

# Rainwater Wildlife Area Tour – July 19<sup>th</sup> 2023

## Transcript of Tour Sites



Photo credit: Annie Warren, NWPB

### Stop 1 – Entrance to Rainwater on Robinette Mt. Rd

**JM:** Hi, welcome. My name's Jerry Middel, I'm the project lead for Rainwater Wildlife Area.

**LC:** And I'm Lindsay Chiono, I'm the assistant project lead for the Rainwater project.

**JM:** And welcome and thank you for coming and taking interest in the Rainwater Wildlife Area, really quickly for those that don't know this is going to be repetitive for those that do. The Tribes purchased Rainwater, and it was 8500 acres in 1998. It was part of a mitigation land for land flooded under McNary Dam. Loss of habitat Bonneville funded the purchase of it and it's meant for exactly that. Wildlife habitat, Fish and Wildlife habitat. So there's 10 miles of anadromous fish stream that's in Rainwater on the South Touchet. And there's been three additional acquisitions since 1998, in 2010 the Tribes, bought the Gallatin track, which is on the other side of the valley, that added 1200 acres, and they added another 1000 acres or so right down here to expand the area moving to

the South.

So now we're at 11,000 acres and the Tribes are trying to purchase a couple of in holdings that are currently that up for sale. We'll see how that goes.

Uh, so of the 11,000 acres, about 8500 acres accounted for forest and about 2000 acres or so of grasslands and 500 acres of riparian and shrub land is more or less how it breaks out.

Uh, our, you know, we're working for the Department of Natural Resources, of course. So our main objectives are to increase opportunities for tribal members to collect or harvest First foods, so the majority of our actions are based on that, that guidance.

So to that end, you know, we have 2000 acres of grasslands that were probably overgrazed for 100 years that are pretty filled with invasive plants and weeds. And they're isolated grasslands, so they're really tough to treat and control. We've tried a lot of things and we're not done.

It's an ongoing operation - we tried to bring goats out here and run goats on the grasslands to eat the yellow starthistle primarily, and we did that for about 6-7 years with -- meh wasn't great results, but due to the issue of domestic livestock potential for infecting bighorn sheep, we took them off. So we're done with that project.



Next thing we're going to try is an aerial herbicide application using drones. So that's going to be a first, we'll start that this fall and that's not the preferred

method, but we have to do something because the weed infestation on those hill slopes is pretty intense.

Uh, so and then on the river-side of things we've done some restoration work on the South Touchet over the years. The previous project lead Allen Childs, don't know if anybody knows him, he's out of La Grande. He managed this prior to me coming out and did some work in 2007 on the South Touchet, and then we've picked up in 2010 and we've done some more river restoration work along the South Touchet.

It hasn't been the primary focus because the river is in pretty good shape actually. Once we got cattle out of there and took the road from blocking the river, the floodplain is very connected to the river now, which is one of our goals. And so over time, the habitat is really improved down there on the South Touchet. So the need for river restoration projects has decreased down there. On the forest side of things, which is primarily we're going to be looking at today. Uh, you know we have of our work cut out for us.

A short history, the property was owned by the Rainwater family, which is interesting. I used to live in Corvallis OR and I used to drive from Corvallis to Albany and I've passed this little place called Rainwater Lane and never – Nothing was just there. Well, when I applied for the job here and I got the job, I started doing a little research. It turned out that the homesteader that's homesteader this place last name was Rainwater, and that was their place in Albany. And then they came over here. So all of a sudden it had a I had a connection to that for the short duration that I was still in Benton County anyway.



Rainwater ran as a ranch, cattle and timber primarily. I don't think it was ever a -- You know, they just high graded, easily accessed logs over the years and then ran cattle across the entire property and 1992 they sold it to a timber company, Miller Timber. And they came in and started doing liquidation forestry and as kind of interesting, I'll point out some places that it really didn't work for them. For instance, they built an extensive road network to get the logs out and they couldn't get the logs out on the road, so they ended up flying them out. The helicopter, which I don't know if they went bankrupt or not, but they lost a lot of money.

So by '98 it came up for sale and that's when the Umatilla Tribes purchased it. So it's a habitat mitigation project and restoration is primarily what we're doing. So we have a lot of stands, forest stands. It's very diverse. Uh, a lot of Ponderosa pine on the West side mixed with grand with Doug Fir. On West facing and then as you get into the draws and on the higher stuff, it becomes Doug Fir, grand fir, Western larch. We have -- since a lot of it was high graded, the best timber was removed over the years and then we've gotten really good at putting out fires since World War Two we have a problem where we have a real imbalance where we have too much grand fir. It's overstocked with grand fir, and so one of our goals is to remove the grand fir so that if we do get a fire going up here, it won't be catastrophic. It's a really big task. We were only just started. It's expensive.



We've had great support from the Washington Department of Natural Resources. They've been funding some of our projects to date, the hand thinning projects.

You'll see some of that. We have a project going on right now where they're working, so we'll just stop and take a look at that and.

Yeah, that that's more or less the history what we do, I know people are interested in other things that I might not mention. So please, you know, fire away if you have any questions. Lindsay do you have anything to add?

**LC:** I think we covered a lot of this on the bus and I think we'll have a lot of time for conversations today. We're gonna start with this. Stand this year was a mastication stand. We're going to just go a little up the road and get a better look at it, but masticated and then burned. Our second stop is the stand that we thinned more heavily and then burn just last fall. So that's a fun one to look at. And then our last stop of the day is a stand that Jerry was in charge of thinning back in 2014. It was not under burned and it was thinned a little more lightly. And it's a lot shadier. Also, a really pretty stand. Yeah.

**JM:** So the best way I would describe this as the mosaic. I mean, there's all these different treatments we're trying to figure out what works, like Lindsay said, this was all mechanically thinned. I came in with essentially an excavator with a big old head on it and it just came down and grinds everything up that and what you see is what we left. It's a little thicker here, so we'll jump in the rig and drive up quarter mile and get to another spot where you have a really good look and you walk around and then ask any questions you can see.



So this is done in 2019. We also did burn this when we were done and we didn't get great ignition. It was wet. That's one of the problems up here. Our window for burning is so narrow. It's hot. It's hot, it's hot. It rains. It's too wet, so it's really hard to get on the ground and time it. And when we get to that stand, we burn last year, we can talk about some of the problems or issues that came up around that.

So you're welcome to walk as well along the road if you want to. We're only going to go up about 1/4 mile or so or jump in the bus. Whatever, I assume it's OK to walk if people want to. And then you can just. We'll stop again. And you can look at the spacing there. What we were trying to achieve and then see if you have any questions.



**EM:** Jerry, What's with the onions and the sheep?

**JM:** Ah, that's Bennett Lumber's piece of excuse me. Bennett Lumber's property, interestingly, that whole property used to look like this. See that pine right there? These two Pines. So this would be before I came, but that was all real nice pine. And when the Tribes bought this, apparently that land was up for sale and Washington DNR owned it. Tribes are trying to buy it, but instead DNR sold it to Bennett Lumber, and Bennett Lumber slicked it off, and then they tried to sell it to the Tribes.

So, but that's a that's just kind of how the history of that little piece and then -- but what's up there now is that this, the Bennett is leasing it I assume to someone who's right raising sheep. I haven't met the guy. Got a big Trump Won sign, so I haven't

asked him about his philosophy but the thing is that he's got a bunch of sheep up there and he's got a bunch of dogs and they bring out onions and they're feeding it to them. So I don't know what else is. I haven't talked to him too much about it. That's been going on for about 2 years. They come up in the spring and clear out in the fall.

**EM:** I thought it was like a scent thing.

**JM:** It attracts bears! So perhaps I should quit and talk about wildlife up here, so excellent habitat for elk. This is the Dayton unit. Very popular area to hunt and on that note, one of the agreements that the tribes have with Bonneville is. This is Open Access. Anyone can come here. Non Tribal people can hunt here if they have a valid Washington state hunting license, and they do. It's pretty popular place. Of course, the Tribal Members have an extended season, so they're typically not overlapping.

This gate gets closed December 1st and it stays closed till June 1st. Just to keep the high rise Toyotas from doing their thing and also it's great winter range. So it quiets things down out there. So elk, mule deer, whitetail. And then predators Cougars.

Interesting fact on the Cougars is the elk population is down right now, and Washington Department of Fish and Wildlife has been doing studies on elk population. They come out here in the spring and cooperation with the Tribes and collar Calves, newborn calves, and they've done it for three years now. I'll just these are very -- I'm just going to spitball some numbers. It's like they collar 100 calves a year and then when the signal quits -- when the calf quits moving, they go check it out. So they've lost about 90% of the calls that they've collared for at least two to three years in a row. And of the that 90% that have been lost, almost 90% are cougar kills, there's some that are wolf kill and some that are bear kill and some that are starvation. But it's primarily cougar kills, so it's an interesting dilemma. The Cougar population is really high, apparently. Did you have a question?

**DA:** Ohh you answered it. It was about the onions. Why they were feeding from the onions and not the land.

**JM:** Yeah, they're obviously grazing. You know, they, they, they've, it's pretty knocked

down out there. I guess it's a supplement so many must have a good price on onions. I guess I don't know. I've never stepped. It wouldn't occur to me to feed sheep onions, but what do I know?

**DA:** Seems like that would be tasty.



**JM:** There you go. So yeah, the conversation going up this looking at this stand will just be, you know, here's something that was treated mechanically and then burned afterwards. You know, it reduced the density, get out some of the white fir grand fir and try and get these trees, you know well because we're competing with drought and heat. And so obviously, when we're overstocked, we're stressing the trees and I'm trying. 2015, 2015 and 2017 were really hot years and we had -- you could just see the mortality when you get to a spot where you can look at the landscape it -- there were just a lot of dead trees after those years. And then it also bug infestation.

So what do we do? You know, how do that's one of our dilemmas and that's one of the problems we're trying to solve. And it's not easy. So we'll take a look and you can see what we're doing here. Anything else? Thank you.



## Stop 2: RTRL Managed Site



**JM:** Well, just real quickly, I'll describe the take -- the take home here is that this stand was very thick with trees. It's practically impenetrable. And so one of the ways that we select these trees is that we got funding from BIA under the RTRL Program, Reserve Treaty rights and Lands Program, which is for non trust land. This was fee land. It is becoming trust land right now. It's not quite there yet, but we got funding from RTRL and one of the things we did was 100% complete inventory of all the forest.

So we sent contractors out there and well, first we delineated all the forest stands based on some signatures that you can see from the air. And then from those stands that were delineated, we sent forestry crews out and inventory foresters and they essentially, you know, measured subsample of all the trees on Rainwater. And then from that data we compile it and then look at stands that have an inordinate number of trees per acre seem to be out of whack, you know? For what we what we would expect, and then this also this opportunity is close to the road.

So this one fit that description well, it had far too many trees to the acre above what's recommended in the Blue Mountain stocking information. So we mechanically thinned it. Like I said, with the excavator and a big head and one thing that I think I don't have any photos to show you right now. But you know this, it was bare. I mean, the ground was barren and it looked like a machine had gone through there. And you know, there was very little of vegetation other than the trees that were that we left.

Of course, the first thing that comes in the year after that is all weeds. I mean it's Mullein and Thistle which is kind of disturbing, but that's what you get. But then, after we burned and this was 2019, we burned this in 2019?



**LC:** 2021.

**JM:** We burned this in 2021. I mean, it's come back with a vengeance in terms of shrubbery, which is great for elk habitat and better than that, compress the overstock trees and we're starting to see the weeds fall out. They're still -- I saw a big patch of Mullein back there, but overtime that Mullein and Thistle it seems to be like an early colonizer after we come in and disturb it. But then it drops out afterwards. So this is

just an example of one way that we're treating stands up here. We'll go to a spot that's a little more stark in a moment.

### Stop 3: The Larch Stand



**LC:** So this stand here we burned just last fall. October 20th, I think was the date. We thinned it in 2021. This was actually a commercial thin, so that means we removed logs and hauled them off site, turned them into to logs or – sorry, turn them into boards. So our objective here was to bring back a lot more this larch. You can see mostly it's larch in the overstory, so we're we've been calling this stand the larch stand. We also retained a lot of our Ponderosa pine. That's -- you can see the a couple of those right here in front of us. Most of what we took out was grand fir,

some spruce, some doug fir.

One of the main objectives to burning here. Was that larch really likes the bare mineral soil that burning leaves behind in order to regenerate and so that was kind of one of our main objectives was to open this up a lot, have a lot more of that bare mineral soil. We're also expecting to see a lot of shrub response to the burning a lot like that last site that we visited. It really illustrated how our our native plants respond positively to burning -- a lot of our native plants are "re-sprouters", so they're really well adapted to burning.



So right now what you're seeing is the sort of really short term aftermath of a burn. So a lot of these are weeds and over time, it's going to look a lot more like that first site that we saw, right now It's a little ugly. It's just kind of how it is. This is Woolly Mullein. This short stuff here, it's kind of a carpet of this stuff really. Right now, it's a weed. This here is a native plant. It's called golden pea and it's a real quick fire responder. There's some Bull Thistle towards the back. A lot of these things are really short lived weeds. They'll get outcompeted pretty quickly with our native species.

**DA:** Are you guys gonna be using the precision agriculture to kill the Mullein?

**LC:** So the Mullein, our approach is usually to leave it alone actually, because it will, it just fades out pretty quickly. It likes that initial disturbance, but it can't really hold the

site. So you'll mostly see it along the roadsides kind of day to day. Yeah.

You'll notice we got a pretty high scorch height on these trees. We killed quite a few trees. This was a really kind of a hot burn. We had a lot of fuel in the ground when it burned. It was also pretty hot, burning conditions -- hot and a little bit windy, so we were right on the edge of our prescription, which defines the weather conditions we can burn under. As Jerry was saying earlier, we get a pretty narrow burn window up here because it's just high elevation. So it goes from fire season in August to, you know, Snow really quickly. So we just get this narrow window to work with.

It can be a little dramatic to see some mortality after a fire, but this doesn't concern me. A lot of the other folks that we've had up, they weren't concerned about it either. We got a lot of what our objectives were. It's just you'll see some of that mortality in short term.



**KC:** So in the fall, how do you keep the wood cutters off the larch?

**LC:** Good question.

**JM:** There's no firewood cutting up here allowed. No, there, there isn't any. And then we're under --I you might have to help me with this one. You're not supposed to have fire with more than 50 miles? Is that it?

**LC:** Yeah, right. You don't want to be hauling bugs, you know, and transferring between forests. So we really try to discourage that.

**KC:** So I see you got Engelmann Spruce, was that in your inventory?

**JM:** Yeah, yeah, that's what I was saying. I can't -- I don't have that data right in front of me, but the further we go up, we'll see more and more spruce. OK, there was some here, but yeah, there's a -- we get into kind of a wet, cold canyon, it's dominated by spruce.

**LC:** I think this was probably only like 5%.

**JM:** It was low here. This is pretty dry site still, even though we're facing east.

**KC:** Probably changing because there's a couple here going that way.

**JM:** Yeah. I mean, they're here. There's no doubt.

**KR:** Do you think you'll want to reburn it? This site in the future?

**LC:** Good question. We got really good consumption of this larger fuel that you see on the ground, better than we kind of expected. So I think it kind of remains to be seen. We would -- since we wanted to see that larch generation, we wouldn't want to bring a fire back until that we have some real recruitment into the overstory. So we didn't kill it all.

**DH:** As far as mortality, looks like 95% Ponderosa.

**JM:** Yeah, the larch did just fine. Which is -- yeah, it's the most fire resistant trees.

**LC:** Yeah, larch is the most fire resistant tree here on the forest. It's got really nice thick bark. The roots are really deep. The crowns are really high, so the fire doesn't really climb into them well and they regenerate their needles every year. So even if

you damage them they're going to be coming right back. They're also really young all the time. They never get older than five months old, so they're always pretty high in water content, so they're really hard to burn the needles.

**AW:** The needles themselves?

**LC:** Yeah. So we did get some patches of mortality. I think there's some bigger patches farther on, but you know nothing really terribly concerning. Some patches in the stand, you know, it's really not a bad thing. What do you guys think? Looking at this?

**DA:** Where are the new trees?

**LC:** Yeah. So it's only been a few months since we burned it, so I think if we were to hike around, I think we'd find some little seedlings. Yeah. Or it could take a few years for the right seed crop to come around.

**DA:** Umm, they do come around though?

**LC:** Yeah.

**CS:** It is kind of shocking to see so many trees that look like they're struggling, but I think that that just might be my untrained eye, you know? Yeah. I feel like I look at this and I'm like, oh, my gosh, look at all of the dead trees. But what you're saying is that that's actually not too much of a concern.

**LC:** So yeah, I mean, yeah, there's some mortality. Yeah, these ponderosa Pines with the red needles. Those are dead. Some of these larches were a little suppressed also before the treatment because they were pretty shaded. So they're crowns aren't very full either, so there's that too you're seeing.

**CS:** And that's something to remember too, is that like stocking density -- like tight close stocking density, can be very dangerous for trees too, so it's not just the fire, but the tightness of the canopy is also a danger for them.



Photo credit: Annie Warren, NWPB

**LC:** Yeah. Good point.

**JM:** This had over close to 400 trees to the acre. I think we thinned it down to about 130 and the literature says 85 to 100 trees to the acre. So even if we lost some of the standing, but I have to say when this was burning, I was I had so much anxiety. I didn't want -- I didn't want to burn it, but we burned it and it's good. But it's just so -- when this fire is going, it's so nerve wracking. Are you going to get a spot spread? Now, what are we going to do? Oh now there goes one of the big P(onderosa) Pines burning! Now, what next? So there's a lot of, it's a lot of responsibility and it worked out, turned out good.

We burnt another stand back there. We can't get to that one. It actually went a little better. It didn't -- it didn't get as hot as this one did. But yeah, it's, I mean I know it's good, but it's hard to do. Luckily, Lindsay's brave.

(Laughter)

**AW:** Do you have a big crew? Like who all is here when you do that?



**LC:** Yeah, we had a big crew here for this one. I think we had one 20 person hand crew. We had must have been 8 engines. We had a water tanker to supply the engines. We had a bulldozer in case something really went awry, and then a couple other pieces of heavy equipment, plus all the kind of overhead staff, so it's pretty it's expensive to do these things. A lot of eyes on it too.

So we would have part of the crew you know, they would just be walking through the forest to make sure we didn't get another fire starting where we didn't want it and other folks lighting and other people just standing on the line watching and making sure it didn't cross. So it's a big operation.

**JM:** It's probably worth mentioning that it's worth mentioning how careful you have to be because we had planned to burn two more stands last fall. I mean, it was a go. We had crews here, everybody was on site ready and the winds changed and we cancelled the burn and ended it for the year. So I mean, we had, you know, we had all the crew that Lindsay just described standing there with nothing to do and sent everybody home. So it's, you know, it's you get great results. It's a, really it's a hard project actually. I mean it's it takes a lot of coordination.

**CS:** So one thing that First Foods Policy Program has done, our "Preparing for Fire" project, bought one of those remote atmospheric weather stations. One of the RAWS stations to send with the BIA fire crews, is like more local information about weather conditions. Helpful thing in making those "Go / No Go" decisions?

**LC:** Yeah, that's that information is really critical. I think we used one of those temporary stations, maybe last year. Maybe it was yours. And definitely the year before that because we that's the very best thing is we know we can track you know, what are the winds do during the day. Umm where -- what direction are they coming from? What are temperatures like? What time of the day do they start cooling down? And that's all really important for planning. It helps you know, OK, am I gonna be in my window or am I going to bring 20 people up and find that I can't actually burn that day legally? So yeah, that stuff is important.

**EM:** What are those stations called?

**LC:** The one she's talking about is a remote automated weather station. Yeah. So it actually sends the data through satellite, so you can just look at it on your computer.

**EM:** Nice..

**LC:** Yeah, they're really helpful.

**CS:** They were excited about it. They're like, "it's a weather station that calls you!" Like, OK, that doesn't so fancy, but they were so excited about it.

**LC:** Yeah. Otherwise they just base it on like interpolated data.

**CS:** That was the issue was that, Jeff Casey, the burn boss for the BIA was saying that their data wasn't helpful enough or they're working off of like remote data. So yeah, yeah, spot information is really, I think, important.

**LC:** Very helpful.

**JM:** One other thing that's probably not -- it's not coming from the science or forestry angle, and that's social. Umm, you know, we are close to Dayton. A lot of people are very curious in Dayton about what the Tribes do up here and, you know, taking on projects like this on controlled burn generates a lot of interest and a high visibility.

So that's just another consideration. You have to talk to a lot of people before. After, during, gawkers, you name it. Pro Con follow that, but the social aspect is really important. The Tribes have made great inroads with Columbia County over the years. It wasn't always that way, I understand, but it's gotten a lot better because they see that this was being actively managed. But that's just an important component that we always have to be aware of.

**DA:** You don't get a lot of lash back from Dayton residents?

**JM:** It depends who the residents are. In the beginning my first meeting in 2010 was really an eye opener. I mean, folks have been up here before and dealt with it, but I didn't realize the level of animosity that existed. I found out, we called the sheriff into that meeting. Since then, things have really, you know, changed, for various reasons and too many to go into now.

You know the County commissioners, for the most part, are totally behind the work that's going on up here and the Land Acquisition Committee has put a lot of effort in working with the county around topics like that up here. I mean, Koko Hufford has

been up there to the County quite a bit and they've really made some strong inroads working with them, but it's always a consideration. Well -- if people see logs coming off of here, they wanna know what's going on. They see crews coming up here, they see plumes of smoke. You know it's a high interest area.



**CS:** The arrest that happened in Grant County, is that something that concerns you guys?

**LC:** Yeah. So that came up when we were doing this, this burn. We planned to do another unit the very next day, so we all came up, got ready for that. It was on the edge again in terms of our prescription, the stand we were going to burn was right on the boundary with private land. So it came up then, and that had just happened within the last couple of weeks before that. And so it's another level of uncertainty for sure and it's these things are hard enough to do without that kind of pressure and just uncertainty about can you get arrested if your fire, you know, goes out of bounds.

**JM:** Does everybody know what the what we are talking about?

**LC:** Ohh yeah, let me give you some background on that. So last fall there was a burn boss. The burn boss is the person that's in charge of everything happening during the prescribed fire. They're kind of like the top command person. They had a fire that, that went out of bounds and crossed onto some private land. I think it burned mostly grassland. The landowner called the sheriff and the sheriff decided to arrest the burn boss and so they just called them away in the middle of an operation.

**JM:** That's a Forest Service employee.

**LC:** Yeah, yeah. And that had never happened before. So it was kind of like a big eye opening thing that that could happen. Yeah.

**DA:** Was that the -- what county was that sheriff from?

**LC:** That was Grant County. Yeah, but it had big ripple effects, so it affected us here.

**JM:** Grant County, Oregon.

**DA:** I have a question, so a prescribed fire safer than a wildfire, like the School fire, correct?

**LC:** Yeah, I think that's fair to say that. Yeah, something like less than 1% of prescribed fires escape, and when you're burning a prescribed fire, you know it's not August. It's not, you know, high wind conditions, whereas when you have a wildfire, it often is -- especially a big wildfire, it's, you know, it's conditions when you can't control it. So I think that's fair to say that, yeah.

**DH:** How many acres this is?

**LC:** This was only 20 ish. 24, something like that.

**JM:** 34.

**LC:** 34?

**JM:** 34.

**LC:** OK. So all of our units so far have been on the small end like that.

**DH:** So when you referred to Mullein as a weed, but it's a native plant.

**LC:** No, it is not a native plant.

**DH:** No? That's my misunderstanding. But it does provide some service if you will, because birds love it. It you know, it takes up nutrients and when it doesn't live that long and then when it dies it does provide cover and it retains moisture.

**LC:** Yeah, good soil cover. Yeah.

**DH:** Yeah, I didn't realize it was. From Europe.

**LC:** People think it's is ugly too, so that the people that focus on weed treatments all day, they love to spray it, but we tend to leave it alone.

(Laughter)

**LC:** Yeah, I don't think it's that ugly.

**DH:** And I noticed that the burn, that was what, three years old, the 1st place we stopped at, that had fire weed. This doesn't have fire weed yet, fireweed's like a 2 year right?

**JM:** Don't take long I don't think. Yeah.

**KR:** So maybe at the burn that we saw or this you mentioned elk, what are some of the other expected like benefits for wildlife and other plants and animals up here that make it worth burning versus just thinning?

**JM:** Well, I think Lindsay can probably address this, but I'll just say that I mean, and culturally burning is where we want to get to. I mean, we want to put fire back on the landscape, so I'm not certain that by thinning and then masticating versus burning, we're going to get a different shrub component. We don't know yet. You'll see an area that we're going to next that we thinned and masticated and didn't burn.

Umm, so you can just put that so. But you know, we're trying to encourage shrubs.

And when we did the thinning, we also have we have some huckleberry up here, not a lot but some. And we found those patches prior to our thinning, you know, delineated them out, didn't go into that area, and we'll watch and see how they respond over time. Adjacent to the thinning, burning, or mastication, but it's from a cultural standpoint I think is one of the reasons we really want to reintroduce fire.



**LC:** And like I was saying, a lot of our species have a like a kind of a fire specific adaptation for resprouting. So a lot of shrubs will respond just to the increase in sunlight, but they actually have an adaptation to burning itself. The heating of the, you know, the little roots, the root nodes and everything. So you'll see a more abundant response after a fire than to just a thinning project.

**CS:** I wonder if there's a chemical component because decomposition is an acidifying process, but ash is an alkaline, so maybe there's a balance there with the burning chemically.

**LC:** Good point.

**DH:** They're more available -- the nutrients are more available. Phosphorus, nitrogen, all more available after the burn.

**LC:** Yep. Ohh question?

**KC:** Are you getting any cones from the like the Pines of the trees for the nursery?

**LC:** No, as far as I know the nursery doesn't grow any trees.

**KC:** Why not? I shouldn't be asking you (laughter).

**LC:** I don't know.

**MS:** I thought you said the other day that maybe in the next few years we might look at doing some cone collecting.

**JM:** Yeah, cone collecting's fun, you get to go to the top of the tree. Get all the pitch on you. Do it in the redwoods. Ohh yeah man. Honestly, we should.

**MS:** Can I bring up another benefit of prescribed fire?

**LC:** Please!

**MS:** So Sharon Hood put out an article in 2015 looking at tree rings and resin decks and ponderosa pine, and found that ponderous pine long-unburned forests had a lower resin deck response to expel, you know, insects attacking. And as they were frequently burned over and over again, that resin deck response got stronger and stronger, building more resilient trees that could expel insect attacks. And they've only done that study in Pines, so you can imagine maybe there could be some similar benefits in other trees too. It's really good science here.

**LC:** I do think there are a lot of benefits we may not know much about, like that.

**JM:** Also, I wonder if we're not improving the overall forest in the end, because if we thin and we leave the best trees and then we burn and then we kill some of the weaker trees and that then what's left are the strongest and then that's where we're going to see the reprod(uction) coming from. I mean, I don't know how that works, but it seems to make sense.

**MS:** There's also some evidence that some species, after they've been burned and it's kind of like an injury, and if they keep getting that, they tend to use less resources because they're kind of always recovering a little bit. And don't -- you know they have less of a crown and, you know, I did a lot of tree ring science. What we find in old growth trees is really low tree ring growth. So as they get older, so you know they're growing fast and it hit a drought year, you can have a real shock there and trees can die off some time. So yeah, like you said, a lot of different benefits.

**LC:** You do tend to see bigger growth rings after fire too, because of that like nutrient release that Dave was talking about. A lot of those nutrients become available after burning.

**MS:** Lindsay, can I ask, are you the burn boss on most of these projects?

**LC:** I was the burn boss trainee on this project. Yeah I'm still working on it.

**CS:** And what is the certification look like for burn boss?

**LC:** You kind of work your way up from just basic firefighter to Squad boss and then maybe engine boss and you kind of take a track. I'm still working on my incident Commander, which is a wildfire thing. So you need that before you can be a burn boss so.

**CS:** Thanks for going through that.

**LC:** Yeah, I like it.



## Stop 4: Jerry's First Stand



Photo credit: Annie Warren, NWPB



**JM:** Hello again. So just a little bit of background. I started in 2010 and reading the management plan that was written by the previous manager, they called for 800 acres of thinning on Robinette Mountain. Well, you know, how do you get started with that? And so I delineated out 150 acres and we didn't have really good data then. And then I went out and the 150 acres and did the inventory myself and first I based it on aerial, how things looked because it was really overstocked and it was on Robinette where it was being called for thin.

So then did inventory and got a handle on tree count out here and then came out and ribboned it off and you don't see here, but I marked the 1st 50 acres of "leave" trees and proceeded to thin it. It was a commercial thin, so we took out the trees. It was more or less cut everything up to 14 inches and 12 to 16 foot spacing or trying to go by at that point, not as heavy of a thin as we're supposed to do. So I left a lot more, but I have to admit I was really wanting to be cautious. Being new to the project and you know having the responsibility to manage the Tribes' Forest, I was thought well, I'd rather take less than more. So that's -- I didn't think it was less at the time. I thought we hit it pretty hard and then after we were done, of course we came in and masticated it.

So we ground everything that was on the floor. So again, the forest floor was completely void of vegetation. And so this is about 10 years and the response has been great. I mean, I know that we -- now I know we should have took more, but I also know that there's opportunity to come in here and do some individual tree selection if that's ever the case. And one thing that we might do, and I've talked to my supervisor about this and considering like the next river project that we do, this would be a good opportunity to come in and push over some of our larger trees to get for our, to use in the river. So that's another option because it's pretty flat ground. No, no streams around.



It's pretty safe in terms of that, but it's had great response and game love it. Uh, and we're getting good regen(eration) and I don't know about right here though, but generally speaking on, yeah, I see some. I see some regen(eration), it took a little longer. I think the burning will cause regen(eration) to come faster, but I've drilled these trees since there and then it's they're jumping out of their socks and the last 10 years, the growth rings have really expanded. So, but it's just the we're creating this mosaic here.

You know you have this, you have the stuff that we you saw when we first came in and that thinning that the larch stand that we did about 150 acres based on that kind of prescription and then about 120 acres look like this. And but we still got a long ways to go, but it's varied. And so there you go. Questions?

**Unknown:** What do you call "leaf" trees?

**JM:** "Leave" trees! Yeah. So and you'll walk around and you paint the trees. So by this time, and this was later in the operation, so the Faller already knew what we wanted. So and I was here so I didn't have to mark the trees. That's a lot of Labor marking each tree, putting, you know, paint on each tree. So I wasn't doing that and here because they kind of had it figured out by now. But for I guess as we drive up, you can look to the left. There's a spot up there that's really gives you a great idea of what it looked like prior. I mean, it was thick. It was "dog hair" as they like to call it. You can barely get through it, so it's changed quite a bit.



**NL:** Jerry?

**JM:** Yes?

**NL:** Can you talk a little bit about like what leads up in terms of the timeline up until like you initiate a project like this? So you said when you came in, it had been decided that this was going to be worked on up here. Is that like months or years or?

**JM:** Well, I mean, there's a -- so there's a lot of things that are at play, right? I mean, luckily here we didn't have any river or stream to deal with. So, no environmental compliance issues around water. Culturally, I mean this whole area or anywhere we do ground disturbing activities has to be culturally surveyed. So first thing you got to do is like lay out the unit. Then I would say that that might take me a winter to find these, figure out where to go, at least in so. That's probably a three to four month operation.



Photo credit: Kaci Radcliffe, TNC

OK, we're going to do this area, then notify cultural resources and they have to, you know, put it into their schedule. Uh, and quite frankly, I know currently -- back in 2012, they weren't as busy as they are now. They are extremely busy now. I mean, there's so much work going on, so they have to fit that into their schedule. And that's, I mean, right now I'm doing a restoration -- just for context, I'm doing a river restoration project on the main stem Touchet, and the cultural it's about most a year out from notification before they can get to it, which is really tough because if you're getting funding from outside sources and so, but that wasn't the case here.

They were able to get on this pretty fast and you know, they send out a crew and they walk through and do their pits and digs and then, you know, they didn't find

anything out here in these stands. They gave us the go ahead and so then that by then -- then hiring a contractor, you know, sending out a solicitation, hiring a contractor, going through that whole competitive bid process and it making sure that admins got to do their job. So there's a lot. You're looking at one to two years after planning, which is tough sometimes because you wanna move.

Yeah, just on that same note, we're right now laying out a bunch of work for the future. We haven't had cultural resources look at it yet, so we're probably a year out from that. Depends on the prescription, like that hand thinning over there, we notified cultural, they looked at the area and they said no worries you know go for it, just don't burn any of the relic trees, you know so that that was their main issue there. So it depends like that's not very ground disturbing, but you're looking at a one to two year depending on the project. It's not hard that you'll be two years out before initiation to get it done.

**NL:** Okay thanks.

**AW:** Oh, I just was wondering to clarify cultural through the Tribe?

**JM:** Yeah, I mean, well, we work with Bonneville actually, Bonneville's the EC. So what we'll do is we notify Bonneville and then Bonneville notifies the Tribe. And then they notify SHPO, the State Historic Preservation Office. And it goes through a quite a few hands before we can do anything. The river projects are always have ground disturbance and so they're are a lot more sensitive and take a lot more time to do. The thinning that we did, Cultural came out and did a survey, but they also said that when we wrap it all up, they want to come out and look at it again once it's cleared, because I think they can't get to a lot of the spots when the trees are so dense. So things will open up for them a little bit.



Photo credits: DeArcie Abraham, CTUIR Farm Committee

**CS:** Is prescribed fire more intense with Cultural Resources because you're digging break lines?

**LC:** Yeah, it's definitely part of the line construction. Umm, but when we're broadcast burning something, they also want to know about it in case there are resources that fire can directly impact.

**JM:** I think that on those fire lines, if I remember correctly that we just had to have an observer when we were putting them in, they didn't do any survey of that. In particular, it's like when you're. I've only done it once so far. It's like pushed over trees on Tribal land to use on a river restoration project. And you have to have it observer there because when you turn it over the ground the the roots are exposed and you don't know what you're going to find. So we have, we, we have observers on that as well.

# Lunchtime Photos



**Managing for Wildlife Mitigation and First Foods in the Rainwater Wildlife Area**  
 Jerry Widdel, Carl Scheeter, Arnos Pond, Tanya Harrison, and Troy Rodriguez  
 Department of Natural Resources, Wildlife Program, Confederated Tribes of the Umatilla Indian Reservation

**Recent Management**

- 1) mowing roads and clearcut
- 2) leaving large wood in habitat corridors
- 3) revegetating riparian zone
- 4) thinning overstocked riparian zone
- 5) planting new riparian zone
- 6) mowing grass and forest

**Recent Project History**

Spring pre-grazing

**Acknowledgments**  
 Bonneville Power Administration priority lands; Rainwater Wildlife Area Wildlife Mitigation Project.

