June 2020

MAKING TRACKS

NEWSLETTER OF THE FRIENDS OF THE TUALATIN RIVER NWR

JOYFULLY CONNECTING OUR COMMUNITY WITH THE WONDER OF THE REFUGE

We hope that you enjoyed our first ever Virtual Bird Festival. We have left most of the content up on the Friends website. Go to the Bird Festival page to enjoy the content we put together. We would like to continue bringing you the Ask the Expert segments. If you or your child would like to ask an expert a question about the Refuge, wildlife or the Friends, please contact Carly at Carly_Hirschmann@FriendsofTualatinRefuge.org

For Refuge updates, please visit the FWS.gov website.

We encourage you to STAY HOME and STAY SAFE.

If you do visit the Refuge please know that all facilities are closed- the restrooms, the buildings, and the parking lot. You may park below the gate and walk up to access the seasonal and year

round trail. Please do not block the gate or park on the grass. If parking is not available, please come back at another time. Pets are not permitted on the Refuge, and use social distancing when walking the trail.

If you have Urgent Questions about the FRIENDS, please send those to Info@FriendsofTualatinRefuge.org. These would include questions about Board Meetings, Membership, Advocacy and the nature store. All other questions should be directed to USFWS.

As a 501(c)(3) the Friends of Tualatin River NWR applied for and received funding from the Payroll Protection Plan Loan from the Federal Government.

Donations to help us continue our work to support the TRNWRC are more important than ever as our Natures Overlook Store is closed.

JOIN
DONATE
RENEW

UPCOMING EVENTS
Friends Board Meeting
Virtual Meeting Planned

June 23, 2020 6:30 PM
Contact by 6/19/2020 Info@FriendsoftualtinRefuge.org if you would like to receive an invitation to attend our ZOOM meeting.

SOCIAL MEDIA

PRESIDENT'S PERCH

By Alan Christensen, President of the Board

One of the stated objectives of the Friends mission statement is to work on the restoration of the Tualatin River NWR. By any measure the past year has been really successful in that regard. With the progress made on the Chicken Creek Restoration project last year and the plan to finalize that effort this year, the groundwork was laid to work on the vegetative needs driven by the restoration project. Modification of the overall nature of how water is used, moves and is stored on the Refuge dictated that new opportunities were created and old regimes were altered. Riparian habitat is being developed along the winding new channel and changes around the two ponds near the Visitor Center allow the addition of some new vegetation.

Volunteers played a big part in getting the revegetation started with efforts in December, February and March. A couple of unique species were among the more familiar species that were planted. Nelson's checker mallow, a native perennial herb to the Willamette Valley was planted in December on a wet, cloudy day. The species is listed as Threatened under Federal guidelines. Early in 2020 several hundred wapato tubers were planted near the ponds adjacent to the Visitor Center. Wapato is a perennial aquatic emergent plant that produces tubers that were extensively used as food by Native Americans. It grows in colonies and its showy white blossoms will be something to look for in coming years. Also planted by volunteers near the ponds were other wetland species like rushes and spike rush.

The majority of planting efforts were accomplished by the Friends and USFWS under contract with Ash Creek Forest Management and Clean Water Services. Their efforts were extensive and covered many areas on the Refuge and were just completed in May. The many species planted represented a wide range of natives and included everything from wetland sedges and bull rush to a wide variety of familiar shrubs like snowberry and nine bark and larger shrubs and trees like willow, oak and crab apple. Early observations indicate the plantings have "taken" well and

are showing good signs of growth. These combined efforts between volunteers and contractors resulted in an incredible total of about **317,000** new plants of many species now present on the Refuge.

Wapato Lake National Wildlife Refuge, near Gaston, falls under the responsibility of the Tualatin River National Wildlife Refuge Complex . The added word “Complex” means the geographical span of management is spread out and includes various discrete locations within a larger area. Refuge staff have been busy working at Wapato Lake NWR in anticipation of its official opening to the public this fall. Among the restoration efforts at Wapato Lake NWR is the use of biocontrol agents to reduce or eliminate purple loosestrife, an invasive nonnative aquatic species that displaces and overcomes native species. Biocontrol often depends on the use of insects that naturally feed on or damage targeted species. Before their introduction though, biocontrol agents are stringently studied in order to avoid problems with native species. In the situation at Wapato Lake NWR, two species of beetle have been introduced to combat the purple loosestrife. One species feeds on the foliage while the other species burrows into the root system. It is hoped their combined behavior will help stop the spread of this undesirable species at Wapato Lake NWR. **Friends were an integral part of the restoration efforts this past year through the efforts of volunteers and by facilitating grants and contracts for the plantings. Job well done!**

Biocontrol Agent Release at Wapato Lake

By Natalie Balkam

Habitat Restoration Specialist

Friends of the Tualatin River National Wildlife Refuge

Biological Control Agent Release at Wapato Lake NWR

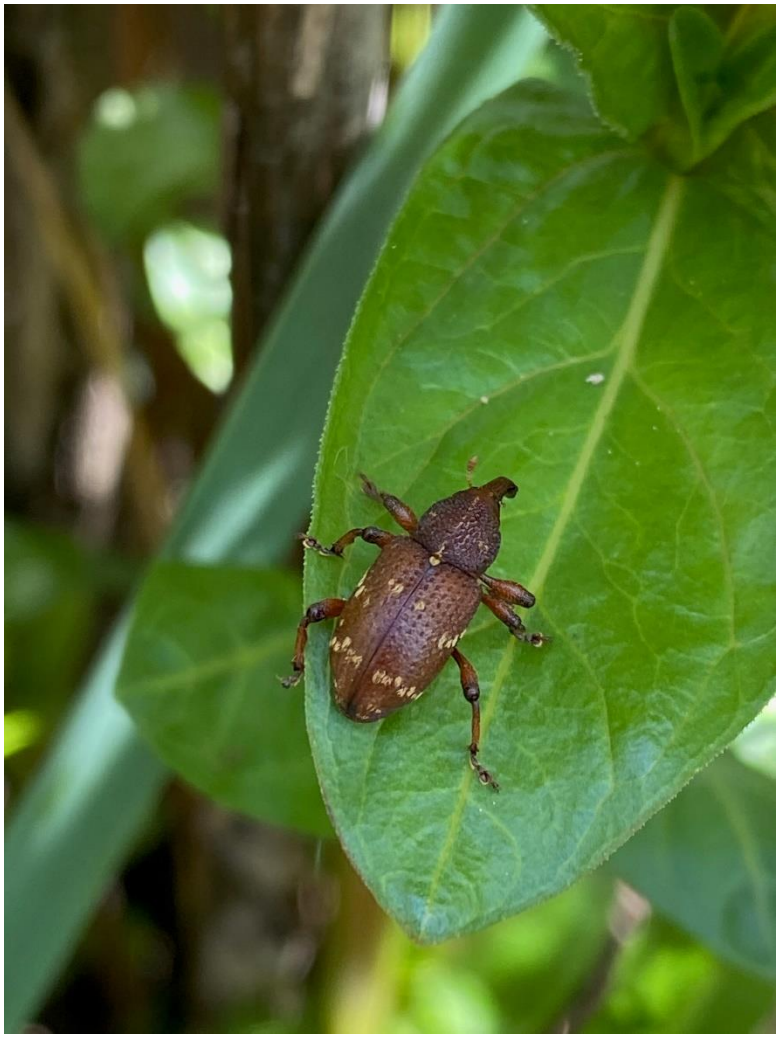
Early May marked a huge event at Wapato Lake National Wildlife Refuge – the release of biological control agents. Sarah (Biological Science Technician) and Curt (Refuge Biologist) released two types of *Galerucella* beetles and one type of *Hylobius* root weevil to control the purple loosestrife population at Wapato Lake.

Galerucella beetles munching on purple loosestrife

Last summer, I was initially hired to focus on mapping the extent of the purple loosestrife (*Lythrum salicaria*) at Wapato Lake. Purple loosestrife is a beautiful plant with showy purple/pink flowers, but poses an extreme threat to wetland ecosystems; it forms very dense monocultures that essentially take over entire areas, and lessens the growth opportunity for native plants that waterfowl and other wildlife depend on. It is such a successful plant because it produces a large amount of seed, which travels through waterways; in conditions such as the Tualatin River watershed, seed can travel very easily between wetlands. Unfortunately, the purple loosestrife population was larger than Curt and Sarah had initially thought.

All three of the biological control agents that we brought in are specifically used to target purple loosestrife. The two *Galerucella* beetles (purple

loosestrife black-margined leaf beetle and purple loosestrife golden leaf beetle) consume the leaves and the stems, and often eat the buds which prevents plants from flowering. The *Hylobius* root weevil (purple loosestrife root boring weevil) attacks the root systems. These beetles and weevils consume the plants and make populations less competitive to native flora.



Root weevil

Before Curt and Sarah released the beetles and weevils, we went through a multi-step process to get everything approved. We began meeting with an Oregon Department of Agriculture entomologist as well as the Invasive Species Program Coordinator from Tualatin Soil and Water Conservation District. We consulted with them to determine if our site and populations numbers were adequate to sustain these biological agents. After we got the go ahead from ODA, Sarah wrote the necessary paperwork to get approved

through U.S. Fish and Wildlife. Through ODA, we sourced the beetles from Marion County, and the weevils from the Nez Perce Tribe in Idaho.

We have gone through the necessary research, communication and paperwork to feel confident in this process. Before release, ODA tests and makes sure that these agents will not become invasive to native plants. Biocontrol agents are one method of controlling invasive plants, and can be used instead of, or in addition to herbicide. ODA reports that they have been releasing the beetles for over 20 years to manage loosestrife populations in other parts of Oregon.

Root Weevil

On the release day, Curt and Sarah reported that the beetles immediately began to consume the loosestrife! We will continue to monitor their progress, and will be conducting site visits with our biocontrol partners. It is undetermined how long this process will take; though we might never be able to completely rid the site of loosestrife, we are hoping that that this release will at least lessen the population. As loosestrife number decline, the beetle and weevil population will also lessen, since they will have less food available.

I am very excited about the release of these beetles and weevils, and hope that they can make a difference in reducing the loosestrife population.

CONTACT US

Friends of the Tualatin River National Wildlife Refuge
19255 SW Pacific Highway
Sherwood, OR 97140
503-625-5944 x227

info@friendsoftualatinrefuge.org