



## Tapteal Talk

### *President's Message*

#### **Board Business**

*By Dirk Peterson*

Tapteal Greenway is an all-volunteer nonprofit guided by a board of directors. The board holds monthly meetings typically on the second Monday of the month at 7:00 p.m. Currently most of our meetings are being held via Zoom. Members are welcome to attend board meetings - just contact us for details.

The board is composed of four officers and presently five at-large members. The four officers are elected by the board and serve for a three year term. The current term for our officers ends this December, at which time the board will elect a new slate of officers.

Having previously served as treasurer and vice president, I will step down as president at the end of this term but will stay on as a board member.

Board members serve no fixed term and can be elected to the board at any time. The only requirement is they must be a Tapteal Greenway member. Our by-laws allow for up to 13 board members (this includes officers). At our present size of nine we have both the room and the need for more board members. It takes a diversity of board members to cover our objectives of conservation, education and recreation. If you have a passion for any of these topics that you would like to translate into action we would like you to consider joining our board. If you might be interested, you can talk with any of our board members, send us an email, or message us on Facebook or Instagram.

#### **Monthly Presentations**

This past summer the Benton Conservation District acquired a water stargrass harvester. Some of our board members were able to attend a demonstration of the harvester in early September. Shortly after that I was contacted by Rachel Little offering to give a presentation about water stargrass and the harvester to our membership. This led us to schedule a Zoom presentation later that month. This also led our board to decide to offer similar presentations on a regular basis. In October the presentation was the 2020 and 2021 summaries that we would have given at the annual celebration. On November 18 at 7:00 p.m. Gretchen Graber will discuss the Youth Ecology Education through Restoration (YEER) program. This is a middle school science program in which the students study a degraded local ecosystem, design a restoration plan, then implement that plan. This program is organized by the Washington Native Plant Society and Gretchen is their Eastern Washington coordinator. Gretchen will give an overview of the program, discuss its progress to date and plans for the future. Details for connecting to the Zoom presentation are given below.

Join the Zoom Meeting at <https://us02web.zoom.us/j/85839949906?pwd=c0hqSThhY25yUVFoeFR6QWJvRzdrQT09>  
Meeting ID: 858 3994 9906 Passcode: 082597



## Benton Conservation District Works to Improve Yakima River

By Rachel Little, Benton Conservation District

The Yakima River contributes to our quality of life in Benton County by providing many essential services to both wildlife and the human community. These services include recreational opportunities, water conveyance for irrigation and public health. Unfortunately, the quality of the lower Yakima River has been degraded by an example of the law of unintended consequences. Improvements to irrigation practices during the 1990s greatly reduced the amount of farm soil eroding into the river. This reduction in suspended solids allowed sunlight to reach the riverbed. Sunlight, in combination with excess nutrients, provided ideal conditions for plant growth. One native plant in particular, water stargrass, has exploded in growth filling the river with stringy green vegetation.

Water stargrass has grown to the extent that it negatively impacts all of the functioning of the lower Yakima River, especially in drought years. Fall chinook salmon that historically spawned in the lower river have had to go elsewhere because stargrass forms a thick mat over the gravel they need to build nests. During darkness, when the plants cannot photosynthesize, they continue breathing, sometimes driving oxygen levels dangerously low for all aquatic life. These periods of low oxygen can occur as early as March, when juvenile salmon are still in the area or as late as October, when adult salmon are trying to return upstream. The plants clog the river, slowing the flow. It's no coincidence that the Prosser reach, which has the greatest amount of stargrass plants, is also the reach with the greatest rise in water temperature. Warm water temperatures stress native fish like juvenile salmon while making their non-native predators like bass more active.

Water stargrass is so prolific in the lower Yakima River that its biomass has displaced the river itself, causing the surface elevation of the river to rise by as much as three feet near Benton City. The billions of leaves at the surface create stagnant water habitat for mosquitos capable of carrying West Nile virus, according to Angela Beehler, Manager of Benton County Mosquito Control District. Later in the season these leaves are shed and as they float downriver they plug irrigation structures both large and small, significantly increasing operational costs.



The Benton County Mosquito Control worked closely with the Conservation District to develop funding and awareness of the stargrass problem. With support from Senator Judy Warnick and State Representative Brad Klippert, Benton Conservation District was able to secure funding from the state budget to purchase an aquatic plant harvester. The harvester, affectionately called the StarGrazer, is a pontoon-style motorboat with front-mounted interchangeable implements. One implement is a traditional aquatic plant cutter. The second implement is a roller system, intended to grab the tops of the plants and pull them aboard. These interchangeable implements will provide options in stargrass management. Initial staff training and river testing were conducted in September.

Next year, Benton Conservation District plans to concentrate water stargrass harvesting in four areas to scientifically evaluate the results. These four sites were selected based on the consideration of several variables including boat launch access and safety, proximity to historic salmon spawning areas, water quality concerns and irrigation infrastructure. One site is upstream of the Benton City boat launch while another site is downstream of the launch. The other two sites are located on the Wanawish Reservoir and in the Yakima Delta area. Data collection will include water quality, mosquito populations and fish assemblages. So if you see a shiny paddlewheel-driven machine on the Yakima next summer, wave to the Benton Conservation District staff working to improve river conditions and quality of life in our community.

## Tri-Cities Conservationist of the Year Awards

By Dirk Peterson

### 2020 Tri-Cities Conservationist of the Year

As part of our conservation mission each year we recognize an organization or individual for their significant contributions to local conservation. With the disruption of the COVID pandemic outdoor recreation became even more important than usual for people's well-being. Therefore, it is fitting that our 2020 recipient is Jim Langdon. After moving to the Tri-Cities, Jim became a very active member of the Inter-Mountain Alpine Club. His love of the outdoors also led him to become a regular trail maintenance volunteer with the Washington Trails Association. After the Friends of Badger Mountain was formed in 2003, Jim became their first, and so far only, Trail Master. Jim has been responsible for the construction and maintenance of the trails we now have on Badger and Candy Mountains. His dedication to this trail system is inspiring.



Board member Dan Hansen, on the right, presents Jim Langdon with the **2020 Tri-Cities Conservationist of the Year** award. We caught up with Jim at the Dallas Road trailhead on Badger Mountain after he spent the morning performing trail maintenance.



Board member Stan Kuick, on the right, presents Ernie Crediford with the 2021 Tri-Cities Conservationist of the Year award with some of Ernie's Halloween decorations in the background.

### 2021 Tri-Cities Conservationist of the Year

Ernie Crediford grew up in the Tri-Cities and developed an interest in our native flora and fauna. At an early age he honed his ability to wrangle reptiles. He has been a long standing member of the Columbia Basin Chapter of the Washington Native Plant Society and was in charge of their field trips for several years. He became one of their most popular field trip leaders as Ernie loves to share his knowledge and enthusiasm for our native flora and fauna with adults and children. When I discussed Ernie's nomination with some of our members, the most common response was surprise that he hadn't already received this award. If you have the opportunity to join Ernie on a field outing, take it. In addition to having a good time you are guaranteed to learn something.



Authored by QT Luong, an acclaimed photographer of our public lands, "Our National Monuments" introduces the spectacular and unique landscapes of 27 National Monuments from the north woods of Maine to the cactus-filled deserts of Arizona. America's national monuments include vast lands rivaling the national parks in beauty, diversity, and historical heritage. Included is a chapter on the Hanford Reach National Monument, established in 2000 by President Clinton, with an introductory essay written by our own Rick Leumont, Mike Lilga, and Carl Berkowitz. Preview and order here: <http://www.ournationalmonuments.com/>. Also available on Amazon.



## Educational Activities

By Diana McPherson

### **Screech at the Reach with Beavers**

One hundred and eighty-one parents and costume-laden kids enjoyed this year's Screech at the Reach outside among the fresh scent of sagebrush and overlooking the Columbia River. It was nice to be in person again. Visitors enjoyed learning about our local trails and our large rodent, the beaver.

Beavers are the largest rodent in the United States, weighing in at 30-50 pounds, but they come in second place in the beaver family being outsized by their cousin, the capybara in South America, who reaches weights of 77 to 146 pounds.

Locally beavers inhabit many sites along the Greenway. The once nearly extinct rodent is vital to the structure and function of the wetland ecosystem. At first sight, their voracious appetite for the local trees may appear destructive to the habitat. However, this is not the case. By knocking down trees and chewing off branches, beavers are encouraging fresh growth. A large felled tree may only get partially used, but what's left behind will become a nurse tree, a new substrate providing nutrients for fresh growth.

Many of the branches and logs the beavers eat become part of their lodge or dam. They wisely designed the lodge with entrances underwater to minimize predators' access. Inside there are two rooms, a mudroom where the beavers can dry off and a dry room where they stay dry and warm.

The dams have many purposes. They increase the water level around the lodge, providing the beavers with plenty of swimming area and protection from predators. The extensive pools of water created increases the size of the habitat and also increases the aquatic and riparian plant growth, which attracts other species, thus increasing the biodiversity.

Water downstream from the dam is cleaner because of the filtered flow and reduction of soil erosion. The dams, ponds, and streams created also play a role in flood prevention. They redirect water from heavy storms, thus protecting nearby infrastructure from floods.

But don't worry. Beavers' teeth won't break from chewing all wood because they have a strong protective outer layer of iron. That's also why their teeth are orange. They strip the rough outer bark and eat the inner bark, or cambium, which provides all the nutrients for the tree to grow. They then use the smooth cleaned branches for the lodge or the dam. While they snack on a lot of cambium, most of the beavers' diet comes from leaves and aquatic plants.

Their thick coats keep them warm while 2-inch long shiny guard hairs repel water to keep them dry. Large webbed hind feet help to propel them through the water while their flat, broad, scaly tail steers. Their tails are also used to warn the rest of the family about predators or intruders by slapping the surface of the water. The smaller front feet are used to grasp vegetation and to push branches, grasses, and mud for building their lodge and dam.

It should come as no surprise that beavers are also known as nature's engineers. With the innate ability to improve the ecosystem by increasing plant and animal biodiversity, preventing soil erosion and protecting areas from floodwaters, our Greenway and other wetland and river areas have benefitted from these busy rodents.

If you'd like to see beavers in action, please visit our YouTube page.

[https://www.youtube.com/channel/UCPfDuSmmNT5aS1Q9V4Br\\_1w](https://www.youtube.com/channel/UCPfDuSmmNT5aS1Q9V4Br_1w)

Pictures continued on the next page...

## Educational Activities (continued)

By Diana McPherson



Table at Screech at the Reach overlooking the Columbia River



Beaver teeth – orange due to iron coating



Side view beaver skull



Paw prints – front and back



Beaver fur with long shiny guard hairs



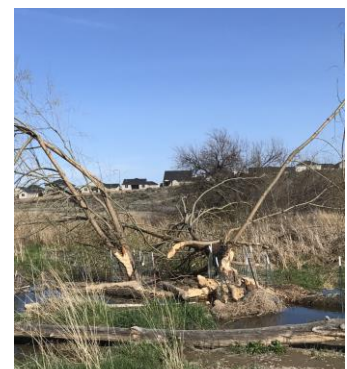
Beaver tail



Chew Marks



Wood Chips



Voracious appetite



Presenting the Beaver info



Diana at the Beaver info table



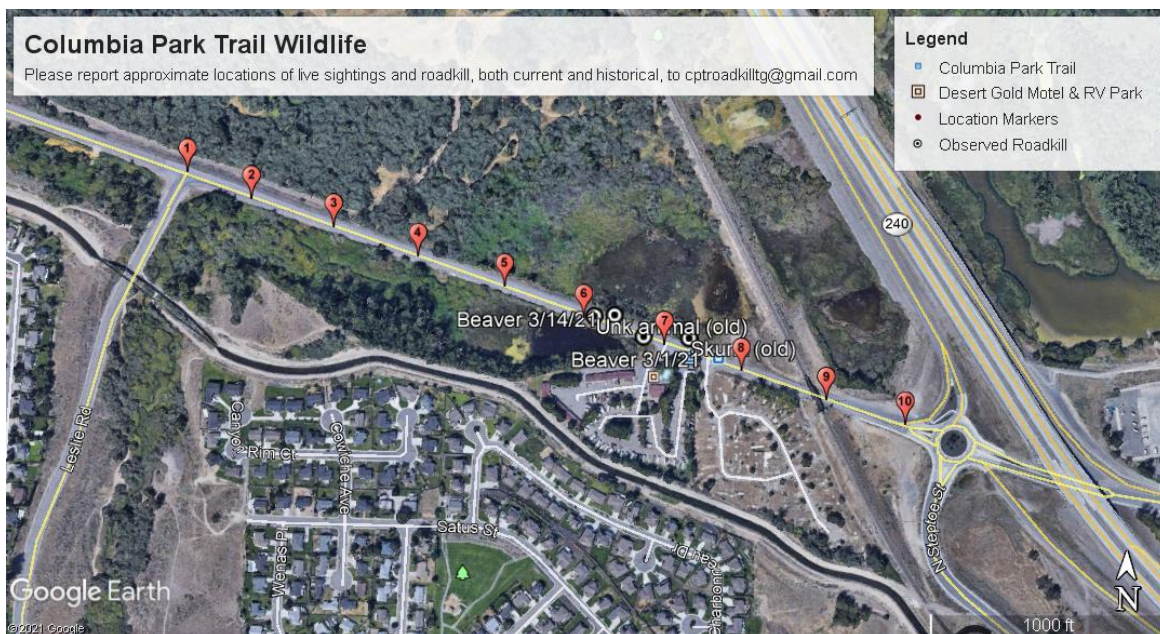
Visitors at the table



## Update - Columbia Park Trail Wildlife Crossing

By Mike Lilga

Could I hear a round of applause for JUB Engineers? Thank you! JUB conducted, *pro bono*, an engineering and cost assessment of a wildlife crossing of Columbia Park Trail. The assessment anticipated costs for design, installation, and permitting of the crossing structure and fencing to funnel wildlife to the structure. Proposed is a 3-sided concrete structure to replace the existing 52" culvert. The structure will allow Amon Creek to flow naturally, providing a water course that beavers prefer. The structure will allow passage under Columbia Park Trail for raccoons, skunks, and other wildlife and will be tall enough to accommodate deer. The project will require about \$2.2M. The Federal Lands Access Program and the bipartisan infrastructure bill are potential funding sources that we are keeping an eye on. The grim count to date since March include at least 6 beavers, 8 raccoons, 5 skunks, and 1 porcupine. Your sightings of roadkill or live animals along the stretch between Steptoe and Leslie are still really important. Report your sightings to [cptroadkilltg@gmail.com](mailto:cptroadkilltg@gmail.com).





## Restoration Efforts

By Dirk Peterson

Over the past few years we have been working on small native plant restoration sites in Amon Creek Natural Preserve and along the Tapteal Trail. In addition to weed removal and the initial planting, these sites require ongoing weed control and supplemental watering. This past year we had four sites that we watered on a weekly basis starting in March. Even with this frequency of watering the new plantings in Amon across from the end of Rachel Road did not fare well as about half of the sixty plants died off. We recently replaced the dead plants. An encouraging sign was that about half a dozen volunteer gray rabbitbrush plants popped up and survived (we do water volunteer plants when we spot them).

We also replaced some plants in the second Amon site, just below the KID irrigation pond. This area was the site of a major restoration effort about twelve years ago. We did additional planting there two years ago. This site had a unique problem as mice were getting in the watering tubes which were then being dug up by coyotes. This led us to place cages around each of the plants. Several of the sagebrush plants were well enough established for us to remove the cages and watering tubes. These cages were then used to protect new plantings.

We have been working in the Grayhawk area (located along the Tapteal Trail in the Horn Rapids development) the past two years. Many of the seedlings planted last year were very small, and it is too soon to tell if they survived. We will know for sure this spring. Both of the planting areas have had a lot of volunteer bunch grasses become established as well as gray rabbitbrush plants. In fact, over this past year we had to thin out some of the gray rabbitbrush, which we placed in pots and used in our recent plantings. Our new plantings were used to replace some die off, fill in around the previous plantings and to extend the planting area. Our recent rains bode well for this round of planting.



A view of the Amon restoration area across from Rachel Road. White flags indicate new plants.



A few of the plants in the Amon restoration area near the pond



The Grayhawk section planted two years ago



The Grayhawk section planted last year

## Hiking, Biking, or Riding in Chamna Natural Preserve

By Stan Kuick and Dave Harvey

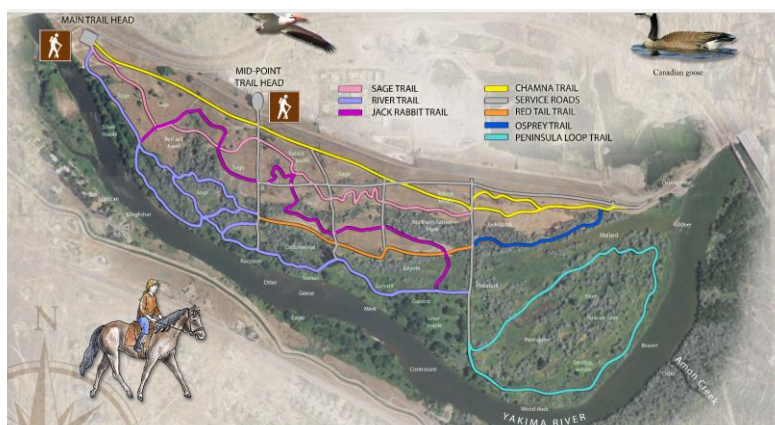
One of the classic and most popular Tapteal Greenway hiking areas is in the 276-acre Chamna Natural Preserve. Chamna is located south of downtown Richland along the Yakima River and can be reached by taking the bridge over I-182 off of Aaron Drive near Beaver Bark Nursery, and turning right at the T junction. This area is great for hiking, mountain biking, and horseback riding. There are a lot of trail options in Chamna, but we will lead you through the longer outer loop options. The attached map shows the 11-mile trail system and these maps are posted in various locations throughout the preserve.

A good place to start is at the main parking lot on the west end of the preserve. There is plenty of parking, an informational kiosk, and a porta potty. Chamna has riparian, floodplain, and shrub steppe habitat which makes for a diverse number of landscapes. If you walk straight toward the Yakima River from the parking lot and turn left at the last opportunity, you will be on the River Trail shown in purple on the map. This will lead you through both riparian and floodplain areas since, of course, it is closest to the river. During high water or wet periods in winter and spring this trail can be muddy, so be prepared to take another trail. This trail has multiple branches in one spot so do not get lost! Bear to the right. One interesting aspect of this trail is that parts of it go through dark “tunnels” made by overhanging Russian olive trees. These make a welcome respite from the sun in the summertime. There are also short spurs that lead right to the river for fishing or just enjoying river views.

The River Trail ends at a north-south running service road, where you have to decide how long you want to hike. If you go right, you can go around the Peninsula Loop Trail (light blue) which will give you a 4-mile round trip back to the main entrance via the Tapteal Trail (yellow). The Peninsula Loop Trail has a lot of trees and vegetation since it is in the floodplain. It also goes along a slough of the Yakima River where there is a chance to see waterfowl and other wildlife. If you instead go left on the service road, you can make a shorter hike of just under or over three miles. As you go north on the road, there are assorted options for trails (see map) heading back to the main parking lot. As noted, the yellow trail is the main Chamna/Tapteal Trail and is the best maintained and goes through mature shrub-steppe. On the way back is a spot on the left among some trees, which looks like a camping area (although there is no camping in Chamna) near the midpoint trailhead. This has benches and even a geocache. See if you can find it!

A slightly longer 3-ish mile hike is to take a right turn from the road on to the Osprey Trail (dark blue). This is a genuinely nice trail that meanders through trees and connects back to the main Chamna trail. Take a left and head back to the main parking lot.

Enjoy the many other trails in Chamna for other days of great hiking.





## Equestrian Usage of the Tapteal Trail

By Carole Schuh

One sunny afternoon in October seven BCHW Rattlesnake Ridge Riders had a wonderful ride east along the Tapteal Greenway Trail from Horn Rapids Park. The Yakima River was beautiful, the rabbitbrush was blooming golden, and the waters around Wanawish Dam were sparkling. Two young riders aged seven and nine decided that day that they would like to grow up to be Back Country Horsemen (women). After our ride we met up with seven others back at Mecham Hall (HRP) and had a great potluck with lots of good food and visiting.

Mecham Hall and the Horn Rapids Horse Camp are maintained by the Rattlesnake Ridge Riders through the "Partners and Parks" program and tie in nicely with the Tapteal Greenway Trail which goes right through the park.

If you are aware of others who are interested in joining Back Country Horsemen of Washington, please have them go to [BCHW.org](http://BCHW.org) or give Carole Schuh a call at 509-539-9998.



Trail Boss Jeanie Chappel and her granddaughter



RRR Chapter President Paul Mellick and a young trainee



RRR Chapter Treasurer Paul Silvernail



Enjoying the view along the Yakima River



The pretty little Wanawish Dam



Future BCHW members

## "Sole Survivor" Race & Chamna Chase 6K, 10K and Half

By Dan Hansen

Chamna was the location for two running events put on recently by the Nomad Trail Runners, a local trail running group. Among other events, the Nomads organize and host The Badger Mountain Challenge series of races each Spring.

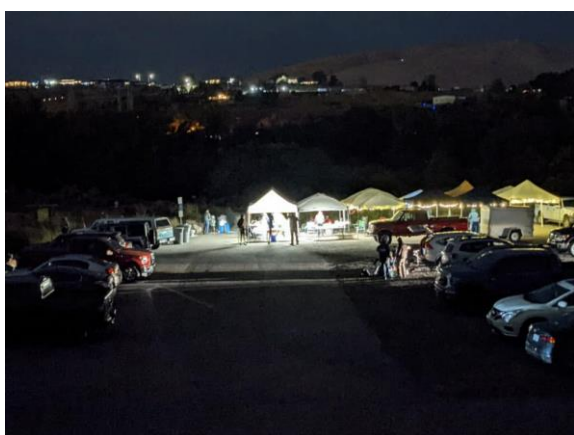
On September 18 at 8:00 am the **Sole Survivor Race** (last Man Standing) started. For those who are not familiar with the backyard ultra-format, there is only one official finisher in this type of event. The race starting distance is 4.167 miles. The race starts at the top of the hour, each and every hour that there are at least two runners. If a runner doesn't finish the 4.167 mile loop before the top of the hour, they are considered "Did Not Finish". If they don't start at the top of the hour, they are "DNF". There isn't a set time or distance for this event. The race continues until there is only one runner left. There were 36 hardy souls registered for the 2021 race, with 32 starting in the rain. During the first day (Saturday), the field dwindled, until midnight when 3 runners were left standing. By 4:00 am, Sunday and 83 miles, only Matt and Lupe were left. And after 28 loops and 28 hours (which equals 116 miles!!), Matt (the "metronome") finished as the Sole Survivor! He finished each loop pretty much at 32-34 minutes. You could almost set your watch to him. Pictures include a commode and bell. The dropouts sit on the commode and ring the bell, signifying that they have given up and are out of the race!



Sole Survivor Race Start



DNF Ringing Out



Start/Finish at Night



Sole Survivor Winner Matt



## Chamna Races (continued)

On October 16 the **Chamna Chase 6K, 10K, and Half** was held. The Chamna Chase is a family-friendly race, and costumes were encouraged. The 6K race had 12 finishers, ranging in age from 12 to 69. The top male was Brian Kreitzer in 34:56 minutes, and the top female was Sayra Cambell in 40:42 minutes. The 10K race had 18 finishers, with ages ranging from 22 to 60. The first overall finisher was Brooke Hansen who finished in 46:45. The top male was Kurtis McFadden, who finished in 53:40. The half marathon had 20 finishers, with ages ranging from 19 to 57. The top male was Colby Jones in 1:40:28. The top female was Leanne Smith in 1:44:30.



Chamna Chase Costumes



Chamna Chase Costumes



Chamna Chase Race Start



Race Start



Chamna Chase on the Trail