ODFW Field Reports

Oregon Fish and Wildlife Commission
June 13, 2025

East Region

Nick Myatt, Region Manager

Wenaha River Chinook salmon survey

The Wenaha River, a wilderness stream in the Grande Ronde basin, harbors a natural origin population of spring Chinook salmon. In the past two decades, hatchery origin Chinook salmon have been periodically observed on annual spawning ground surveys (video by ODFW) causing concern for managers about genetic introgression and erosion of natural origin productivity through interbreeding of hatchery and natural origin Chinook. However, the sample size of recovered carcasses declined markedly in recent years, making it difficult to assess the presence of hatchery origin Chinook salmon in the Wenaha River.

Spawned out wild spring Chinook salmon female recovered in the Wenaha River.

During 2024, Emily Treadway (ODFW) began work on a Master's project (a joint effort among Oregon Hatchery Research Center, Oregon State University, and ODFW) to improve survey methodology by combining kayaking, snorkeling, and Passive Integrated Transponder tag antennas with traditional foot survey methods to better assess the presence of hatchery origin spawners on the spawning grounds. This work has successfully increased the number of Chinook observed.

Surveying the Wenaha River for spring Chinook salmon with inflatable kayaks.

These new data paired with historic data will be used to apply a novel estimation method, weighted proportion hatchery origin spawners (pHOSw, developed by ODFW). Estimates of pHOSw are spatially and temporally explicit and will improve both the understanding and future monitoring of hatchery origin – natural origin interactions in the Wenaha River.

Keno Dam fish passage study

ODFW's Klamath Anadromous Restoration Program released 95 radio-tagged juvenile spring-run Chinook Salmon near Keno Dam on The Klamath River on April 28th, 2025. The release of these tagged fish is part of the Keno Dam Fish Passage Alternatives Analysis, Feasibility Study, and Initial Design project funded by NOAA's Restoring Fish Passage through Barrier Removal program. Located 21 miles downstream of the outlet of Upper Klamath Lake, Keno Dam and its associated fish ladder was built in 1966. While not a complete barrier to fish, the current passage facility does not meet requirements for anadromous fish passage and is in the top 10 of ODFW's 2025 Priority Passage Barrier List. The dam is a potential obstacle adult anadromous fish will face on their way to the hundreds of miles of newly available habitat or on their way to the

ocean as juveniles now that the four lower hydroelectric dams have been removed.

ODFW staff release radio-tagged juvenile spring-run Chinook Salmon below Keno Dam to compare migration and survival to those released above the dam.

Radio-tagged juvenile chinook can be detected by mobile tracking from aircraft or vehicle and at numerous radio telemetry stations located from below Keno Dam all the way down the Klamath River to the former site of Iron Gate Dam in California. The goal of this study is to investigate downstream fish passage through the dam and compare survival and migration timing between fish released above and below the dam. Results of this study should help inform the development and feasibility of alternatives for fish passage at Keno Dam. Nine days after the release, a flight was conducted with Oregon State Police, and some juvenile chinook released above and below Keno Dam were detected over 40 miles downstream in California below the former hydroelectric dams. Another 95 radio-tagged juvenile chinook will be released in June.

Motus towers installed in Klamath Basin

The East Region's Wildlife Diversity biologist and our nonprofit partner, Bird Conservation Oregon, installed three Motus towers in Klamath and Lake counties during the beginning of May 2025. The new towers were installed on Nature Conservancy and other private property. ODFW's role in the process is to provide technical support while all groundwork is conducted by our partners. This is another win-win for conservation and collaboration.

Visit the Motus website to view real-time data from Oregon's various towers. One of the new towers on its second day of operation detected a migrating Dunlin. https://motus.org/data/projectActiveReceiverDeployments?id=857

High fives after completing the final install of a Motus tower.

West Region

Chris Kern, Region Manager

2025 Pikeminnow diet study on Jumpoff Joe Creek

Umpqua pikeminnow, illegally introduced into the Rogue River in the 1970s, are now widely distributed in the Rogue Basin. Conservation plans for the Rogue Basin include actions to encourage removal of this non-local species by angling.

The Rogue Fish District is coordinating and sharing information with the California Department of Fish and Wildlife who face a similar situation on the Eel River with illegally introduced Sacramento pikeminnow. In recent years, ODFW has made efforts to better understand the seasonal abundance of pikeminnow in Jumpoff Joe Creek, their diet, and their potential impacts on juvenile salmon and steelhead.

Staff targeted Jumpoff Joe Creek since a Rogue fishing guide expressed concern about pikeminnow in the creek. A section of the creek holds a large spawning congregation of pikeminnow that arrive when water temperatures rise to 58-60 F in late spring. This matches the spring migration timing from Eel River. From our observations, large 350-550 mm (total

length) females arrive first in mid-to-late April, followed by smaller males. Spawning begins mid-May into June.

This spring, Rogue Fish District staff used a combination of seines and gillnets to successfully capture adult pikeminnow and sampled the stomach contents to determine diet. Out of 52 individuals, 18 stomachs were empty, two had unknown contents (digested), one contained a steelhead smolt, two had unknown fish (digested), 28 had crayfish, and one had eaten a crayfish and an unknown fish.

Interestingly, nearly all crayfish were invasive ringed crayfish. A smaller sample of stomachs from May 2024 in the same creek was also dominated by crayfish which were also the most common food item in a pikeminnow diet study conducted in the Rogue in the early 1990s. This may be due to the density of available prey.

Results could be different depending on timeframe and location. We plan to continue efforts moving forward to help paint a more detailed picture of the pikeminnow and their impacts in the Rogue basin.


An Umpqua pikeminnow and its stomach contents.


Rogue staff seined and gillnetted adult Umpqua pikeminnow to sample stomach contents.

Where fishers rest: understanding den site selection for species conservation

To study movement behavior and interspecific competition, the Western Oregon Wildlife Research Lab has been using GPS collars on fisher in the Applegate Wildlife Management Unit since winter of 2023. Fisher are a State Wildlife Action Plan species, with the Klamath-Siskiyou ecoregion in southern Oregon hosting the only known population of native fisher in the state.

The GPS data helps researchers understand the fishers' home range size, habitat selection, and survival. The data also helps identify den sites where reproductive females birth and rear their kits. Each night, male and female fishers choose a rest site, often a cavity in a tree, snag, or hollowed log. Female fishers typically use numerous rest sites per week across their home range.

However, during the spring denning season (March-April), reproductive females remain in a small area of their home range and repeatedly use the same den site for days or even weeks. As kits mature, the mother may start to move further from the natal den, eventually relocating kits to two or three different rearing dens. Identifying den sites is crucial for understanding fitness and recruitment in the population. By describing the habitat characteristics surrounding den sites, we can help guide future forest management to ensure that denning habitat and den structures exist.

During the 2024 denning season, the research team monitored four collared female fishers, three of which showed signs of denning behavior. Game cameras were placed at the center of GPS activity clusters to monitor the den sites. These cameras captured images of one female with kits, while the other two females were observed without kits. The GPS data indicated that one female used her den well into the summer, suggesting successful kit-rearing while the other ended her denning behavior early in the season.

Researchers are currently monitoring dens for the 2025 season which began with nine collared females. Four of the nine have shown signs of denning behavior. We are currently monitoring proposed den sites with game cameras and using radiotelemetry to track female presence from a safe distance that will not disturb the female or kits. As of early May, the cameras confirmed the

presence of the collared individuals, but it is still too early to observe any kits.

Even without directly observing kits, the data on den site structures is important for managing fisher. After denning season, vegetation surveys are conducted at den sites selected by the reproductive females. Survey information is then compared with data from sites that are equally available within each individual's home range. This helps identify important habitat features that may contribute to successful reproduction and population stability. This information is shared with habitat managers.

With wildfires becoming increasingly common and severe in western Oregon, forest management strategies such as fuels reduction that reduce wildfire risks are important. However, these treatments may reduce the availability or quality of denning habitat for fishers by removing large dead or dying trees or reducing the number of downed woody debris on the forest floor.

Our research is working to find a critical middle ground that can simultaneously reduce wildfire risk while maintaining critical fisher habitat. This research is funded by a Pittman-Roberson Wildlife Restoration Act grant.

A collared fisher (lower right) caught on a game camera at the base of a den site structure in June 2024.

Family Fishing at Oregon State Penitentiary

ODFW's Salmon and Trout Enhancement Program partnered for a second year with the Oregon State Penitentiary for another great family fishing event this year. There were over 100 participants on May 3 and 4, with every single kid persisting until they caught their very first fish. The Mid-Willamette District STEP Biologist and three ODFW volunteers staffed the event. ODFW provided 250 fish (bluegill and hatchery trout) for the event. Roaring River Hatchery provided trout to make the experience even more fun for the families at the event by having multiple species and some truly huge fish to catch. Activities included a steelhead dissection table, a casting game spot with prizes, a macroinvertebrates table, tadpole and crayfish observation. A huge thank you to ODFW district and hatchery staff and volunteers for their invaluable contributions in making sure there were plenty of fish at the event. The STEP program is working hard to expand this event to the women's facility next year.

Many kids caught their very first fish.

Northwestern pond turtle and American bullfrog projects at Muddy Valley Habitat Reserve

May kicked off another season of fieldwork at Muddy Valley Habitat Reserve near McMinnville. Ongoing research at the site includes a long-term project to monitor northwestern pond turtles (NWPT) through trapping and marking, as well as a pilot project focused on capturing bullfrogs and analyzing their diet.

Participants included staff from ODFW Conservation Program, North Willamette Watershed District, Willamette Wildlife Mitigation Program (WWMP), Information and Education Division, Yamhill Soil and Water Conservation District, and several Western Oregon University students and their advisor Dr. Gareth Hopkins.

For the turtle project, traps were placed in one of the site's ponds and captured turtles were carefully carried to a nearby processing area. Each turtle was measured, checked for a marking, and given one if it was a new capture. Staff recorded important details like size, weight, and overall condition to help track the health and movement of the population over time.

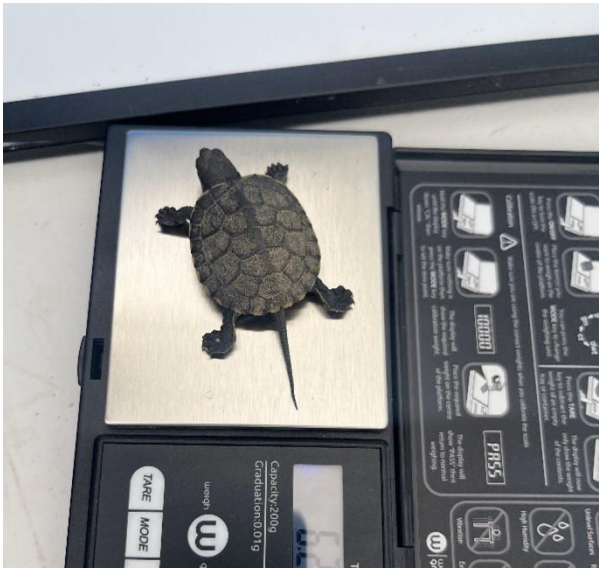
WWMP staff flew a drone over one of the ponds to spot turtles from the air. Meanwhile, surveyors on the ground used binoculars and a timed observation method to count the turtles from a fixed location. Interestingly, the drone images revealed three times more turtles gathered on some logs and trees than what could be seen from the ground, showing how useful this aerial technology can be.

The team also worked at night to catch American bullfrogs using traps, nets, and by hand. The biggest bullfrogs were measured, and staff examined their stomach contents. One bullfrog had eaten a full-grown rough-skinned newt and had a completely digested shrew in its gut. The rest of the bullfrogs were sent to Western Oregon University for further study as part of an undergraduate research project.

About 20 northwestern pond turtles were caught - most of them turtles that had been captured and marked before. A highlight was the discovery of a newly emerged NWPT hatchling - the first confirmed live hatching at the site.

Other field activities included searching for turtle nests and testing whether drones could be used to detect nests or locate bullfrogs to better target future capture and egg mass removal efforts. Wildlife cameras were also deployed to monitor animal activity around the pond.

Both the turtle trapping and bullfrogs capture projects at Muddy Valley will continue this year with additional field days from May-September.



Newly emerged NWPT gets weighed at Muddy Valley Habitat Reserve.


Aerial view of a basking structure in a pond at Muddy Valley Habitat Reserve. There are at least 45 NWPT visible in this photo.

Oregon State Police

Captain Casey Thomas, Fish & Wildlife Division

Troopers and other rafters rescue subject on Owyhee River

Fish and Wildlife Troopers patrolled a 51 mile stretch of the Owyhee River from Rome to Birch Creek. During the patrol, 110 people were contacted (40 rafts, 10 Cata Rafts, 1 Drift Boat, and 13 Kayaks). On one of the final technical class four rapids called "Nuisance," the Troopers witnessed a male subject and his dog in a large raft get caught in the rapid sideways. The male subject then got pinned up against a large boulder in the swift current and his raft flipped over. One Trooper quickly went to the aid of the rafter and his dog, and another Trooper was able to row over to secure the man's raft as it was floating away downstream.

The Troopers along with some other rafters were able to get the man's raft flipped back over and get him and his dog back in his raft safely. Troopers escorted the subject and his dog to a nearby camp spot and verified he and his dog were okay after the traumatic incident. The man was visibly shaken but otherwise in good health along with his dog. The subject advised that he was going to stay safe at the camp overnight, change out of his wet clothes and relax the rest of the day. The Troopers gave the male subject their spare oar to be able to row out the next day because he broke both of his oars when his raft flipped. The man was very grateful for the river rescue of himself and his dog.

Fish and Wildlife Troopers bring K-9 "Buck" to youth event on coast.

Fish and Wildlife Troopers, along with K-9 Buck, participated in a Fishing Poles for Kids Oregon Coast event at Englund Marine in Newport. Approximately 550 fishing poles were given away to kids. The kids received other items as well, including OSP swag and K-9 Buck's trading cards. The kids and parents had a chance to interact with the Troopers and K-9 Buck. The event was well-received, and everyone left with a smile on their face (photo above).

Oregon State Police Fish and Wildlife Troopers attended a youth fishing event at Camp Baldwin near Dufur sponsored by ODFW, CCA and Boy Scouts of America. The weather was fantastic, and the fishing was great.

Marine Resources Program

Justin Ainsworth, Marine Resources Program Manager

Federal funds supporting Oregon anglers

Fishery stock assessments are critical to ensuring sustainable harvest for commercial and recreational fisheries. A model is only as good as its data, and for Oregon stocks, biological data is the most important.

In a continuing grant and partnership with the Pacific States Marine Fisheries Commission (PSMFC), staff ride along during ocean charter fishing trips to collect essential biological data at the location of where a fish was encountered. Staff collect fish length and weight from released fish. For retained fish they take length, weight, and collect otoliths - fish ear bones.

Otoliths are like tree rings, changing color seasonally which allows us to determine how old a fish is. While age is critically important for effective fisheries management, otoliths also act as a climate record and let us understand changing ocean conditions.

Thousands of otoliths are collected each year and stored until an ODFW scientist can determine the age of the fish. To do this, the scientist breaks the otolith in half then toasts it over a flame to make the rings easier to count under a microscope.

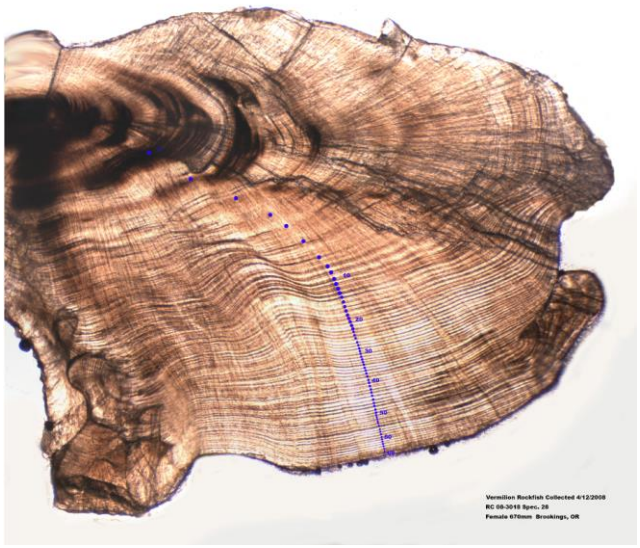
Our marine program employees one full time age reader who, in collaboration with California, Washington, British Columbia and Alaska, reads these otoliths and conducts the important research needed. This international collaboration ensures the agencies are using the same methods, and our data are compatible across the region. Once aged, the data is included in the stock assessment process.

Many of Oregon's rockfish species live very long lives (some as long as 200+ years) and reach sexual maturity at a very late age. However, the fish don't continue to get longer as they age, so aging the fish helps ensure we aren't removing so much of the population that harvest becomes unsustainable.

The otoliths of these long-lived rockfish act as a time series of ocean events. ODFW has received federal grants to study changing ocean conditions by examining otolith chemistry, shape and ring patterns to begin forecasting how populations will change in light of climate change.

Otoliths truly are an amazing tool for scientists providing us with the invaluable ability to maintain healthy stocks but also to shine light on how population dynamics will change as our oceans change.

A China rockfish otolith that has not yet been broken and aged.



A broken and burned vermillion rockfish otolith was aged at 68 years old.

Coded-wire tag recovery keeps salmon fisheries open

ODFW's Ocean Sampling Project (OSP) collects coded-wire tags (CWT) from hatchery salmon harvested in both the ocean recreational and commercial troll salmon fisheries. The tags are tiny pieces of stainless steel placed in the nose of juvenile salmon.

Each tag is inscribed with an alpha-numeric code that is unique to a specific release group. Information from these CWTs contributes to the management of salmon fisheries including making informed decisions about season structure and duration and allows managers to understand specific stock contributions to fisheries.

Oregon's commercial troll and recreational ocean salmon fisheries are mixed-stock fisheries. That is, they harvest salmon from multiple salmon populations or stocks. The proportion of stocks encountered in these fisheries varies within each season and from year to year. As a result, careful management strategies are needed to consider the status of all affected stocks and minimize the impact on those that are vulnerable.

The OSP is a largely federally funded project that employs approximately 30 seasonal staff at 11 major ports along the Oregon Coast each year. During each interview the OSP staff conducts, every salmon is checked for the presence of a CWT, and if present the snout containing the tag is collected for CWT recovery. Once the tag is read, the information relating to that recovery is fed into the regional database that records CWT releases and recoveries. Models used by fishery managers to forecast fishery impacts use the information contained within this database as one of their data sources.

It is imperative that the OSP maintains an adequate sampling rate in both fisheries and across locations to continue to provide fishery managers with the best information possible to facilitate sustainable fishery opportunities.

ODFW OSP team member Alexandra Copeland wands an angler's salmon to check for the presence of a CWT.

ODFW OSP troll samplers taking biological measurements from a troll caught coded wire tagged Chinook salmon.

Federal grant funds evaluation of climate related effects on nearshore invertebrates

In 2021, ODFW successfully gained and executed a $250,000 federal grant from the Competitive State Wildlife Grant (C-SWG) to evaluate climate related effects on invertebrate species undergoing rapid shifts. The grant explored new survey methods, clarified key data gaps, and resulted in useful information we immediately applied and will be used in the future.

The work focused on the south coast nearshore ocean from 2022-2024 with three objectives: 1) new nearshore surveys for key species (sea urchins, sea stars, and abalones), 2) two statewide kelp canopy surveys in 2022 and 2024, and 3) gaining new understanding of nearshore oceanographic drivers.

First, working collaboratively with academics and fishermen, staff surveyed for sea urchins, sea stars, and abalones at shallow and deeper depths. Staff and the University of Oregon dive team performed 46 SCUBA transects in the shallow rocky reefs of the South Coast). In partnership with fishermen, we also performed 206 deeper surveys with use of a small ROV. Example data from this work showed continued declines of abalones. Staff presented this information to the Commission in 2023 and was used directly in management.

Second, we completed contracts for statewide kelp canopy aerial surveys in 2022 and 2024. We acquired fine scale, infrared photography suitable for multispectral analysis via fixed wing aircraft across the coastline of Oregon. The work provided an important update to major kelp changes since the prior 2010 survey. The study also filled a glaring gap in understanding of kelp on our coastline.
Findings of this work showed that historically robust south coast kelp beds have continued to decline; however, kelp beds around Cape Arago and Depoe Bay showed promising resilience. These data are disseminated frequently, including use by numerous data outlets, and direct use by partner groups such as Oregon Kelp Alliance and often applied to scientific publications and management decisions.

Lastly, we improved our ability to understand connections between ocean conditions and ecosystem changes by purchasing and deploying oxygen and temperature sensors to new areas along Oregon's southern nearshore. Results from this effort will lead to a better understanding of the oceanographic drivers of recruitment, which include upwelling and low oxygen zone dynamics. Project partners included Oregon State University and others who then share and collaborate with similar data.

This federal C-SWG grant provided key data acquisition used immediately in management and into perpetuity for an enhanced understanding of our nearshore ocean.

ODFW and the University of Oregon perform SCUBA surveys off the Brookings coast.

Infrared photograph from the 2024 aerial kelp survey at Cape Arago.

End of field reports for June 13, 2025