's AmeriCorps interns Hans Lohmeyer and Colton Hodgson (S. Rancourt)



No complaints were heard from a very enthusiastic crowd.
(S. Rancourt)



Former AmeriCorps intern Michael Ploegman getting the fencing panels ready to put up. (S. Rancourt)



FOT Board members Lorna Kropp and John Barber cooking the meat. (S. Rancourt)

Other Restoration Projects

We plant trees a little differently at Turnbull to ensure they make it past the seedling stage by protecting them with tubes of hardware cloth. Many of those saplings are now trees and substantial bushes that need to be released so they can “spread their wings”. Several volunteers were recruited to start working on this project including 3 volunteers in the Master Hunter Program and an Eagle Scout candidate and his crew. To help prevent any confusion, Mike and I went out and sprayed the cages that needed to be removed.

Eagle Scout Project

Robbie Devenish from BSA Troop 418 was in need of a project to complete his Eagle Scout requirement by the fall. We had just the right one in mind. Robbie organized his troop and their parents and removed over 70 hardware cloth cages from individual trees, a substantial effort by this group.



Eagle Scout candidate Robbie Devenish dismantling the larger cage to access the smaller one inside. (S. Rancourt)

Master Hunter Projects

Three individuals in the Master Hunter Program removed numerous hardware cloth cages from trees or shrubs this fall that had out grown their cages and needed to be released. They also installed larger cages around the mature aspen trees to protect them from beavers. Ron Van Horne and Sid Harty and his son Justin worked extremely hard on this project.



Master Hunter Ron VanHorne hard at work in the Pine Creek Riparian Restoration Unit. (S. Rancourt)

Webelos & Weeding Project

In late October, Kristin Weaver Bowman brought a group of cub scouts and their parents to volunteer their time at Turnbull. The Webelos Den Pack 351 did a great job weeding many of the potted plants in our nursery. The weeds in the pots were very well established so this was not an easy task, especially for little hands. Their efforts will help increase the seedlings' chance for survival. The youngsters got quite a lot accomplished and still had time to do a several mile walk at the refuge.

Monarchs & Milkweed

EWU EagleUp!

EWU students participating in EagleUp!, a freshmen and transfer students orientation program, assisted Mike, myself, bio tech Dustin Cousins and AmeriCorps members Colton and Hans with planting 700 milkweed seedlings in the Pine Creek meadow.

There is always an educational component to our volunteer projects, so not only do volunteers provide great service but also learn why their efforts are so important. The students were provided orientation on the refuge and refuge system and also learned about monarchs and the importance of milkweed in sustaining butterfly populations.



Hans, Colton and Dustin drilling holes in the background. Mike planting with the students. (S Rancourt)



Well over 15,000 milkweed seedlings have been planted over the past 2 years. (S. Rancourt)

Bluebirds

Eagle Scout Bluebird Nest Box Project

Eagle Scout candidate Cameron Smith from BSA Troop 405 built 36 bluebird nest boxes for the refuge. Cameron coordinated with 31 individuals in his troop to get this project completed. The boxes are constructed out of cedar and are very well made. Every year, nest boxes need to be replaced due to normal wear and tear, squirrel damage or the occasional inquisitive elk. These boxes will really come in handy for our upcoming field season. Some of the boxes will also go to Friends of Turnbull who give them out for memberships received at the nature store.



Photo of BSA Troop 405 provided by Cameron Smith.

Environmental Education & Outreach

We had a very successful Fall Field Trip Season. I started scheduling field trips and camps in mid-August and by mid-September our Fall Field Trip Program was booked by the time Colton returned. His welcome back was a full plate. Demand for our EE program continues to be a great indicator of its popularity. When I advertised our fall and winter outreach program, many teachers saw it as an opportunity to get a head start and lock in a date for a field trip in the spring. Volunteers and staff were very busy presenting these great programs. They include; AmeriCorps interns Colton Hodgson and Hans Lohmeyer, Joyce Alonso, Fran Haywood, Chuck Kerkering, new recruit Diana Latta, and EE Contractor Kylie Gaard. In October, Joyce led a field

trip for a class of 4th- 6th grade Montessori students. It was a very cold, rainy day. Not a deterrent for Joyce though who is always well prepared. She was well equipped with all the right rain gear and even brought enlarged, laminated photos of birds for the students to see since many of the live ones were hidden in a sheltered spot that day. We are well into our Winter Outreach Program at this time. To date the following winter programs have been provided for many schools including: Owls, Animal Tracks, Create a Creature, Habitat, Now You See It, What is Wild, All about Birds, and Endangered Species.



Joyce Alonso describing some of the many bird species found at Turnbull. (S. Rancourt)



Colton presenting the Owl Program for students at Cheney Middle School. (S. Rancourt)



Our new PowerPoints are a big hit. AmeriCorps Hans Lohmeyer assisting with the Owl Program. (S. Rancourt)

All our EE programs are great, but I am especially partial to our field trips and night hikes. Two groups participated in our Night Hike Program this fall. Wildlife, including owls and coyotes and even the stars on a partially cloudy night, cooperated for the night time adventure provided for Friends of Turnbull. EWU also came out on a windier night. We didn't hear as much wildlife, but the sound of wind through the pines is always hard to beat. It is always fun seeing the adults get into the night time activities just as much as any youngster which couldn't be more obvious than during the bat - moth game.



A beautiful night for a hike through the woods. (S. Rancourt)

Outreach

Camp Wooten, Camp Cowles, FOT WinterFest & Spokane Falls Service Learning Fairs

Colton and Hans spent a couple of nights off refuge at Camp Wooten near Dayton in early October. The camp is hosted by St. Thomas More Catholic School and because of the great service provided by the members, we are asked back year after year. The camp has a nice stream and pond which is perfect for sampling aquatic invertebrates. We provide the instructors, waders and other equipment necessary for the activity. Dinner and housing is provided by the School who are great hosts. Turnbull also hosted information booths for 2 service learning fairs at Spokane Falls Community College. These fairs provide an opportunity for our members to network with college students, talk about their service at Turnbull and the AmeriCorps program. The members interacted with 200 students at the fairs.

Turnbull had an interactive booth at Camp Cowles, a large Cub Scout event held at Diamond Lake in the fall. This was our 5th year at this event. Over 400 scouts and family members participated. We had an aquatics table near the lake where scouts were able to catch and learn about aquatic invertebrates. We brought some aquatic invertebrates to supplement their catch. We also had an information and touch table with lots of critters to look at and activities for participants. Lots of handouts were also provided.

We also helped Friends of Turnbull with their annual Winter Festival. A feast of chili and cornbread was provided for free for all who attended. Mike Rule provided 2 elk tours for the public during the event. No elk in the morning, but over 80 were spotted on the afternoon tour. Carmen Yount from West Valley Outdoor Learning Center brought some beautiful raptors and gave a nice presentation. We had our animal tracks corner for kids to make some tracks out of Plaster-of-Paris with a holiday theme.

Turnbull's Photo Contest

As many of you know, Turnbull hosted a photo contest this year highlighting wildlife and habitats found on the refuge. We received 360 spectacular photos from amateur photographers. It is amazing the talent out there, and it was no easy task selecting the overall winner. I say overall winner because there were many winners. I was one of the lucky judges, and I do mean that. Tom Munson, Chuck Kerkering, and Nancy Curry were also on the judging committee. Thank you for all of your time and expertise! Our special thanks go out to all the contestants and their beautiful photos. Budget technician Jason Werner, did a great job organizing the contest. This contest was so well received, we have decided to make it an annual event. Congratulations to James Strampher and his winning photo of twin moose calves swimming in one of Turnbull's beautiful wetlands. His photo will be featured on the 2017 Annual Refuge Pass and highlighted on the refuge website.

Attention Photographers! This year's contest is already on. For more information about contest rules, please visit our website @ <http://www.fws.gov/refuge/Turnbull/>.

Welcome Back and Aboard

AmeriCorps Interns

It is my pleasure to report that last year's Environmental Education AmeriCorps member Colton Hodgson returned for a 2nd term of service in mid-September. He has been very busy presenting EE programs for students, data consolidation and working on other EE projects. Hans Lohmeyer moved from North Carolina to serve as our new biological AmeriCorps intern. He has been busy conducting wetland and aspen surveys, assisting with habitat restoration projects, entering and summarizing survey data and assisting with EE facilitation twice a week during the winter. We are fortunate to have such pleasant, capable assistance on board.



James Strampher's winning photo of twin moose calves.

A Friends Passing

It is with a heavy heart to report the passing of a long time volunteer and Friend Virgil Bowen. Virgil was Turnbull's first Visitor Services Volunteer, a position he held for over 14 years. Even after illness prevented Virgil from volunteering as much as he would like, he still helped out when he could. I can still recall that day he came down to my office for an interview to volunteer at the refuge. He was quiet and reserved and seemed a little bit wary. I got the definite impression he was not quite sure what he might be getting himself into and either was I. Well, over 14 years of volunteer service speak volumes and is a testament to who he was. We gave each other a chance, and I am so glad we did. Virgil was a character, and I do mean this in the nicest possible way. He was a practical joker which occasionally got him in a spot of trouble (as he informed me), but if you knew Virgil it was always just good-hearted fun. He didn't pack a college degree in any of the sciences, but more importantly, he possessed a determination to serve and an obvious appreciation for wildlife and the refuge. Virgil retained what he learned and that was a good deal of knowledge. He loved Turnbull. He loved wildlife, especially the moose. He was always asking what that unfamiliar bird might be that he spotted regardless if it was on the refuge or not. That inquisitiveness for wildlife never waned nor did his enthusiasm for volunteering at Turnbull.

During his tenure as the Visitor Service Volunteer, Virgil did a considerable amount of custodial work for the refuge. I think this is one of the most important jobs on the refuge and definitely the hardest to recruit for because most volunteers would rather be doing something else. Virgil made the best of any situation. He emptied garbage, meticulously cleaned bathrooms, interacted with the visitors, monitored a bluebird nest box trail, maintained the grounds, staffed information booths, and regaled us with his stories. He was exceptionally skilled at procuring donations from our local grocery stores which included getting all the donuts and coffee donated for our 2 annual community planting events during all those years. He was never afraid to try something new, like wearing the bluebird costume that his talented wife Priscilla made for our Now You See It outreach program, or trying out a parachute demo at Fairchild Air Force Base. It hasn't always been easy to recruit individuals -even some EE folks- to wear the costume and act like a kid for the students. I usually have to resort to blackmail.. No matter what the task, Virgil always did a great job, and he never complained! A couple of years after Virgil started volunteering for the refuge, his lovely and devoted wife Priscilla, came on board after she retired from EWU. She turned out to be quite the volunteer herself, something he fully recognized. He would not have been able continue in the same capacity without

her help during the later years. The couple parked their RV at the refuge during the warmer months, headed south when the cold weather was peeking around the corner, but returned just in time for the spectacular spring flowers and our planting event.

One of the things that struck me the most about Virgil was that he was a very humble man. I am not sure he realized just how important he was to us, and that what he possessed, was more than many. He was shrewd, witty, and had the wisdom to appreciate all those really important things in life that are sometimes taken for granted. Some of us can get so wrapped up in our jobs that we forget to stop and smell the roses that is something Virgil never failed to do. He loved to go on a walk or take a drive around the auto tour route, and he was always so appreciative of some company. Virgil would often bring a family member or a friend out to the refuge to experience the beauty of Turnbull as he had, either a trip around the ATR or to see all the neat things in our EE classroom. He was grateful to receive a birthday or Christmas card, and would always call to say thanks. Who does that? He did. He embraced life to its fullest. We will miss his stories, his humor, and his presence. Turnbull just won't be the same without him.



**Virgil Bowen
(S. Rancourt)**



Virgil was always up for the challenge. (S. Rancourt)

Wildlife Observations

Mike Rule

The weather has been crazy this fall and winter. From the above normal high temperatures this summer through a record breaking wet October and now a polar high that has brought below normal temperatures since Thanksgiving. Although the large, permanent wetlands on the refuge fared the summer pretty well and recovered some in October, the shallower than normal water levels resulted in most wetlands freezing up by the second week in December. Prior to freeze up we saw a few larger flocks of tundra swans move through with most sightings on Upper and Lower Turnbull, Cheever and Kepple Lake which maintained areas of open water. On Dec 2, the trumpeter swan pair and their now fledged 3 cygnets were observed on Cheever Lake where they nested. The pair that nested in McDowell Lake has not been seen since late August, but a mixed group of tundra and trumpeter swans were observed on West Tritt the day before the FOT Winter Festival Tour with one pair with 2 cygnets that may have been our swans. There was also a

mixed group of swans on Lower and Upper Turnbull observed during the morning tour. Hopefully we will get a chance to see most of our swans in the next week with the forecasted rain and warmer temperature which may open up the ice on some of the refuge wetlands. Cheever Lake is usually the first place they return. A refuge visitor observed 6 trumpeter swans flying over Cheever Lake on January 8 looking for open water.

I thought everyone might be interested in seeing what the swan enclosure in Winslow Pool looked like when the first trumpeter swans were brought to Turnbull in 1964. This enclosure was maintained and the pond aerated in winter to maintain open water through 1976. One of the swans in the foreground could have been Solo.



Cheever Lake trumpeter swan pair with three cygnets
12/2/2015. M. Rule

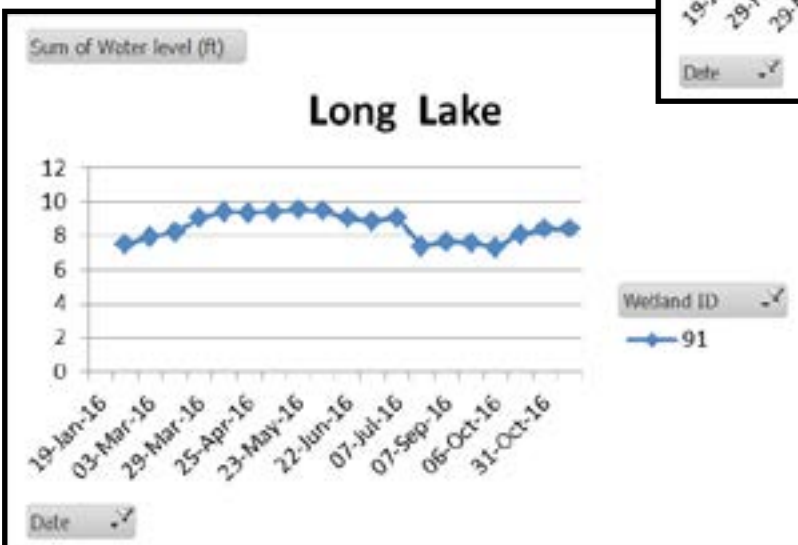
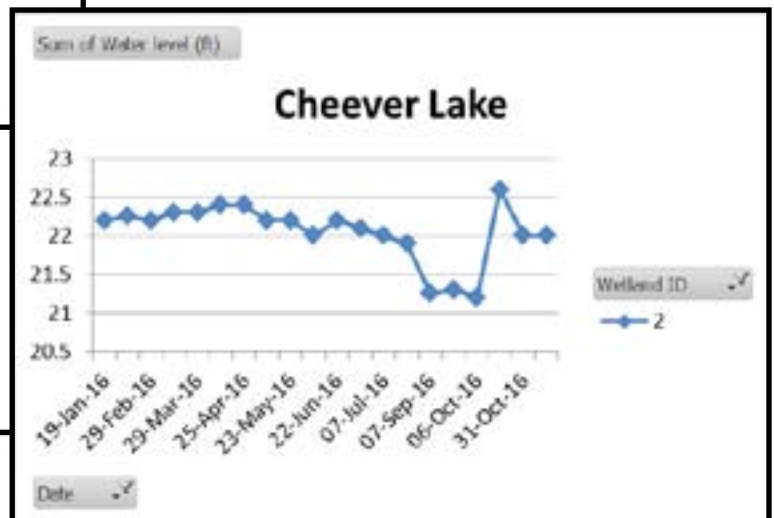
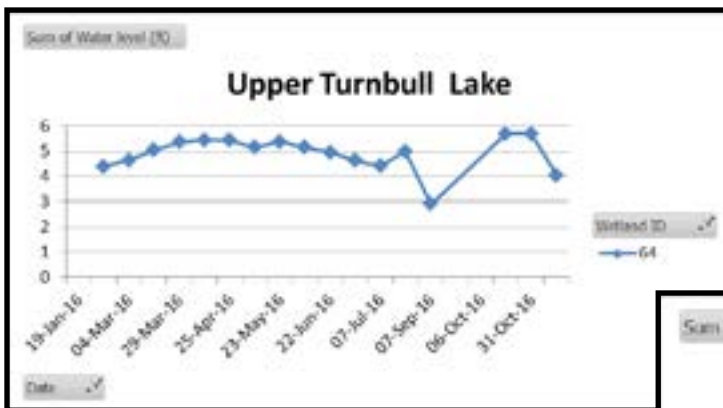


Wetlands and Climate

We always get a lot of questions about how the wetlands are fairing as a result of the changes in weather here. As you all know one year can be very different from the next with respects to the timing and amount of snow and rain we receive and the temperatures we experience throughout the year. This variation affects wetlands through surface water inputs from rain and snowmelt and evapotranspiration through the growing season. Surface water inputs from rain and snow depend on the amount of precipitation they receive, and a great deal on other factors including the size of the watershed contributing to run-off, whether the ground is frozen during a snowmelt run-off and the intensity and duration of rainfall. A rain on snow event when the

ground is frozen as we experienced recently can result in large inputs to refuge wetlands. Evapotranspiration is the amount of water evaporated and transpired by plants and varies by the amount of plant cover in wetlands and of course the temperature and solar radiation. On average, we lose around 3 feet of water per year through this process.

In order to monitor, the impacts of weather and other factors on wetland water levels, we visit our 22 wetlands with control structures at their outlets to measure water depths every 2 weeks. I have posted 3 graphs below that show how some of our larger wetlands respond to the weather we had this year. All three wetlands recovered well from the drought conditions of 2015 mainly from high precipitation in December of that year. Upper Turnbull was nearly dry in fall of 2015 and received over 4 feet of recharge through March. All three wetlands had a half to full foot increase in June from the very heavy rains received that month. This resulted in only a net loss of 2 feet from evapotranspiration through the summer. All three wetlands also experienced significant inputs from the record rainfall in October 2016. Long Lake which is much larger and deeper than the others is more resilient to drought. Current climate modeling predicts warmer temperatures and possible increases in precipitation mainly in the form of rain. These changes will have impacts on wetlands by increasing evapotranspiration and possibly decreasing inputs by reducing the frequency of rain on snow events that often contribute significantly to wetland recharge.



Other Wildlife Observations

The intense cold since December has resulted in few reported wildlife observations for the refuge.

The belted kingfisher is back foraging on stickleback in Pine Creek below Headquarters.

Varied Thrushes and Northern Shrike, occasional winter visitors, were observed in early winter.

Numerous moose sightings have been reported on the auto-tour route and other areas of the refuge.

The elk have been frequenting the area just east of Cheever Lake on the way to Stubblefield Lake . A large herd of over 80 animals has been seen there on several occasions.

Flocks of nuthatches and crossbills are frequently seen and heard throughout the pine forest of the refuge.

A number of Cooper's Hawks have been observed this winter on the refuge and in the vicinity.



Female Crossbill



Male Crossbill
Photo by Mike Wisnicki, via
Birdshare.



Red-breasted Nuthatch
Photo Cornell Lab.



Cooper's Hawk
Photo by Bob Shinier



White-breasted Nuthatch
Photo James Wedge

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