

WASHINGTON NATIVE PLANT SOCIETY - NORTHEAST CHAPTER
STUDY WEEKEND
MAY 19-21, 2017

FIELD TRIP DESCRIPTIONS

A general note: Humans are not the only creatures who make eastern Washington their home. We share our wonderful open spaces with a variety of animals, large and small, some of which are venomous, some of which are disease vectors, and a few of which are large and prone to challenge possible intruders. Everyone should wear sturdy footwear and consider ankle protection. Long pants tucked into socks and long sleeves will reduce, but not eliminate, the potential for mosquito bites and tick hitchhikers. Do not approach moose, elk or deer no matter how photogenic they seem. Rattlesnakes, while common throughout eastern Washington, will take every opportunity to avoid human encounters. Nonetheless, if cornered or taken by surprise, they will protect themselves. Look, before you stick fingers and toes under shrubs or into rock crevices.

All trips are limited to 12 participants plus leaders.

Weather in eastern Washington in May is unpredictable. Wear layers, and bring at least a light weight rain jacket. Bring lunch and snacks and plenty of drinking water for all trips.

SATURDAY FIELD TRIP DESCRIPTIONS

1 Kamiak Butte Led by EWU botanist Robin O'Quin. Depart from EWU Parking Lot 15 at 8:00 AM. Drive time from campus to the southern most destination of the trip is about 2 hr through channeled scablands and rolling Palouse hills. We will visit some spectacular remnant Palouse Prairie sites during our "*Tour de la Palouse*". Our primary destination will be **Paradise Ridge** in Genesee, ID where Jacie Jensen of Thorn Creek Native Seed Farm (<http://www.nativeseedfarm.com/about.php>) will provide us access to one of the largest and most intact Palouse prairie sites in the region. Saved from the plow for over a hundred years, the Jensen family is proud to share this special place with us. Recently, Thorn Creek Native Seed Farm has been doing seed production of *Silene spaldingii* for the USFW, and Paradise Ridge is a SISP research site. Trish Heekin, who works for the Latah Soil and Water Conservation District, will join us on our fieldtrip. Our walk up the ridge will also take us through some of the additional conservation and restoration projects ongoing at Paradise Ridge including 10 acres of pollinator strips in CRP, which is a part of a joint research project with USDA-NRCS, USFWS-Latah Soil District Spalding catchfly research, UI/WSU. It's a bit of a walk up to the ridge, but not terribly strenuous and there's an option to get a ride up the steepest part if you need it. In past years, the wildflowers have been magnificent and the views from the top are stunning. We will walk a loop trail around the top of the ridge (~1 mile). Lightweight hiking shoes or sneakers are suitable footwear, please no heavy vibram soled boots.

After Paradise Ridge, we'll stop at the **Whelan Cemetery**, a lower elevation site outside of Pullman, WA. Although small in size, this historic cemetery has a formidable species list and provides a window into the regions floristic past. This is a short stroll.

Our final stop on Saturday will be **Kamiak Butte State Park**. Time permitting we can hike the Pine Ridge loop trail (3.5 miles, 900' elevation gain). Over 180 vascular plant species have been recorded for Kamiak Butte, and this site affords us an opportunity to see the diversity of the north-

slope vegetation in a sea of prairie, as well as more Palouse prairie plants along with world-class views. For more info on Kamiak Butte check this site. *With driving time, expect to return to Cheney in late afternoon.* <https://sbs.wsu.edu/herbarium/localfloras/kamiakbutte/>

2A – Smoot Hill - Led by botanists Ellen Kuhlmann and Barry Wendling. Depart from EWU Parking Lot 15 at 8:30 AM. Drive time from campus is about 1 ½ hr through channeled scablands and rolling hills of agricultural land to the Hudson Biological Reserve at Smoot Hill. Located north of Pullman, Smoot Hill contains one of the largest intact remnants of native Palouse prairie in the state. Owned by WSU and managed as a research station, this 800- acre property is normally not open to the public, presenting a rare opportunity to experience an all-but-lost ecosystem. Hiking will be moderately strenuous, with elevation changes of 800-1000 feet.

With driving time, expect to return to Cheney in late afternoon. For a little background on the Hudson Biological Reserve look here: <http://roalsonlab.weebly.com/hudson-biological-reserve-at-smoot-hill.html>

2B – Escure Ranch - Led by EWU botany graduate student Cody Thomas. Depart from EWU Parking Lot 15 at 8:30 AM. Drive time from campus is about 1 hr, including a few miles on gravel road. Although years of grazing have taken their toll in weed introductions, there are plenty of native wildflowers to be seen as well as you hike through shrub steppe. Depending on how the season progresses expect to see great displays of some combination of arrow leaf balsamroot, various buckwheats, phloxes, lomatiums, lupines, larkspurs, and possibly bitterroot. Explore the remains of some of the ranch buildings dating from the early 1940's, and then follow a 3 mile long trail over gently rolling terrain to Towell Falls. Along the way you will pass through expanses of bunchgrass in the slightly deeper soils and sagebrush on the lithosols, and encounter a variety of potholes and ponds along the way. The last half mile or so involves a 200 ft elevation gain, and then a bit of a scramble down to the falls. The return trip will be along the same trail. *Expect to return to Cheney in mid to late afternoon.* For a bit of background on the 20 square mile BLM property, check this site: <http://www.bentler.us/eastern-washington/recreation/escure-ranch.aspx> For a description of the trail go here: <https://www.wta.org/go-hiking/trip-reports/tripreport-2005042907>

3 – Clarkia Fossil Beds – Led by botanists Rob and Ruth Kirkpatrick, and paleontologist Bill Rember. Depart from EWU Parking Lot 15 at 8:00 AM. Drive time from campus is about 2 ½ hours to Clarkia ID, but the long drive is well worth it. Minimal hiking. Visit a 15 million year old (Miocene) lake bed with one of the best preserved assemblages of fish and leaves on the planet. Peel apart layers of shale to find actual leaf material from a forest that included *Metasequoia*, a variety of conifer genera familiar to residents of the Pacific Northwest, and deciduous trees that are more characteristic of the present day southern Appalachian Mountains than the semi-arid inland northwest. Bring old newspaper to wrap a few souvenir specimens, along with lunch and plenty of water, not only for drinking but for rinsing your hands of the dry clay that will inevitably cover your fingers. **Admission fee to the Fossil Bowl is \$8.** If time permits, there will be a short side trip to an ancient cedar grove. *With driving time, expect to return to Cheney in late afternoon.* For a bit of background read this write up from the Idaho Native Plant Society: <https://idahonativeplants.org/news/SageNotesFeb2010.pdf>

#4. Palisades Park and Deep Creek - Led by riparian ecologist Becky Brown. Depart from EWU Parking Lot 15 at 8:30 AM. Drive time from campus is about ½ hr to Palisades Park on rocky basalt bluffs on the western edge of Spokane. Palisades Park sports classic channelled scablands

topography, ponderosa pine woodlands, mima mounds, plenty of bitterroot, and spectacular views of Spokane and beyond. The vegetation here differs subtly from that of Turnbull National Wildlife Refuge. We will also have the opportunity to see the effects of a 2015 wildfire that burned near the park. This portion of the trip involves mostly easy hiking over basalt bedrock. From here participants may choose to return to campus for some plant keying, while hardier hikers can continue on to Deep Creek Canyon, about 20 minutes from Palisades Park. At Deep Creek we will hike through a rugged narrow canyon that opens up at the mouth of Deep Creek into the Spokane River. Deep Creek runs underground in Deep Creek Canyon, so we will have the chance to observe hyporrheic stream flow emerging above ground. There will be the opportunity to view a range of riparian habitats, wetlands, rocky outcrops shaped by the Missoula floods, and ponderosa pine forest. **Discover Pass required for parking for Deep Creek.** *Half day to all day activity.* Some information on Palisades Park along with a few photos can be found here <http://www.palisadesnw.com/>

5 Liberty Lake – Led by local beaver specialist and restoration ecologist Joe Cannon. Depart from EWU Parking Lot 15 at 8:30 AM. Drive time from campus is about 45 min. The first part of this hike is an interpretive walk exploring how beavers build wetland plant communities and influence ecosystem processes. We will observe and discuss the plants that characterize this habitat and region. The main walk is about one mile of unpaved level walking, one way. Hikers may opt to stop here and return to the parking area along the same trail. Ambitious hikers will extend the tour to a more strenuous hike through the approximate 6 mile scenic loop trail, heading up the Liberty Creek catchment and observing Selkirk foothills/ old-growth forest ecosystems and plants. **Admission fee to Liberty Lake Regional Park is \$2.** *Half day to all day activity.* A topographic trail map can be downloaded here <https://www.spokanecounty.org/DocumentCenter/View/4062>

6 Dishman Hills – Led by botanist Mary Waters. Depart from EWU Parking Lot 15 at 9:00 AM. Drive time from campus to Camp Caro parking area is about 45 min. This trip through the northern parcel of the Dishman Hills Natural Resource Conservation Area consists of two walks on easy well trodden trails. The exact route through a series of interlocking loop trails will depend on where the most botanical action is occurring in mid May, but expect to find lots in bloom along trails that lead through granite ravines, along ponds, and up to exposed knobs. The deep cool ravines and granite cliffs can keep anyone interested in mosses and lichens occupied for hours. Plan on two loop walks with the option to take a long morning hike or continue on a second loop after lunch for an all day activity. *Half day to all day activity.* Background on the Dishman Hills Conservancy, the geology of the area, and trail maps can be found here <http://www.dishmanhills.org/>

7 – Turnbull National Wildlife Refuge – Led by Refuge Biologist Mike Rule. Depart from EWU Parking Lot 15 at 9:00 AM. Drive time from campus parking area is about 15 min. Learn about the history and multitude of management issues associated with the Turnbull National Wildlife Refuge on this ½ day tour of the refuge. Established in 1937, the Refuge's initial mission was to maximize habitat for migratory waterfowl, and its many wetlands were intensively managed with that goal in mind. In recent decades the Refuge's mission has been greatly broadened to also enhance habitat for upland birds and mammals, and for reptiles and amphibians. In the past few decades the Refuge has implemented an extensive prescribed burn program to attempt to restore its ponderosa pine woodlands to a closer approximation of pre-European settlement conditions, has experimented with various strategies to protect its dwindling aspen stands, established weed control programs, and supported research on preserving the flora of its extensive mima mounds. This tour will involve some driving on narrow roads that will require vehicles with moderate ground clearance, as

well as some walking on well-maintained mostly level trails. Expect to visit ponderosa pine woodlands, seasonal and permanent wetlands, mima mound prairie, aspen stands, and some shrub steppe. If we have a moderately cool wet spring the floral displays in the mima mounds can be eye-popping. **Parking permits at \$3 per car** may be purchased at the Refuge headquarters. Refuge Annual Passes, Annual Federal Duck Stamps, Senior Passes, and unexpired Golden Eagle and National Park Passes may be used in lieu of a daily parking permit. *Half day activity with the opportunity to do further self guided exploring afterward.* The Refuge's official website is here <https://www.fws.gov/refuge/Turnbull/>

8 – Riverside State Park – led by USFS botanist Kathy Ahlenslager. Depart from EWU Parking Lot 15 at 8:30 AM. Drive time from campus is about 45 min. Riverside State Park is Washington State's largest park and has at least 410 plant taxa. The park contains over 55 miles of hiking trails as well as equestrian and bike trails. The exact route for this trip will depend on what's blooming where, but we will start at the 2.1-mile Bowl and Pitcher loop trail at Riverside State Park. This trail extends along both sides of the Spokane River with an elevation gain of 166 ft. and a high point of 2,165 ft.. The hike boasts great views, ponderosa pine and riparian forests, wetlands, basaltic rock outcrops, cliffs, and talus slopes. Bring a beverage and snack and plan on an afternoon trip to the Spokane House Interpretive Center, a traditional meeting site for Spokane area Native Americans and site of the first permanent Euro-American settlement in Washington State. **A Discover Pass is required for parking.** *Long half day activity.* Information on Riverside State Park and the Bowl and Pitcher is here <http://www.wta.org/go-hiking/hikes/riverside-state-park> and a trail map is here <https://cdn-assets.alltrails.com/areas/maps/10115647/8682614c5b1f9729b47412386dff07f.pdf> and information on the Spokane House Interpretive Center is here <http://www.friendsofspokanehouse.com/home.html>

9 – Steptoe Butte - led by WSU botanist and weed identification specialist Richard Old. Depart from EWU Parking Lot 15 at 8:30 AM. Drive time from campus is about 75 min. Steptoe Butte is a quartzite bluff that protrudes through the surrounding basalt bedrock and rises about 1000 feet above the surrounding Palouse hills. It contains some of the oldest exposed rock in the Pacific Northwest. The butte is quite steep and there are no established trails, so it will be rigorous hiking. This will be an excellent opportunity to see native Palouse habitat (99.9% of which has been destroyed) as well as a dramatic lesson in the effects of aspect and slope on vegetation. Unfortunately, we will also encounter a number of weed species and see their impact on the native plant communities. We will also visit the historic apple orchards from the 1800s. At some point we will make it to the top of the butte (likely by driving) to see some of the most spectacular views in eastern Washington. **Discover Pass is required for parking.** *Plan on returning to Cheney in mid to late afternoon.* Information on Steptoe Butte, including a link to the Steptoe Butte Prairie Reserve Facebook page is here <http://www.steptoebutte.org/>

10 - Mica Peak/Tower Mt – led by forester/botanist John McCormick. Depart from EWU Parking Lot 15 at 9:00 AM. Drive time from campus is about 75 min. Topping out at 5203 feet, Mica Peak is one of the highest elevations in eastern Washington. It constitutes the southern most extent of the Selkirk Mountain Range, and marks the boundary between the Selkirks to the north and the Palouse hills to the south. In a short 2-3 mile hike one can pass from lowland ponderosa pine forest through mixed Douglas fir mid-elevation forest into subalpine vegetation, with aspen and birch stands along the way. Although the very top of the mountain is privately owned and not open to the public, there are still lots of spectacular views to be had along the way, and the opportunity to explore a variety of forest types with diverse logging history. *Plan on returning to Cheney in mid to*

late afternoon. To learn about ongoing attempts to preserve Mica Peak as part of a wildlife corridor check out this news article <http://www.spokesman.com/stories/2016/jun/11/diamond-in-the-rough-mica-peak-conservation-area-t/>

#11 – Fishtrap Lake – led by EWU botanist Suzanne Schwab. Depart from EWU Parking Lot 15 at 9:00 AM. Drive time from campus is about 30 min. The Fishtrap Recreation Area managed by the BLM offers some excellent examples of channeled scabland topography, with outstanding wildflower displays when we have a wet spring. We will leave some vehicles near Fishtrap Resort, and then shuttle everyone to the trailhead at Farmer’s Landing. From there we will follow a 4 mile long trail over gently rolling terrain that will weave in and out of ponderosa pine, small aspen stands, and shrub steppe vegetation dotted with mima mounds. About half the length of the trail follows along the western edge of Fishtrap Lake wedged between surrounding basalt cliffs. Much of this area was burned in the 2014 Watermelon Hill fire that scorched about 10,000 acres of BLM rangeland and surrounding farmland. This trip will offer a great opportunity to observe post fire recovery (and weed invasion). Our hike will end where we left cars in the morning, and we’ll shuttle people back to the trailhead. *Plan on returning to Cheney in mid to late afternoon.* For a brief description of the Fishtrap area and a trail map look here <http://www.bentler.us/eastern-washington/recreation/pdf/fishtrap-lake-blm.pdf>

#12 – Deep Creek Headwaters – led by naturalist Jack Nisbet and geologist Gene Kiver. Depart from EWU Parking Lot 15. Drive time from campus is about 45 min. This tour of scablands geology and botany will begin on the Deep Creek Preserve purchased by the Inland Northwest Land Conservancy in 2015. Immediately adjacent to the WA Dept of Fish and Wildlife’s Audobon Wildlife Area, this trip will offer great opportunities to explore the spring bloom on channeled scabland lithosols interspersed with mima mounds, deep rounded potholes, shallower vernal wetlands, and a permanent lake that is an important stopover for migratory waterfowl. This site is the headwaters for three important eastern Washington drainages: Crab Creek, Deep Creek, and Spring Creek, and depending on where the flowers are, this trip will include short explorations of one or more of these watersheds. Expect to do some short off trail walks across basalt interspersed with short drives to a variety of locales. *Plan on returning to Cheney in mid to late afternoon.* A bit of background on the Land Conservancy Parcel and the WDFW Audobon Lake parcel can be found here <http://www.inlandnwland.org/single-post/2016/03/02/Deep-Creek-Preserve-Citizen-Science-Biological-Assessment> and here [http://www.wildliferecreation.org/our-campaigns/wwrp-projects/projects/Reardans Audubon Lake](http://www.wildliferecreation.org/our-campaigns/wwrp-projects/projects/Reardans%20Audubon%20Lake)

SUNDAY FIELD TRIP DESCRIPTIONS

13 - Kamiak Butte Led by EWU botanist Robin O’Quin. Depart from EWU Parking Lot 15 at 8:00 AM. Drive time from campus to the southern most destination of the trip is about 2 hr through channeled scablands and rolling Palouse hills. We will visit some spectacular remnant Palouse Prairie sites during our “*Tour de la Palouse*”. Our primary destination will be **Paradise Ridge** in Genesee, ID where Jacie Jensen of Thorn Creek Native Seed Farm (<http://www.nativeseedfarm.com/about.php>) will provide us access to one of the largest and most intact Palouse prairie sites in the region. Saved from the plow for over a hundred years, the Jensen family is proud to share this special place with us. Recently, Thorn Creek Native Seed Farm has been doing seed production of *Silene spaldingii* for the USFW, and Paradise Ridge is a SISP research site. Trish Heekin, who works for the Latah Soil and Water Conservation District, will join us on our

fieldtrip. Our walk up the ridge will also take us through some of the additional conservation and restoration projects ongoing at Paradise Ridge including 10 acres of pollinator strips in CRP, which is a part of a joint research project with USDA-NRCS, USFWS-Latah Soil District Spalding catchfly research, UI/WSU. It's a bit of a walk up to the ridge, but not terribly strenuous and there's an option to get a ride up the steepest part if you need it. In past years, the wildflowers have been magnificent and the views from the top are stunning. We will walk a loop trail around the top of the ridge (~1 mile). Lightweight hiking shoes or sneakers are suitable footwear, please no heavy vibram soled boots.

After Paradise Ridge, we'll stop at the **Whelan Cemetery**, a lower elevation site outside of Pullman, WA. Although small in size, this historic cemetery has a formidable species list and provides a window into the regions floristic past. This is a short stroll.

Our final stop on will be **Kamiak Butte State Park**. Time permitting we can hike the Pine Ridge loop trail (3.5 miles, 900' elevation gain). Over 180 vascular plant species have been recorded for Kamiak Butte, and this site affords us an opportunity to see the diversity of the north-slope vegetation in a sea of prairie, as well as more Palouse prairie plants along with world-class views. For more info on Kamiak Butte check this site

<https://sbs.wsu.edu/herbarium/localfloras/kamiakbutte/>

14 – Hog Canyon - Led by EWU botanist Suzanne Schwab. Depart from EWU Parking Lot 15 at 9:00 AM. Drive time from campus is about 30 minutes to Hog Canyon parking area of the BLM Fishtrap Recreation Area about 10 miles northeast of Sprague WA. This loop trail over mostly gently rolling terrain is deceiving. Although the official trail is only about a mile long, there are plenty of opportunities for side trips, including a steep scramble down to the Hog Canyon Falls where spray from the spring run off over a series of cascades supports a diverse flora tucked along basalt cliffs. For those who don't wish to scramble, there is plenty of opportunity to explore off trail in more gentle terrain. A portion of the trail skirts the cliffs above Hog Lake giving a good view of the lake below, and an opportunity to straddle a visible fault line. There are several wetlands and seasonal pools to explore in a short distance. Time permitting, on the way back to Cheney we can take a second side trip along the $\frac{3}{4}$ mile trail to the historic Folsom Farm site. This trail is essentially flat, and follows the base of some rounded hills whose deep soil support a flora that is distinct from the plants adapted to the extremely shallow lithosol just a few dozen feet away. Half day activity.

For more info: <http://www.bentler.us/eastern-washington/recreation/escure-ranch.aspx>

15 – Clarkia Fossil Beds – Led by EWU botanist Becky Brown. Depart from EWU Parking Lot 15 at 8:00 AM. Drive time from campus is about 2 $\frac{1}{2}$ hours to Clarkia ID, but the long drive is well worth it. Minimal hiking. Visit a 15 million year old (Miocene) lake bed with one of the best preserved assemblages of fish and leaves on the planet. Peel apart layers of shale to find actual leaf material from a forest that included *Metasequoia*, a variety of conifer genera familiar to residents of the Pacific Northwest, and deciduous trees that are more characteristic of the present day southern Appalachian Mountains than the semi-arid inland northwest. Bring old newspaper to wrap a few souvenir specimens, along with lunch and plenty of water, not only for drinking but for rinsing your hands of the dry clay that will inevitably cover your fingers. **Admission fee to the Fossil Bowl is \$8.** If time permits, there will be a short side trip to an ancient cedar grove. *All day activity.*

For a bit of background read this write up from the Idaho Native Plant Society:

<https://idahonativeplants.org/news/SageNotesFeb2010.pdf>

#16. **Iler Creek** - Led by botanist Ruth and Rob Kirkpatrick. Depart from EWU Parking Lot 15 at 8:30 AM. Drive time from campus is about 3/4 hr to Iler Creek Parking Area. Hike on the edge of the Spokane Valley with commanding views of the Washington Palouse to the south and the Selkirks to the North and East. On the way we will encounter a wide variety of plant species as we travel through lush shaded forests, open meadows as well as a ridgeline ramble. In the middle of the hike our high point reaches the Rocks of Sharon, a granite-quartzite rock outcropping. What's more is that you have the possibility of encountering moose and elk.

The entire hike is about five miles in length and is rated as moderate with about 1200 feet elevation gain and loss. It is certainly one of the best hikes in the Spokane area.

All day activity. A detailed trail description is here <http://www.wta.org/go-hiking/hikes/iller-creek>

17 Liberty Lake – Led by local beaver specialist and restoration ecologist Joe Cannon. Depart from EWU Parking Lot 15 at 8:30 AM. Drive time from campus is about 45 min. The first part of this hike is an interpretive walk exploring how beavers build wetland plant communities and influence ecosystem processes. We will observe and discuss the plants that characterize this habitat and region. The main walk is about one mile of unpaved level walking, one way. Hikers may opt to stop here and return to the parking area along the same trail. Ambitious hikers will extend the tour to a more strenuous hike through the approximate 6 mile scenic loop trail, heading up the Liberty Creek catchment and observing Selkirk foothills/ old-growth forest ecosystems and plants. **Admission fee to Liberty Lake Regional Park is \$2.** *Half day to all day activity.* A topographic trail map can be downloaded here

<https://www.spokanecounty.org/DocumentCenter/View/4062>

18 Tubbs Hill – Led by botanist Larry Hampson. Depart from EWU Parking Lot 15 at 9:00 AM. Drive time from campus to Camp Caro parking area is about 1 hr. This 120 acre park on the edge of the city of Coeur d'Alene is a popular destination for wildflower lovers in the spring. Bounded on three sides by Lake Coeur d' Alene, a 2 ½ mile loop trail takes hikers mostly along the shore line, with branches off this trail that will climb about 400 ft through open forest to the top of the hill for great views of the lake, and access to a variety of wildflowers. *Half day activity.* Background on the history, geology, and ecology of the Tubbs Hill area is here here

https://static1.squarespace.com/static/5562a6b1e4b08f92bdb8069c/t/5568d1c7e4b0d6fc6b6fb32e/1432932807524/THNT+12pg+Brochure+CS4_1.pdf

19 – Turnbull National Wildlife Refuge – Led by Wenatchee WNPS Member Don Schaechtel. Depart from EWU Parking Lot 15 at 9:00 AM. Drive time from campus parking area is about 15 min. Established in 1937, the Refuge's initial mission was to maximize habitat for migratory waterfowl, and it's many wetlands were intensively managed with that goal in mind. In recent decades the Refuge's mission has been greatly broadened to also enhance habitat for upland birds and mammals, and for reptiles and amphibians. In the past few decades the Refuge has implemented an extensive prescribed burn program to attempt to restore its ponderosa pine woodlands to a closer approximation of pre-European settlement conditions, has experimented with various strategies to protect its dwindling aspen stands, established weed control programs, and supported research on preserving the flora of its extensive mima mounds. This tour will be a leisurely driving tour around the Refuge's 6-mile motor loop with plenty of opportunities to pull over and take short exploratory walks. Expect to visit ponderosa pine woodlands and seasonal and permanent wetlands. Bring your binoculars, as birds will compete with the flowers for your attention. **Parking permits at \$3 per car** may be purchased at the Refuge headquarters. Refuge Annual Passes, Annual Federal Duck Stamps, Senior Passes, and unexpired Golden Eagle and National Park Passes may be used in lieu of

a daily parking permit. *Half day activity with the opportunity to do further self guided exploring afterward.* The Refuge's official website is here <https://www.fws.gov/refuge/Turnbull/>

20 – Little Spokane River – led by Washington Butterfly Association President John Bauman and WNPS member Brenda McCracken. Depart from EWU Parking Lot 15 at 8:30 AM. Drive time from campus is about 45 min. Park at the Yokes Market at 3321 Indian Trails Rd, and squeeze into as few cars as possible to go to the fairly small Painted Rocks Trailhead parking area. Where would plants be without pollinators like butterflies, and where would butterflies be without plants as a larval food and a nectar source? Ponder this question as we take this 1.5 mile hike on a gentle uphill grade and back (total ~ 3 miles) catching (and releasing) butterflies, viewing plants along the trail, and exploring the impact of the 2015 Rutter Canyon fire on insect and plant populations. During the walk, we'll catch butterflies for the purpose of viewing, identification, and photography as desired and will then release them unharmed. The Little Spokane River area is home to 46 species of butterflies; on a sunny day in May, well over 20 species of butterflies may be seen along with numerous companion plants and other native wildflowers. As an added bonus you'll get to view some Native American pictographs that are about 250 years old. **A Discover Pass is required for parking at Painted Rocks.** *Half day activity.* For a little bit of information on the Painted Rocks Trailhead look here https://www.srhd.org/documents/PA_N/littlespokane.pdf and for a satellite's eye view of a hike along the Little Spokane River check this out <https://www.hikingproject.com/trail/7011801>

21 – Damage Creek - led by EWU soil ecosystem ecologist Justin Bastow. Depart from EWU Parking Lot 15 at 8:30 AM. Drive time from campus is about ½ hr. Hike through areas of channeled scabland and wetlands affected by the 10,000 acre Watermelon Hill fire in July, 2014. The mile or so hike will be off trail but over mostly gentle terrain and will encompass scabland/shrub steppe, ponderosa pine, and wetland landscapes. Trip leader Justin Bastow, a soil ecologist in the Biology Department at Eastern Washington University, has been following the impacts of the fire on soil food webs and soil carbon storage. Justin is eager to exchange his soil insights and love of nematodes for our insights into the flora of the area.

22 - Mica Peak/Tower Mt – led by forester/botanist John McCormick. Depart from EWU Parking Lot 15 at 9:00 AM. Drive time from campus is about 75 min. Topping out at 5203 feet, Mica Peak is one of the highest elevations in eastern Washington. It constitutes the southern most extent of the Selkirk Mountain Range, and marks the boundary between the Selkirks to the north and the Palouse hills to the south. In a short 2-3 mile hike one can pass from lowland ponderosa pine forest through mixed Douglas fir mid-elevation forest into subalpine vegetation, with aspen and birch stands along the way. Although the very top of the mountain is privately owned and not open to the public, there are still lots of spectacular views to be had along the way, and the opportunity to explore a variety of forest types with diverse logging history. *Plan on returning to Cheney in mid to late afternoon.* To learn about ongoing attempts to preserve Mica Peak as part of a wildlife corridor check out this news article <http://www.spokesman.com/stories/2016/jun/11/diamond-in-the-rough-mica-peak-conservation-area-t/>

#23 – Telford BLM Recreation Area - led by BLM botanist Diane Stutzman. Depart from EWU Parking Lot 15 at 8:30 AM. Drive time from campus is about 75 min. The parking area for this trip is located about 13 miles west of Davenport on Hwy 2; participants from the west side of the state may want to plan on continuing on home from here through Wenatchee. Telford is about 7000 acres and has a wide variety of habitats. Most of it is rough (basalt) but not particularly

steep. Trails are where you find them, but it's wide open. The southern end has a lot of ponds and wetlands and scab-rock. The northern end goes from sagebrush to Ponderosa pine and has a creek and some nice cliffs. So we get everything from sagebrush to forest, very wet to very dry. We'll be driving between various habitats, and will take 3 or 4 easy hikes of 1/2 to 1 mile each. There is one area with steep slopes, but actual climbing is optional. There is a rest stop in the middle of the parcel with picnic tables and restrooms, where we can take lunch. No parking passes are required, but car-pooling is recommended. *Plan on returning to Cheney or continuing on home in mid to late afternoon.* A map of the Telford area is here

https://www.blm.gov/or/resources/recreation/files/brochures/Telford_2010.pdf

#24 – **Channeled Scablands Geology** – led by an as yet to be determined member of the Ice Age Floods Institute. Depart from EWU Parking Lot 15. Planning of details in progress, but will include a focus on the geology of the channeled scablands south and west of Cheney.