

March 2020

MAKING TRACKS

NEWSLETTER OF THE FRIENDS OF THE TUALATIN RIVER NWR

JOYFULLY CONNECTING OUR COMMUNITY WITH THE WONDER OF THE REFUGE



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RENEW

We are listing the programs for Tualatin River National Wildlife, but please note that these programs, meetings and events are suspended until further notice. Please check the Friends website for more updates. The Native Plant Sale and the Tualatin River Bird Festival are still currently planned. We will evaluate as the dates for these events draws closer.

The Refuge Year Round Trail is open- with plenty of room to enjoy the trail!

PRESIDENT'S PERCH

By Alan Christensen, President of the Board



I think a lot about the topics for the Presidents Perch. Members can find information about what is happening on the refuge and among Friends from the web site so it seems like the Perch is a good place to evoke thought and discussion about topics important to the Tualatin River NWR, our Pacific NW ecology, and national issues that affect us. As I listen to the rain drumming on my roof I get a feeling of smugness knowing that we in the Pacific NW are lucky in regard to the abundance and quality of the water that supports us.

Consider the reality that all the water ever formed on earth is still with us, around us, under us. Of all the water on earth only about 2.5% is fresh water, the rest being saline. Only about 1% of the worlds fresh water is

UPCOMING EVENTS

[Friends Board Meeting \(session 3 of 11\)](#)

Virtual Meeting
Planned

March 24, 2020
6:30 PM

[Photo Society Presentation - Jennifer Costello](#)

April 02, 2020 7:00 PM

19255 SW Pacific Hwy, Sherwood, OR 97140

[Puddle Stompers- Canada Goose](#)

April 08, 2020 1:00 PM

[Second Saturday Work Party - April](#)

April 11, 2020 8:45 AM

Tualatin River National Wildlife Refuge

[Puddle Stompers-](#)

available to us for our use, the rest being locked up in glaciers and snowfields.

We draw our water from surface and underground sources. Surface water in the form of lakes, rivers and streams represents only about one tenth of one percent (.0171) of all fresh water. When you think about the Columbia River it seems like fresh water is abundant and unending. The Columbia River has an average discharge of about 250,000 cubic feet per second (one cfs contains about 7.5 gallons of water) and a recorded maximum discharge of about 1.25 million cfs, yet it does not rank anywhere near the top 10 rivers in the world. Half of the world's fresh water is located in just six of the worlds countries which means many places on earth suffer with a shortage of water and all the benefits it brings. The World Health Organization estimates that over 2.1 Billion people suffer from a shortage of drinkable water.

So what does all this mean to the Tualatin River NWR and Friends. I think we need to recognize the responsibility we have to steward and protect the resources present on the refuge and within our communities. Surrounded as we are by an abundance of water its easy to ignore polluting activities and behavior that wastes or reduces the quality of our water. We all have ways we can use water more responsibly and practices that reduce wasting this precious resource. The ongoing Chicken Creek project on the refuge is a good example of long term water conservation. Altering the water features on the refuge from open water seasonal ponds to a meandering riparian stream will sustain cleaner water and more flow to the Tualatin River in the long term. Riparian habitat is the interface between the land and water. It is typically the location of plants that depend on the water and in turn filter runoff and stabilize stream banks with their roots.

The Chicken Creek channel is designed to "snake" across the open flat, thereby substantially increasing the length and area of riparian habitat. The flow in Chicken Creek will benefit from shade created by the riparian plant community and the filtration of runoff will ensure higher water quality. Many studies have identified riparian habitat as among the most important habitats in the West. Birds, mammals, insects, reptiles and amphibians all benefit from riparian habitat and the diversity of plants that grow there. Water loving stream side plants become replaced by bigger and deeper rooted shrubs and trees as the distance away from the stream increases. Trees and shrubs provide food, nesting habitat and perches for many species of birds and insects and their leaf litter fall provides nutrients to the stream and aquatic species that dwell there. Movement of aquatic mammals across the landscape is also enhanced by riparian habitat and it is hoped that beavers quickly inhabit the riparian habitat and enhance its value with their activities.

I have been fortunate to participate in Native American traditional ceremonies set around a meal. Each time water is the first and most important food resource recognized. Water is the beginning of all life and is held in high esteem and meant to be cherished and protected. Next time you pour yourself a glass of water stop to think about how irreplaceable it is in our lives and what it means to all the resources we depend on and love.

[Canada Goose](#)

April 14, 2020 10:00 AM

[Nature Ambassadors - Pollinator Power](#)

April 15, 2020 3:30 PM

Sherwood Public Library

[Friends Board Meeting \(session 4 of 11\)](#)

April 28, 2020 6:30 PM

19255 SW Pacific Hwy, Sherwood OR 97140

[Puddle Stompers- Frogs](#)

May 13, 2020 1:00 PM
10:00 AM



SOCIAL MEDIA



NATURE'S OVERLOOK STORE

Nature's Overlook Now Online

The Friends' store, Nature's Overlook, is pleased to announce that they are now selling online! Items currently available online include caps, magnets, pins, patches and walking stick medallions (all with either Friends' or Refuge logos), and the TRNWR Pocket Naturalist. Purchases can be mailed anywhere in the United States for a small shipping and handling fee. The 10% discount for Friends' members applies to online as well as in-store purchases. We love having people shop in the store, but when that's not convenient, shopping online is now an option. Explore the online store at friendsoftualatinrefuge.org/Nature-Store.

Featured Vendor from Nature's Overlook

Hello, book lovers – many new titles are on the way, plus additional copies to restock the favorites we already have on the shelves. As you may know, when we order a new title we just get one copy in, and then the book goes for review and approval by the folks at the Fish and Wildlife office. Once a book is approved, **that one copy goes on the shelves for sale**, and if someone buys it, I order more copies. **We've been told that some shoppers are reluctant, for various reasons, to buy "the last one" of a book... but, in our case, if you *do* find just one copy, please feel free to buy it – that's the signal that it's "a good one" and that we should order more. Since this is a small shop, we don't keep many copies of each title in back stock, especially if it is something fairly specialized** (i.e., we're still waiting to find that certain person who wants to buy the one copy of "A Field Guide to Ticks" – hey, I was trying to represent many of our fellow creatures, including the less appealing ones! 😊). **So, don't be shy – please buy "the last one"!**

Soon to arrive – more copies of Robin Wall Kimmerer's marvelous book, "Braiding Sweetgrass" (which has been one of our big sellers), plus another wonderful book she wrote, "Gathering Moss". Virginia from Fish and Wildlife will give you her impressions of "Braiding Sweetgrass" elsewhere in this newsletter.

HELP THE
FRIENDS WHILE
YOU SHOP

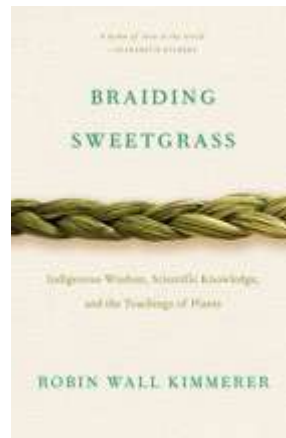


Lots of new titles are on the way -- board books for the little ones in your life, hiking books for the whole family, some new titles about trees, gardening, botanical art, essays, and restocking our nature journaling selection. I'll put all the new titles out on the shelves as soon as they get the OK.

Thanks for shopping at the Refuge – we appreciate your purchases – they help support this place we all love.

Sincerely,

Your volunteer book buyer



Review by Virginia Parks

Robin weaves words into sentences and offers them to the reader with the same beautiful intention that lies behind the eponymous braiding of sweetgrass, it's an act of kindness and gratitude. If you read this book with an open mind and a willing heart, you will laugh out loud sometimes, and often find yourself grinning as she binds together the natural world and the humans (all of us) who depend on it. You will likely also shed tears, some of delight at the profound beauty she describes, and some of despair — even righteous indignation— on behalf of the wild things that depend on us. But her exquisite word weaving soon catches you up again with a sense of hopefulness and makes you feel that, even as one who is not native to a location, there might still be a way to become indigenous to place. It will change the way you look at the natural world.

Chicken Creek Restoration Updates

To see and read about continued updates regarding the restoration project, and the positive impacts it will have on the fish and wildlife at the Refuge, we have created a comprehensive information resource, and blog, to keep you up to date with all the changes happening and pertinent news in the coming years. Please visit: www.Refuge202.info

Wear in the World

Are you going anywhere fun this winter? - take your Friends Logo Wear along and snap a Photo.

Send photos to Info@Friendsoftualatinrefuge.org

Be sure to include the location



Would you like to make a donation to this effort?

We are taking donations of \$2.00 per plant on the website www.FriendsofTualatinRefuge.org or in the Nature Store.

You can buy 1 plant or 100 plants- any donation would be appreciated.

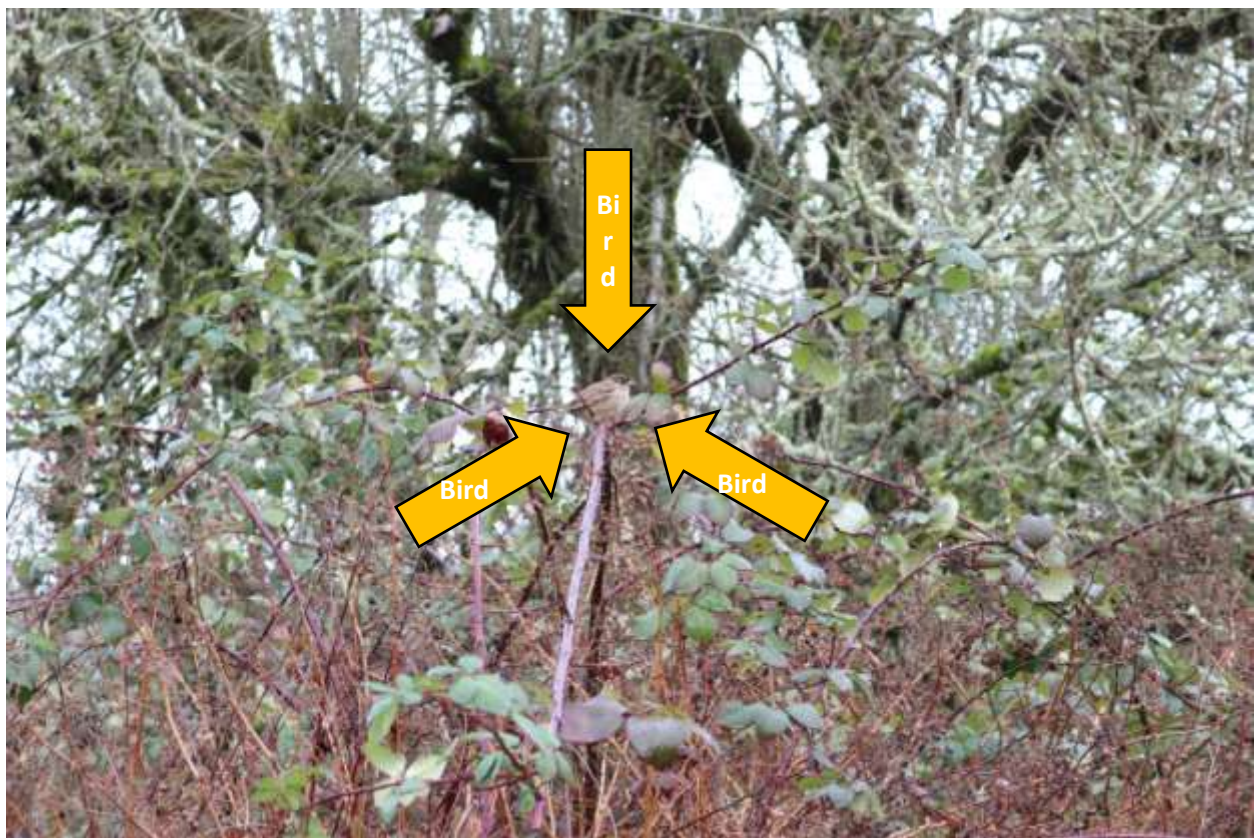
Looking Differently at the Same Plant

Looking Differently at the Same Plant

The problem in distinguishing flora and tools to start becoming well-versed in “plant”

By Joe Edgerton, Trail Rover Volunteer

Throughout my daily excursions on the Refuge’s year-long trail I pass by seemingly endless patches of foliage. Green leaves here, brown bark there. To many visitors, watching birds or other mobile organisms takes visual priority over vegetation in the background. Deciphering all the different plants and recognizing each as an individual can be a difficult task compared to seeing a single, distinct, moving animal.



Against a blurry tree-background and atop seemingly homogenous greenery sits an eye-catching Golden-Crowned Kinglet.

Perhaps, to many trail-goers, plants seem to “blend-in” as walls of bland, uninteresting and peripheral observations. However, this innocent, unconcerned perception of plants does not have

to be a permanent frame of mind. To remedy this, an explanation of this unawareness, along with an example and some tools for observing plants, will help to begin addressing the gap that exists between people and understanding the green-laden world we inhabit.

To any readers who are self-proclaimed “non-plant people,” let me assure you that I do not intend to get into “the weeds” of plant science. However, I will introduce a few concepts and facts that highlight important aspects about plants.

In some capacity, plants impact your life every day (e.g. air filtering, nutritious foods). By attempting to notice the vegetation within your physical space you can eventually achieve: an increase in your understanding of the role of plants in nature and society, acknowledgement of the characteristic beauty of plants, and a personal philosophy that plants are not necessarily less important than animals. Reaching every one of these goals is beyond the scope of this article, but they are good guidelines to think about as you read. To begin, let’s address the issue of “green obliviousness.”

This unawareness has been named “Plant Blindness,” a chronic but treatable condition shared by many animal-enthused Refuge visitors.

Oblivious to something right in front of you

This is not a *medical* condition, but the symptoms will affect your everyday life. Plant blindness has been defined by Wandersee and Schussler (2001) as “the inability to see or notice the plants in one's own environment.” A staple breakfast food, the material used to construct your house, a weed on the side of the road. These are a few examples of how plants are woven into our lives.

Though, plant blindness is more than simply failing to recognize that plants are integral to daily life. That symptom is only one of the multiple possible symptoms; of which, we will further discuss the symptom of “lacking hands-on experiences in growing, observing, and identifying plants in one's own geographic region” in relation to the Refuge.

Within the Refuge, growing plants is unfortunately not possible for visitors to experience (though volunteers can check for planting events on [the calendar](#)). That leaves observing and identifying plants as the other hands-on options to become more aware of vegetation within the Refuge. Prior to practicing these skills on the trails, we need to explore some characteristics to look for in plants.

To ease the introduction to these plant concepts, we will use a common tool for sorting life on Earth, a dichotomous key.

Dramatic Dichotomous Decisions

Time for a simulation: Oh no. Bad news. You are in a desperate situation. Your ability to successfully identify similar looking plants from each other becomes critical for survival. You

know some berries are poisonous, while others are edible. Luckily, you happen to spot three plants that you remember reading about. The qualities or characteristics for these plants will help determine which could be beneficial and which could be detrimental in this hypothetical situation.

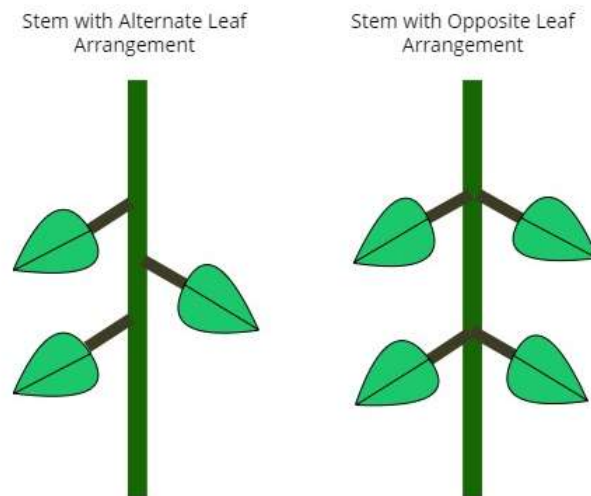




Photos a-c contain boxes for illustrating plant traits (1 for leaf arrangement, 2 for leaf types and leaflet number).

These three plants may have similar characteristics, but you can see they also have unique ones useful for identification.

A good plant characteristic to observe is the position of the leaves on the stem relative to other leaves, known as the leaf arrangement.

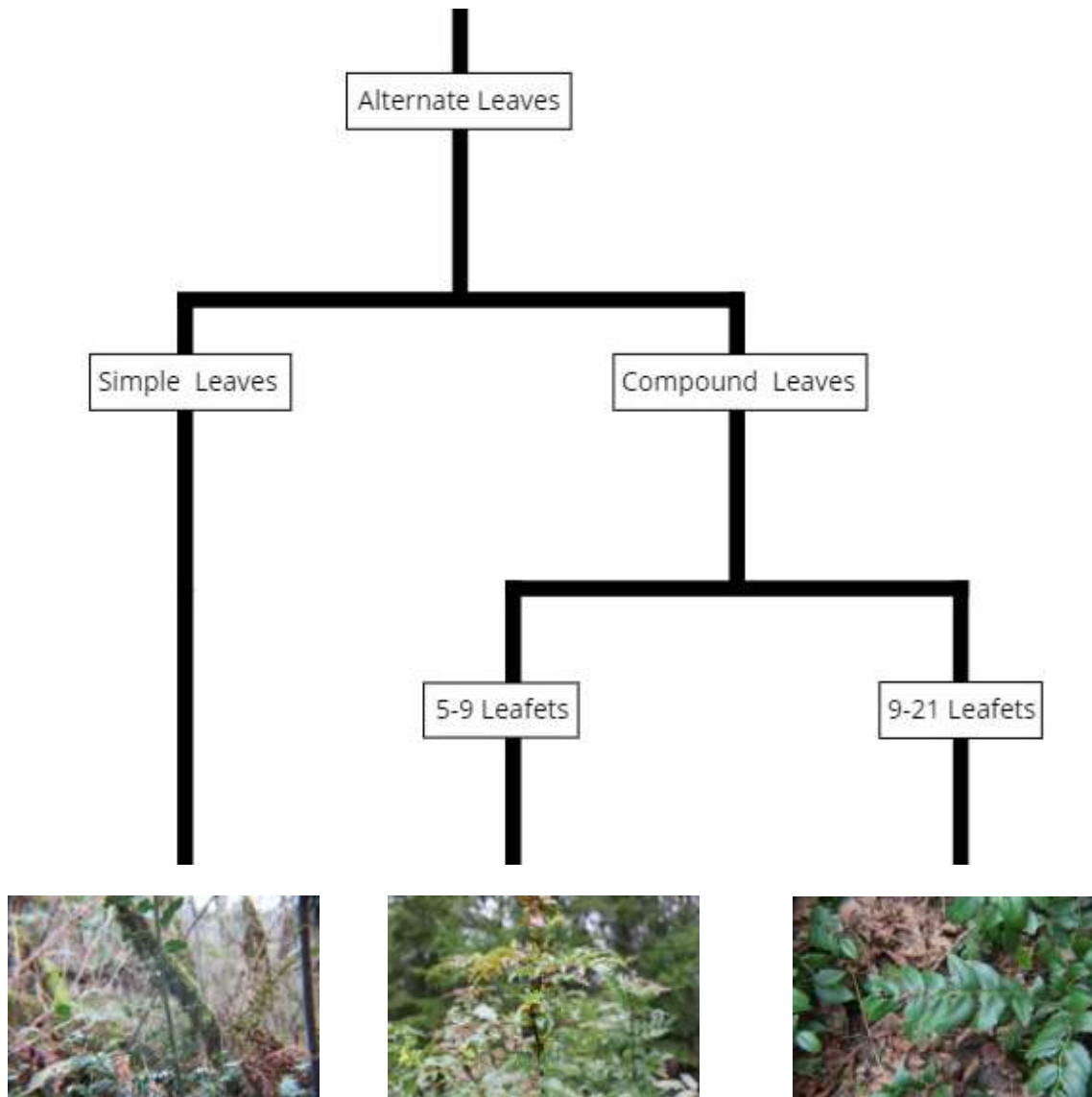


These alternate and opposite leaf arrangements are representations, in nature the difference can be less clear-cut.

From the three plant photos we can locate the stem and see what arrangements the leaves are in (labeled as trait 1a, 1b, and 1c in above photos). The plant's leaf pattern in box 1a is relatively easy to see as an alternate pattern. Boxes 1b and 1c are slightly harder to identify given the photo angles, so you'll have to trust me that they are alternate patterns as well.

You may be wondering why boxes 1b and 1c are not by the "leaves," and why they are not opposite arrangements. This is because the leaves by boxes 1b and 1c are compound, whereas the leaves by box 1a are simple. Simple leaves have complete leaf blades, and compound leaves have leaf blades separated into individual leaflets. Boxes 2a, 2b, and 2c designate what each plant's own leaf looks like.

Lastly, the number of leaflets on a compound leaf can provide another trait to use in identifying the plants. Between the two different compound leaves in boxes 2b and 2c, 2c has more leaflets (~14) compared to 2b (~9). Given all these traits, we can finally construct a dichotomous key to identify each plant.



This diagram represents similar traits, not genetic relationships, and is simplified for brevity.

Now we put names to each plant. The plant with alternate, simple leaves is invasive English Holly, *Ilex aquifolium*. The plant with alternate, compound leaves, and 5 to 9 leaflets per leaf is the State Flower of Oregon known as Tall Oregon-grape, *Berberis aquifolium*. Lastly, the plant with alternate, compound leaves, and 9-21 leaflets is the Mountain Oregon-grape, *Berberis nervosa*.

Even though the survival situation was hypothetical, at least knowing a bit about plant identification can help any Refuge visitor tell the difference between a native piece of state heritage and a nasty, invasive weed.

Plants help humanity in various facets

Oregon grape is not only important for its interesting cultural history, but also its practical uses and contributions to science. Native American history details using Oregon grape in mixtures for treating ailments (e.g. arthritis), as a source of fruit, and for a natural yellow dye. Additionally, Tall Oregon-grape's role in state history was officially established after it was designated the state flower in 1899. Even today, people still use Oregon grape for wool dye and ornamental floral arrangements. Of great importance, Oregon grape has also been involved in scientific investigations for antibiotics and medical conditions. Both old and recently discovered properties of Oregon grape continue to build a plant legacy worth identification.

Plants are not everyone's favorite subject but learning a bit about some of our non-mobile friends in the soil can expand one's perception of the environment and what it means to see life on the Refuge.

CONTACT US

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