



Friends of Turnbull

Volume 4, Issue 4

Friends of Turnbull N.W.R. Quarterly Report

Winter 2002, 4th Quarter

PRESIDENT'S CORNER

I hope that some of you will have attended our Holiday Celebration and Sale at the Environmental Education Center at the Refuge on the first weekend in December. As this coincides with our Big Game Tour led by Mike Rule, the Refuge biologist, we are always hopeful of attracting enough people to see and hear the musicians (who donate their time and effort) and, of course, buy something at the store for Christmas giving.

On a sadder note, Charles Russell passed away on September 13th. He helped us enormously with grant writing efforts and we will be using his work for some time. He had multiple sclerosis and passed away from complications of this disease. I was shocked to hear of his death. He will be greatly missed.

2003 Goals

With quite a few new board members this fall, we have taken a new look at our goals, most of which are long-term and ongoing.

1. Our first and foremost goal is to support the Environmental Education program at Turnbull. The refuge was able to fund the EE specialist through a grant available to them. This year our goal is \$6000.00 for 2 Americorps volunteers to supplement the EE specialist. Next year the cost of Americorps will be \$3500, so if we are able to finance them at the same level, we will need to raise \$7000. As we are still struggling to find compatible grants, most of our financing has been through memberships and donations. Some of the supporting ideas toward this primary goal are:

- Continue developing and promoting memberships and community presence with scheduled events such as Music Fest, Rodeo Days, lecture presentations, nature walks and Centennial events.
- Developing a more active dialogue with our legislators to keep them aware of both the popularity of the EE program and the needs of the Refuge System as a whole.

- Maintaining a presence in the national Friends organization and the Pacific NW network of Friends groups to keep us abreast of national and regional ideas and possibilities.

2. Our second goal is to have the Interpretive Trail completed this Centennial year. One of our members has taken this on as her project and once the artwork is completed, we will be able to print the brochures and put it all together.

Board Changes

Unfortunately, we have lost two board members this quarter. Ed Reynolds resigned to do more travelling, and Marie Fowler has had to resign as she is going to be working outside our area and will be moving nearer her place of employment. We will miss both these wonderful workers.

Eugene Kiver joined the Board in November. He is a retired geology professor from Eastern Washington University and is a welcome addition to our board. We also welcome Kevin Young to the board this month. He is a young man recently graduated from EWU and is currently employed as a research assistant at Sterling International, a firm that makes pest control traps. Did you know that those bee and wasp traps are locally manufactured? I didn't.

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We are still in need of another board member and, if you would like to join the board, please contact one of us.

Bookstore

This year the Friends of Turnbull Store has made a profit, though not a big one. We are learning as we go along about wise ordering. We try to keep a fairly wide selection of books and other items without keeping too much merchandise on hand that may not sell. I am amazed at how many visitors the Refuge gets on weekends from outside our area and even overseas. Our faithful staff of volunteers has kept our store open regularly this year and I am grateful for their service.

Friends Conferences

The Regional Friends Conference was held October 5th and 6th in Portland, which three of us attended.

The daylong session on the 5th was on how to build a better, more effective board. The ideas they gave us, plus looking at how some of the other groups do things, should help us in maintaining and expanding our commitment to our members and the refuge.

The half-day session on the 6th was a welcome respite from the classroom—we toured the Ridgefield National Wildlife Refuge across the Columbia River in Washington. We saw many hawks, mostly red tails and harriers, lots of pintails and other ducks, 3 flying sandhill cranes, scrub jay and other small birds, and a large rodent that they said was probably a nutria. It was good to meet people from other Friends groups and support groups, from Washington, Idaho, Oregon and northern California.

I will again be attending the annual National Friends Conference in Washington, D.C., from January 31st to February 3rd.

Renewal time

We appreciate that some of you have already sent in your renewals. Please don't forget to renew your memberships for 2003. We rely a lot on memberships and donations to keep the EE program going. We know it is of great value to our community, and all our members are valuable to us. Please renew!

Friends of Turnbull Online

Please visit our new website at:

<http://www.tincan.org/ftnwr/>

Check the site periodically for activities updates and announcements. If you have any questions or comments regarding the website, please contact Andy Buddington (abuddington@scc.spokane.cc.wa.us).

For Newsletter information or news contributions, please contact Joanne Powell at 456-7111 x 204 or email powell@snapwa.org

Friends of Turnbull N.W.R.

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Special Thanks

We wish to thank the following people who either renewed this quarter at the patron level or who donated more than their membership fee. We truly appreciate your generous donations:

Nancy Giese
Cindy McCormack
Bob Griffith
Ian & Rosalie Napier
Eugene Kiver
Leonard Weber

We wish to thank **Safeway, Inc., Northern Quest Casino, and Dr. Robert Stockton** for their generous donations to our Endowment Fund this quarter.

We have lost two valuable board members this quarter due to travel plans and working constraints. We will miss **Marie Fowler** and **Ed Reynolds**, who gave us a lot of their time and expertise and we thank them for their time with us.

In this issue, we would like to thank the volunteers who have kept the Friends of Turnbull Store staffed and running this year. Without their help, we would not have had the success we have enjoyed. We are grateful to each and every one of you:

MaryJane Booth	Valerie Schillinger
Chris & Suzette Mangini	Louise Harbison
Virgil & Priscilla Bowen	Ken Swedberg
Rosalie Napier	Jude Johnson
Helen Cook	Joan Tracy
Eileen O'Donnell	Kathy Lauritzen
Geri Damrow	Kevin Young
Joanne Powell	Bob Liepold
Marie Fowler	

We greatly appreciate all of you who donate or contribute your time toward our programs. If we have overlooked anyone who should be acknowledged, please accept our apologies. Also, if you have renewed or donated recently, we hope to list you in the next newsletter.

Marian Frobe

Centennial Events - Turnbull NWR

March 2003 Bighorn Sportsman Show, Spokane, WA - Turnbull NWR Centennial Celebration Exhibit/booth.

May 17, 2003 - Centennial Time Capsule dedication ceremony at Turnbull NWR headquarters. Please call for exact time, 235-4723.

WINTER FESTIVAL

by Marian Frobe

We held our second annual Elk Tour and Winter Festival December 7th & 8th. Last year we called it an Open House, but this year we billed it as a Holiday Celebration. I actually like the idea of calling it a Winter Festival, so that is likely what it will be from now on.



Although the Friends of Turnbull Store closed the last weekend in October for the winter, we opened it for the first weekend of December for last minute Christmas shoppers and the folks who come out for the Elk Tour, which has been very popular and was filled to capacity both mornings. Those taking the tour saw upwards of 100 elk on Saturday, and several smaller groups on Sunday. Mike Rule, the Refuge biologist, is adept at finding the herd, and no one was disappointed. Swans were also seen on both days, and an eagle was sighted on Sunday as well.

We had 7 different music groups throughout the weekend to play for us as we munched on cookies, hot chocolate and cider. People could sit and listen or enjoy a stroll around the classroom looking at the many display animals and birds and, of course, shop in the store for nature-related gift items, books and shirts. We had a coloring table for children and displays about the refuge system.

Keep this festival in mind for next year. We had a good time putting it on, really enjoyed the music, and missed those of you who couldn't come out. Hope to see you next year.



Fall Happenings at Turnbull NWR

by Sandy Rancourt

Greetings!

It was another great year for all of Turnbull NWR's programs and volunteers played a major role in making them such a success. It never ceases to amaze me just how fortunate we are at Turnbull to have so many people wanting to donate their time to the Refuge. Three hundred-fifty two individuals contributed over 16,100 hours in FY 2002 doing just that. Volunteers were involved in a diversity of activities including biological studies and surveys, environmental education, maintenance, habitat restoration, grant writing, Web Page design, administration, visitor contact services, public use management, fundraising and much more.

The Refuge is always looking for assistance from volunteers in habitat restoration. Turnbull and Spokane Audubon Society hosted 2 community planting days in celebration of National Wildlife Refuge Week and International Migratory Bird Day. This is part of an ongoing effort to restore native habitat for birds and other wildlife. Ninety-one volunteers from Audubon, Boy and Girl Scouts of America, FOTNWR, WSC AmeriCorps, WA State Master Hunter Program, Inland Northwest Wildlife Council, West Valley Outdoor Learning Center, and other community members joined Refuge staff to plant 190 trees and maintain the plantings. Our deepest appreciation goes to long-time Refuge Friend and volunteer, Joyce Alonso, for her tireless contribution to the Pine Creek Restoration Project. We are also grateful to newcomer, Gary Honeychurch, for his assistance this summer with the

project. Volunteers also helped with exotic weed control. Twenty volunteers from REI and BSA spent a day in September weeding 3 enclosure pens containing native species in preparation for Turnbull's fall community planting day. Thirty-nine high school students from Upper Columbia Academy Hope Task Force pulled Dalmatian toadflax at 2 sites in the Refuge's Public Use Area.

Many Refuge trails were maintained this fiscal year with the help of volunteers. The Upper Columbia Academy Hope Task Force partnered again with the Refuge providing

twenty-seven high school students and teachers to replace the bark on the Kepple Peninsula Overlook and the Black Horse Trails. Volunteers from the Gear-up Scholarship Program replaced the bark on Turnbull's Boardwalk Trail. They worked side



by side with refuge staff and volunteers from the Student Conservation Association (SCA), AmeriCorps, WA State Master Hunter and Portland State University's Teachers-in-the Woods Programs. Our hats come off to Martin Hepp, a young man who agreed to tackle a major job for the Refuge as his Eagle Scout Project. His task was to remove some of the railroad ties along the 4-mile portion of the Columbia Plateau Trail that runs through the Refuge. This is a really tough project to accomplish since thousands of railroad ties lie adjacent to the trail and down hill from it. Martin had to coordinate with the Refuge, State Parks and Recreation Commission, MoMike Demolition, and BSA.

Martin, his father Mike and mother Karen, were instrumental in the success of this project. Martin is a remarkable individual who stuck with this enormous assignment despite my assurance that there was enough work for more than one Eagle Scout Project. Over twenty-five Boy Scouts and their parents from Troop 210 spent several days stacking the railroad ties in piles along 3 miles of the Trail. They did an incredible job!

The biological program was busy as usual. Volunteers did a great job assisting biological staff with spring and fall waterfowl surveys, marshbird surveys, songbird point counts, M.A.P.S, breeding bird surveys, duck banding, fire monitoring in ponderosa pine and aspen forests, pit fall trapping, raptor/shorebird surveys, coyote scat transects, aquatic amphibian surveys, rare plant surveys, a frog malformation study, and monitoring bluebird and wood duck nest boxes. Marian and Russell Frobe, Ian and Rosalie Napier, Maurice Vial, Lorie Koll, and WSC AmeriCorp member, Collin Leach, contributed significantly to the biological program by assisting with many of the surveys and studies mentioned above. Other volunteer biological support came from Boy Scouts of America, Inland Northwest Wildlife Council, and Eastern Washington University students who constructed and installed 12 elk exclosures and the University of Idaho Wildlife Society members who monitored 39 wood duck nest boxes on the Refuge. We are truly saddened that we will soon be losing some of these outstanding volunteers that have been with the Refuge for many years. We will never be able to thank Ian and Rosalie Napier and Maurice Vial enough for all their priceless time, support, knowledge, and friendship they have given.

The environmental education (EE) program blossomed this year thanks to efforts of AmeriCorps member, Mindy Howard, SCA volunteer, Megan Schnagl, and Temporary Park Ranger, Nicole Bronson. Over 110 school and civic groups enjoyed field trips, classroom activities, aquatic ecology studies, night hikes, tours, and EE outreach programs. In addition, volunteers and refuge staff interacted with thousands of individuals at several fairs and festivals. Turnbull participated in the Betz Family Science Fair, Betz Elementary 5th grade Recognition Camp, Spokane Interstate Fair, Chester Elementary Science Presenter's Night, Sunrise Elementary Science Fair, and Wenatchee River's Salmon Festival. Thanks to volunteer

Mary O'Reilly, our EE classroom is looking better all the time. Mary is painting a beautiful landscape mural of Turnbull. Turnbull NWR's Friends group, FOTNWR, continued their support for the refuge's EE program. We are very grateful to the group for funding Americorps volunteer stipends. Without their continuing support, it would be difficult to maintain the same level of excellence.

Over the past 2 years, it was my privilege to work with Friends member Charles Russell who wrote 2 grants in support of our EE program. Andy Buddington informed the Friends Board that "Charles Russell" wanted to give something back to the community." Andy was referring to Charles's generous offer to write a grant. Despite his struggle with Multiple Sclerosis, Charles jumped at the opportunity and wrote 2 exceptional grants. He did an outstanding job. Charles never let on just how sick he was. Charles passed away on 13 September of this year. Charles was truly an inspiration to all who knew him.

We are also fortunate that Virgil and Priscilla Bowen returned as the Visitor Contact Volunteers for the 3rd year in a row. As usual, Virgil did an excellent job as grounds keeper. He also procured donations for community events, maintained public use buildings, and monitored a bluebird trail. Priscilla actively promotes the Refuge to students in her job as the Undergraduate Student Services Coordinator at EWU.

Reflecting back on the past year, I feel very fortunate to have worked with so many volunteers. The people I have met have been incredible. What they accomplished for Turnbull is amazing. We are so very grateful. Thank you all and Merry Christmas!

Mima Mounds of Eastern Washington

The Friends of Turnbull were treated to a very interesting presentation by Dr. Ted Doughty (Geology Dept., Eastern Washington University) on the infamous Mima Mounds. Mima mounds (also called “pimple mounds”) are named after the type locality of mounds at Mima Prairie in Thurston County, in southwestern Washington. Similar mounds are found in various parts of the U.S. as far east as Arkansas and Missouri as well as the Great Basin region of California.

The slide presentation began with some spectacular aerial photos showing the typical distribution and geometry of mounds in eastern Washington and the Turnbull area. Individual mound fields can be several square miles in area with individual mounds being anywhere from five feet to tens of feet in diameter. The mounds are composed of unstratified loess (silt) intermixed with pebble-sized rock (basalt) fragments and typical mound heights can be up to 15 feet. They come in all shapes and for the most part are uniformly spaced. The mounds have been studied since the early 1900’s and Dr. Doughty highlighted some of the past work by geologists as well as the large number of theories explaining mound formation. There are four main “groups” of theories for mound formation: sedimentary (wind or water silt deposition), erosional, periglacial (at the edges of the great Ice Age glaciers)

and biological (giant Pleistocene gophers or Native American burial mounds). Many folks still favor the “giant gopher” hypothesis, however, to date, no fossilized gophers, gopher scat, or burrow networks have been found inside any excavated mounds.

A relatively new hypothesis (1980’s) was presented by local Spokane geologist, Andy Berg.



Following the eruption of Mount St. Helens in 1980, Berg was building a doghouse in his back yard. While tapping a nail into the structure, the layer of St. Helen’s ash that had accumulated on the flat plywood started to form odd, regularly spaced “mounds”. Berg instantly saw a connection. He photographed the “self-generated” ash mounds and compared them to aerial photos of mound fields and saw an incredible similarity. Berg proposed the mounds to be the result of earthquake activity

in the Pacific Northwest. Scientists have for the most part, disregarded Berg’s seismic hypothesis. Not Dr. Doughty.

Modeling by physicists has shown how particles can be formed into mound shapes and patterns by selective shaking at specific frequencies. Mounds form when “shake” waves intersect one another creating a

bizarre array of interference patterns. Doughty suggests this could easily be the case for what happens when large earthquakes move through the crust of the earth. If the proper thickness of unconsolidated materials (loess soil of eastern Washington) sits above a rigid substrate (the basalt rocks of eastern Washington), then mound fields could be generated by successive “big” earthquakes. Dr. Doughty argues that the seismic hypothesis can explain the existence of mound fields in most

other locals, which have historically been seismically active. Doughty agreed that the recent Spokane (2001) earthquakes probably were not large enough to contribute to mound formation. The presentation concluded with a wonderful “real time” experiment where the audience was able to experience mound formation before their very eyes!

Andy Buddington



Fall Wildlife Observations at Turnbull NWR

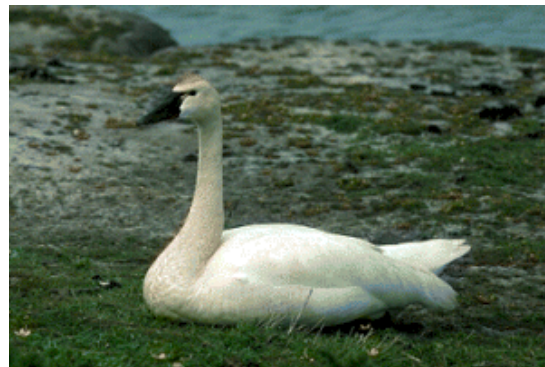
by Mike Rule

Throughout October numbers of fall migrants were near normal with several flocks of American Wigeon and northern pintail stopping over at the refuge.



A family of river otters were regularly seen this fall on Winslow Pool below the public parking area.

Tundra Swans began showing up in sizeable flocks the last two weeks of October. A cold snap with record breaking low temperatures hit just before Halloween resulting in an early freeze up. By Halloween, all ponds were ice covered and all but a few hardy mallards left for open water on larger lakes and rivers near the refuge or points farther south. By the end of the first week of November, the ice was over 4 inches thick, forcing the remaining migrants out of the area..



Gradually, warmer temperatures returned the week before Thanksgiving and open water was again available on the refuge. Only a few tundra swans and mallards remained in the area however, following the early freeze, but fair numbers goldeneyes, ring neck ducks, common and hooded mergansers, and Canada geese have been observed on refuge wetlands recently.

Elk have been observed daily on the eastside of Cheney/Plaza RD between the Eastern Washington University Lab and the Entrance Rd. A group of over 100 were observed on December 7th during the annual Elk Tour



Several bald eagles have been observed in the refuge Public Use Area since early September.



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 _____

My check is enclosed payable to:

Friends of Turnbull N.W.R.

P.O. Box 294

Cheney WA 99004

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



Friends of Turnbull
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.”