

ODFW Field Reports

Oregon Fish and Wildlife Commission September 17, 2021

East Region

Nick Myatt, Region Manager

Partnership with Local Community College

Fisheries staff from the Malheur Watershed District (MWD) and the Natural Resource Program at Treasure Valley Community College (TVCC) have a long history of collaboration. The community college, located in Ontario, Oregon serves students from both Oregon and Idaho. Fisheries staff and TVCC instructor Marcus Nichols engage students through classroom lectures and field labs related to fisheries management. TVCC identified an opportunity to provide work experience for students within the communities where they live in the summer through a grant from Eastern Oregon Workforce Board. TVCC secured the grant and pays students to gain ten weeks of work experience within their field of study working for Oregon Department of Fish and Wildlife (ODFW).

This year, two TVCC students helped MWD fisheries staff with field activities. They began in June helping conduct creel surveys and electrofishing warm water fishes at Owyhee Reservoir. In July, they gained experience collecting environmental DNA (eDNA), backpack electrofishing and conducting snorkel surveys for Lahontan cutthroat trout in the McDermitt Creek basin. They finished in August with bull trout work in the North Fork Malheur River basin.

These internships, along with others in East Region, are great opportunities for students to have a paid work opportunity in their field of study, increase the department's capacity to monitor fisheries resources, and recruit potential future employees.



Cade Tiller preparing to sample for eDNA in the upper McDermitt Creek watershed

Cougar Densities Before and After Wolf Recolonization in the Mt. Emily Wildlife Management Unit

As wolves recolonize Oregon, they have the potential to affect both competing predators and their shared prey populations. Understanding the dynamics between wolves, cougars and their prey are important for effectively managing populations. Wolves are thought to be dominant to cougars, primarily due to their social living structure compared to more solitary cougars. Consequently, wolves may negatively impact cougar populations through two possible mechnisms: 1) wolves directly kill cougars or 2) wolves negatively affect the prey populations of cougars which reduces their food supply. This second mechanism would be most likely to occur if wolves and cougars have highly similar diets. Regardless of the mechanism, if wolves negatively affect cougars, a decline in cougar population size should be the ultimate outcome.

The East Region Wildlife Research Program conducted a study to determine if wolves negatively affected cougar populations in the years following wolf recolonization of the Mt. Emily Wildlife Management Unit (WMU).

ODFW Wildlife Research staff used scat detecting dogs to locate cougar scat on the landscape and subsequent genetic analysis to identify the individual cougar that deposited the scat. This information was then used to estimate population density. In 2011, prior to wolf recolonization of the Mt. Emily WMU, cougar densities across all age classes were estimated at 13 cougars/100 miles². In 2012 cougar densities were estimated at 15 cougars/100 miles². Wolves were first documented in the Mt. Emily WMU in 2012, but they were not known to occur in areas where cougar scats were sampled. By 2017, multiple wolf packs were established within the Mt. Emily WMU and overlapped areas cougar densities were previously estimated. The estimated cougar density in 2017 was 16 cougars/100 miles². The diffrences in cougar density between 2011, 2012, and 2017 were not statistically different and suggests cougar densities have been relatively stable between 2011 and 2017 despite wolves recolonizing the area.



Cougar with radio collar used for research

As wolves recolonized the Mt. Emily WMU, cougars were also collared to determine their movements, survival, and diet. Between 2014-2016, we documented no direct predation of adult cougars by wolves. This lack of direct killing of cougars by wolves suggests wolves were unlikely to negatively effect the cougar

population via this mechnism. Wolves and cougar diets had some overlap, but wolf diets included mostly elk, where cougar diets were mostly deer. Given the differences in diet, competition between wolves and cougars may be minimal at this time and population level effects on cougars were not observed. However, wolves recently recolonized the study site (~5 years) and as wolves become better established and prey population sizes increase or decrease over time, the dynamic between wolves, cougars, and their prey is likely to become more pronounced. Periodic efforts to estimate cougar density in future years will help clarify the response of cougars to wolf recolonization and associated changes in prey populations.

West Region

Chris Knutsen, Interim Region Manager

Tribe on screens projects

The Central Point and headquarters fish screen program staff recently met with a Klamath Tribe representative to provide updates on completed, current and future fish screening and passage project accomplishments in the Klamath Basin. The presentation also included other valuable information such as funding partners, types of screens that work well in particular situations, and project cost breakdowns. The Klamath Tribal representative was pleased with the information and updates provided, and the alignment with the Klamath Tribe continues to be positive.

The presentation provided known points of diversion (PODs), in various Klamath Basin waterbodies, how many were screened and unscreened, and outlined juvenile salmon and steelhead screening criteria and risk assessment. The groups discussed and prioritized future viable projects for the next couple of years.

The Central Point screens shop covers fish screening needs for Lake, Klamath, Jackson, Josephine, Douglas, Coos, and Curry counties with most work centered in the Rogue Basin, Klamath, and Lake counties. Once projects are prioritized by fish district staff, shop staff create the initial screening concept and approach landowners, water users, and funding partners for their approval. Headquarters engineers then design the screens, and Central Point screens staff build, install, and in most cases assume a role in maintaining the screens.



Pump Ditch, 26.9 cfs on the Wood River built by Central Point screens shop staff



Staff constructed this solar powered, vertical panel screen with wiper brush and belt screen cleaner on Simonsen #1 POD. The solar-powered belt screen transfers debris back into the water behind the screen.

Chetco River Hatchery Winter Steelhead Monitoring

The Chetco River watershed is very remote and difficult to access with anglers being able to only fish the lower 15 river miles. Past creel surveys show very few hatchery fish are caught upstream of Rivermile 8 and now Gold Beach staff from ODFW's South Coast District began conducting snorkel surveys two years ago to document hatchery fish spawning in the wild on the Chetco.

Snorkel monitoring over the past two years categorized several hundred adult steelhead in

lower river tributaries as wild or hatchery. Because of the success of this project, snorkel surveys were identified in the Draft Rogue South Coast Multi-Species Conservation Plan (RSP) as a key monitoring tool. These surveys are important work informing the RSP development and implementation around stray rates, fishing, and monitoring actions. The hatchery program has remained the same size (50K smolts) for over 30 years.



ODFW Staff snorkeling the Chetco River

Clackamas River to receive augmentation flows beginning Sept. 1

As of mid-August, flows in the lower Clackamas River are hovering around 700 cfs. These extremely low flows led staff to attend a meeting with Clackamas Water Providers and PGE to discuss augmenting flow to the lower Clackamas River through water releases from Timothy Lake.

The Clackamas Water Providers pursued an extension of a municipal water right that has been contested in court for over 15 years. Due to this, augmenting flows to the lower Clackamas this summer was a voluntary action initiated by Clackamas Water Providers consistent to what is expected when a final order on the water right extension is implemented.

Starting September 1 as part of an existing Federal Energy Regulatory Commission (FERC) agreement, Clackamas Water Providers will ask Portland General Electric (PGE) to increase flows from Timothy Lake into the Oak Grove Fork to 50 cfs over the current release level and hold it steady until October 31. This action should benefit fall Chinook and coho in the lower Clackamas while also enhancing flows for spring Chinook spawning in the Oak Grove Fork and the upper Clackamas River downstream of the Oak Grove Fork.

Battling invasive Ludwigia at Palensky Wildlife Area

Willamette Wildlife Mitigation Program (WWMP) biologists first detected the invasive *Ludwigia spp.* at Palensky Wildlife Area in June. Young plants along the shoreline of Horseshoe Lake, the largest water body on the property that holds water year-round were observed along with two small mats in the lake. In just a week the mats doubled in size, other mats emerged and plants on the shoreline became prolific.

The dense mats of *Ludwigia spp*. choke out native vegetation, prohibiting light penetration and making it impossible for wildlife to navigate through them. It can also greatly reduce the amount of dissolved oxygen in the water, which is detrimental to aquatic fish and wildlife.

Ludwigia spp. have invaded the nearby Smith and Bybee Wetlands Natural Area and numerous areas upstream of Palensky Wildlife Area. Spread is mostly clonal with plant fragments easily dispersed by water and wildlife. It was just a matter of time before this plant showed up at Palensky Wildlife Area.



Mats of invasive Ludwigia on Horseshoe Lake at Palensky Wildlife Area.

WWMP biologists have been applying aquatic herbicide to the plants and will continue to do so through the fall. They will attempt to remove dead material, but this is a logistical challenge with shallow water and deep mud. Staff also plan to consult with Integrated Resource Management to seek assistance with a long-term management strategy as IRM has worked on several *Ludwigia* management projects throughout the Willamette Valley.

Chum Salmon Reintroduction: Adult Outplanting

Large numbers of adult chum salmon returned to lower Columbia River tributaries in the fall of 2020, including nearly 1,000 fish returning to Big Creek Hatchery. At Big Creek they were spawned as conservation broodstock for the ODFW Chum Salmon Reintroduction project. For the first time since project inception in 2010, we maxed out the hatchery's capacity to rear juvenile chum salmon and released over 350,000 of them in the spring of 2021. In addition to meeting goals for Big Creek Hatchery broodstock collection and juvenile release, surplus adults in 2020 were out-planted into nearby Bear and Little Bear Creeks to evaluate the effectiveness of natural production. Prior to 2021, monitoring of juvenile salmonid production from the Bear Creek watershed since 2017 has revealed limited natural production (2-25 out-migrants captured at the trap in 2018–2020). The 2021 results were quite different, where 641 out-planted adults produced over 40,000 out-migrants (estimated). Genetic samples collected from out-planted adults as well as naturally spawning chum salmon will augment our parental-based-tagging program to classify juveniles produced at Bear Creek, and ultimately the contribution of natural and hatchery production to the broodstock and area streams. Finally, much of the large return to Big Creek Hatchery in 2020 was composed of threeyear-old adults. With chum salmon returning at age three, four, or five, we anticipate another large return of chum salmon in fall of 2021.

Information and Education

Roger Fuhrman, Information and Education Administrator



One of the banners featured at the State Fair this year

ODFW Offers Self-Guided Option at Fair

Attendees at the Oregon State Fair this year will see a different look in the natural resources area. All state agencies that normally staff booths will instead offer self-guided experiences for fairgoers. ODFW will feature handouts, banners and signs directing people to various online resources.

Banners will include information about hunting, fishing, shellfish harvesting and wildlife viewing. Each banner will direct people to new online content. In addition, brochures and maps will be available for people to take. And, as always, copies of the current regulations are sure to be popular.

This year, ODFW will also feature a large banner entitled "How you can help wildlife" with information on a variety of topics including: the anti-poaching campaign, invasive species, and information about how to prevent human/wildlife conflict. Although it will not be the same as past years, we hope this approach will encourage people to look into Oregon's fish and wildlife resources and think about actions they can take to help wildlife.

Oregon State Police

Captain Casey Thomas, Fish & Wildlife Division

Oregon State Police (OSP) Fish and Wildlife Division members conducted patrols upon Crane Prairie Reservoir and Suttle Lake. The Troopers contacted multiple individuals and issued warnings for various angling and boating violations. They also assisted a boater who'd wrapped his anchor line around his vessel's propeller, and talked with a couple of young boys interested in the work conducted by F&W Troopers.



Non adipose fin-clipped coho seized by OSP

OSP Fish and Wildlife Division members checked incoming dory boat anglers at Cape Kiwanda. The dories were returning from bottom fishing, crabbing and salmon fishing trips. One non adipose fin-clipped coho salmon was seized and donated to the Tillamook County Jail. The following citations and warnings were issued:

-Failure to Immediately Validate Harvest Card -5 citations/3 warnings -Failure to Properly Validate Harvest Card - 2 warnings -Take/Possess Non-Adipose Fin-Clipped Coho Salmon - 1 citation -No 2021 Combined Angling Harvest Card - 2 citation

-No 2021 Combined Angling Tag in Possession-1 citation



A Fish & Wildlife Trooper checking in with a legal pronghorn antelope hunter

OSP recently updated their Facebook page with information regarding the Oregon State Police "TIP" line. A portion of that information is below.

Don't forget to contact your Oregon State Police F&W Troopers should you need assistance or should you observe any unlawful activity. The Oregon State Police "TIP" line is monitored twenty-four hours a day with reported F&W violation information forwarded directly to F&W Troopers via the Oregon State Police Dispatch Centers. We're here to help and only a phone call away. Good luck on your hunts and we'll see you in the field!

Anyone with information regarding a Fish or Wildlife violation is urged to contact the Turn in Poachers (TIP) hotline at 1-800-452-7888 or *OSP (mobile).

** Report Wildlife and Habitat Law Violators** The TIP program offers preference point rewards for information leading to an arrest or issuance of a citation for the unlawful take/possession or waste of big game mammals.

Preference Point Rewards:

- * 5 Points-Mountain Sheep
- * 5 Points-Mountain Goat
- * 5 Points-Moose
- * 5 Points-Wolf

- * 4 Points-Elk
- * 4 Points-Deer
- * 4 Points-Antelope
- * 4 Points-Bear
- * 4 Points-Cougar

The TIP program also offers cash rewards for information leading to an arrest or issuance of a citation for the unlawful take/possession or waste of Mountain Sheep, Mountain Goat, Moose, Elk, Deer, Antelope, Bear, Cougar, Wolf, Upland Birds, Waterfowl, and Furbearers. Cash rewards can also be awarded for the unlawful take of Game Fish and Shellfish and for Habitat Destruction.

CASH REWARDS:

* \$1,000 Mountain Sheep, Mountain Goat and Moose

- * \$500 Elk, Deer and Antelope
- * \$300 Bear, Cougar and Wolf
- * \$300 Habitat Destruction
- * \$100 Upland Birds and Waterfowl
- * \$100 Furbearers

* \$100 Game Fish and Shellfish

How to Report a Wildlife and/or Habitat Law Violation or Suspicious Activity:

TIP Hotline: 1-800-452-7888 or *OSP (677)

TIP E-Mail: <u>TIP@state.or.us</u> (Monitored M-F 8A-5P)

For the full details go to:

https://www.facebook.com/OSPsocial/posts/145 5633818149265

Conservation Program

Andrea Hanson, Oregon Conservation Strategy Coordinator

Foothill yellow-legged frog inventory

Conservation Program staff in southwestern Oregon are making progress on an inventory project for foothill yellow-legged frogs. Foothill yellow-legged frogs are currently under review for listing under the U.S. Endangered Species Act (ESA).



This larval foothill yellow-legged frog can be identified by the presence of 6-7 tooth rows above, and 5-6 tooth rows below its mouth

Relative to the species range in central and southern California, Oregon is considered a stronghold for the species-though frogs have declined significantly in the northern and southwestern portions of their Oregon range. Additional "no detection" data at historical sites may indicate extirpations, as this species is sensitive to invasive species, dams and diversions, disease, and land use change among other threats. Frog detections in places where habitat is suitable (yet no animals have been documented to-date) can help to incorporate missing habitats or regions into the known core range. Ultimately, this additional inventory work provides fine-scale range data to inform species conservation by providing accurate information about contemporary core habitat extent.



An adult foothill yellow-legged frog is seen here basking on a boulder at the edge of a stream

To date, staff have collected inventory data at 74 sites in the Coquille, Coos, Umpqua, South Umpqua, Upper Klamath, Upper Rogue, Middle Rogue, Applegate, Illinois, and Lower Rogue Subbasins. This survey effort is unique in that instead of the traditional method of detecting individual animals visually during surveys, staff instead are documenting frog presence by collecting environmental DNA ('eDNA'), or DNA of the target organism found in water sampled from suitable frog habitat sites. While results are still pending from eDNA samples, incidental frog detections at survey sites have already confirmed occupancy at one subwatershed subunit (HUC12) where no frog populations had been previously documented and in two HUC12 units where no frogs have been documented for at least 20 years.



This is a foothill yellow-legged frog in the metamorphic stage. As this animal transitions to life in a more terrestrial environment, its poor swimming abilities make it especially vulnerable to predators

Survey work was funded through a Good Neighbor Authority (GNA) partnership with U.S. Forest Service (USFS) and the Bureau of Land Management (BLM) through the Interagency Special Status/Sensitive Species Program (ISSSSP) office. Staff (one biologist, one temporary wildlife technician, and two interns) will continue to survey through the fall of 2021 and additionally survey work will occur in 2022.



Locations of completed eDNA surveys are shown in red on the map above. The range of this species, scaled to HUC12 unit, is shown on this map in green with historical sites (where frog records are > 20 years old) shown in blue. This range extends farther north and east than what is shown in the map above. Note that not all occupied HUC12 units were documented in Oregon prior to the onset of local extirpations tied to land use change during the western settlement period.

Marine Resources Program

Caren Braby, Marine Resources Program Manager

Marine Spatial Planning for Offshore Wind Renewable Energy Industry

The ocean offshore of Oregon is home to world class wind and wave energy resources and has been attracting attention from the renewable energy industry for decades. As a result, this year the Oregon State University started construction on the PacWave wave energy device research facility, which is being built approximately 6 miles offshore of Newport. As the federal offshore wind energy regulatory agency, the Bureau of Ocean Energy and Management (BOEM) has been active this year building an ocean maps database and interviewing ocean users about where BOEM may site offshore wind lease areas. Department staff have played major roles throughout the planning process for both wave and wind energy as marine biology experts and fisheries managers, so that Oregon's

ocean ecosystem and fisheries are represented in the BOEM process.

The Department's central role has been in providing or commenting on data used for mapping existing ocean uses and ocean resources. For the BOEM offshore wind process, the maps are housed and are available for public access at the OROWind Map data portal. OROWind Map allows users to explore a variety of ocean maps, including bottom topography such as rock reefs, fishery footprints, and other information that will be used by BOEM for future designation of lease areas and decisionmaking on lease applications.

Another key role for Department staff has been to help shape ocean energy policy. Governor Kitzhaber established the Oregon-BOEM Task Force in 2011, to coordinate with BOEM on offshore renewable energy activities, including offshore wind. The Task Force includes state, federal and local government officials and has advised BOEM on mapping, stakeholder engagement, research priorities, and marine spatial planning. Another policy development this year has come from the Pacific Fisheries Management Council (PFMC), which voted to convene a new ad hoc advisory committee on marine spatial planning, to engage more meaningfully in both offshore wind and aquaculture planning efforts. Department staff sit on the Marine Planning Committee for PFMC. bringing Oregon's expertise to the region.

Planning efforts for offshore wind and offshore aquaculture are moving quickly, with strong endorsement and mandates from the federal administration. Efforts by the Department to inform data used and shape policy development will influence the future of fisheries, renewable energy, and other ocean uses.

End of field reports for September 17, 2021