# ODFW Field Reports

**Oregon Fish and Wildlife Commission**
**December 17, 2022**

## East Region

Nick Myatt, Region Manager

### Opal and Trout Creek culvert replacement, stream channel reconnection, and road obliteration project

Opal and Trout Creek stream crossings are currently served by undersized and rusted corrugated metal pipe (CMP) culverts. Existing road locations have encroached on the active floodplain and resulted in simplified instream habitat conditions. Additionaly, during road construction (circa 1950) Opal Creek was diverted to provide a more perpendicular road crossing site thus abandoning approximatly 475' of channel. Existing culverts create seasonal fish passage issues for certain life history stages of both Endangered Species Act (ESA) listed Mid-Columbia Summer Steelhead and Resident redband trout.

The orange rope represents the size of the previous culvert that was replaced

Replacement culverts are open bottom culverts that meet current Bonneville Power Administration Habitat Improvement Program III biological opinion standards and are designed to accommodate a 100 year flood event. In addition to replacing culverts, the project obliterated 1415' of road in the floodplain and recontoured the road prism to match natural floodplain elevations. Additionally, the project reconnected the lower section of Opal Creek to its abandoned historic stream channel and confluence with Trout Creek.

New thirty-three-foot wide, open bottom culvert that replaced two, six-foot wide culverts

### Response of mule deer and elk to thinning and prescribed burning in forest ecosystems

Changes in forest management (i.e., fire suppression and reduced timber harvest) on public lands have contributed to reduced amounts of early seral and low to moderate canopy cover forest stands and nutritional resources available to both mule deer and elk. Reduced forage availability on public lands has contributed to population declines and distributional shifts from public to private lands.

Research throughout western North America has documented increased use of disturbed forest stands (either created by wildfire or timber harvest) by both mule deer and elk in the years immediately following disturbance, but the duration of the benefits is not well understood. At the Starkey Experimental Forest and Range, research documented the long-term (10+ years) response of mule deer and elk to mechanical thinning and prescribed burning of forest stands.

In the year following thinning and fuel treatments, elk increased use of treated compared to pre-treatment use. Elk used treated forest stands at night while foraging but returned to untreated stands, which provide security and thermal cover during the day. Use of treated

stands peaked five years post-treatment. After 15 years, elk use returned to baseline levels observed prior to treatment. Elk had increased use of treated stands that were further from roads open to motorized vehicle use. Mule deer use of treated stands was like that of elk, but with a few notable differences. Mule deer did not increase use of treated stands until four to five years post-treatment with use continuing to increase up to 18 years post-treatment. Determining the exact duration will require additional data collection.

The delayed response and greater duration of increased use of treated areas by mule deer compared to elk is likely related to available forage resources. Grasses and forbs, preferred elk forage, respond immediately to disturbance. In contrast, shrubs, which are preferred mule deer forage have a delayed response to treatments but will persist longer in treated stands than grasses and forbs.

Pre-treatment aerial photo of a mixed conifer stand on the Wallowa Whitman National Forest

Aerial photo following mechanical thinning

A mosaic of treated and untreated forest stands will provide the greatest benefit to mule deer and elk on summer range. This will allow for use of treated areas with increased nutritional resources at night while providing access to security and thermal cover in untreated areas during the day. Forest treatments that reduce overstory canopy cover to 30-40% are likely to have the greatest benefit for mule deer and elk. Additionally, vegetation treatments on public lands should be coupled with permanent or seasonal road closures to maximize use to benefit populations and decrease conflict on private lands.

## West Region

Chris Kern, Interim Region Manager

### Partnering to update Rogue Canyon bear wise education video

Jason Badger (Gold Beach wildlife biologist) and Adam Baylor (I&E) joined the U.S. Forest Service (USFS) and Bureau of Land Management (BLM) to float the Wild and Scenic corridor of the Rogue River and shoot footage for a new, updated Bear Wise Educational video for boaters and hikers. While river flows were very low, the weather was cooperative (so were the bears) and great footage was captured.

This project is part of a larger cooperative between multiple agencies, and it is hoped that updated material will help reduce bear-human conflicts. ODFW, U.S. Forest Service (USFS), Bureau of Land Management (BLM), and U.S. Department of Agriculture Wildlife Services have been partnering to improve communications with river users and strategize on ways to minimize bear-human conflict.

A black bear in the Rogue Canyon Wild and Scenic section

A BLM river ranger checks an electric bear fence. Rafters use these fences to safeguard coolers and food storage containers


ODFW, USFS, and BLM staff took photos and videos to upgrade a safety video for rafters and hikers

## Good Neighbor Authority implementation

The Good Neighbor Authority (GNA), made permanent in the 2014 Farm Bill, facilitates partnerships between state agencies and the USFS and BLM to perform watershed, forest, and rangeland restoration on federal lands. The overall intent of GNA is to expand federal agencies' capacity to implement restoration activities and to support cross-boundary landscape-scale restoration.

As of October 2021, ODFW has signed 20 Supplemental Project Agreements (SPAs) with nine of the 11 national forests in Oregon under the 2016 Master GNA Agreement with the USFS. The SPAs contain funding for ODFW to implement projects such as fabricating and installing gates for travel management, replacing culverts for fish passage, and restoring strategy habitats like aspen stands, riparian areas, and historic meadows.

One example of a riparian restoration project took place in 2021 in the Sweet Home Ranger District of the Willamette National Forest. The ODFW Corvallis habitat crew conducted thinning (falling and leaving small trees) and snag creation on nine acres of riparian reserve habitat to create more structural and species diversity over time.

In 2020 and 2021, ODFW and the BLM developed two "umbrella" agreements that provide funding to ODFW for aquatic and special status species monitoring and restoration. Projects in these agreements include Warner sucker, Foskett speckled dace, and salmonid monitoring, eDNA surveys for Foothill yellow-legged frog, pygmy rabbit surveys, evaluating the impact of fire and fuels management on Siskiyou Mountains salamanders, and implementing an automated radio-telemetry tracking system to monitor sensitive bat and bird species' movements.

The use of GNA has allowed ODFW and federal land managers to accomplish more on the ground, while strengthening the state-federal relationship. The establishment of ODFW's new Habitat Division and permanent GNA Coordinator position will help ODFW grow the program, and together with additional partners, work across ownership boundaries to improve fish and wildlife habitat quality, connectivity, and climate resilience.

Riparian thinning on the Willamette National Forest

A new culvert installed on Deadwood Creek in the Malheur National Forest by the John Day Screens Shop using GNA

## Clackamas River seeing high wild coho returns

Returns of the early component of the Clackamas River wild coho population are on track to set a modern- day record (since counts began in 1958). Through October 7, 2021, 7,771 early run coho have already passed through the Portland General Electric (PGE) North Fork Dam fish collection facility into the upper Clackamas River basin.

Based on average run timing, this year's return is predicted to reach about 10,500 fish. The previous record established in 2020 was 7,881 total early wild coho population typically begin arriving in mid-November and will be in addition to the predicted 10,500 early run fish.

The fish collection facility sorts wild from hatchery fish without actually touching the fish. Photo provided by Garth Wyatt, Portland General Electric

These counts also do not include a significant number of wild coho that spawn in the lower Clackamas River basin below the PGE dams. The number of coho that return to the lower basin will be estimated through spawning ground surveys this fall.

## Cannabis issues in Rogue Valley

During the recent cross-agency cannabis enforcement call, the Oregon Department of Agriculture (ODA) provided an update on *Operation Table Rock,* an inspection of grow sites in Jackson and Josephine counties. A total of 320 sites were visited and about half of the licensed hemp sites are actually marijuana. ODA officials said the primary environmental issues are illegal water diversion and new wells (using groundwater illegally).

District staff have received numerous complaints in the last two years from members of the public reporting a wide variety of illegal activity and environmental damage.

ODFW staff are hoping to get additional details on illegal activities and subsequent response from multiple state agencies including the Water Resources Department, ODA, and the Liquor and Cannabis Commission. Illegal activities can greatly affect Rogue fisheries and create habitat loss, particularly streamside vegetation that helps cool water in the Rogue's hot summers. Examples of information sought include whether illegal water diversions (dams), wells, culverts, and ponds have been removed, if habitat has been restored, and if poor agricultural practices and run off has been mitigated.

## Elk research in two Wildlife Management Units

In a cooperative project with ODFW's West Region Wildlife Research, an Oregon State University graduate student conducted two years (2018, 2019) of research using fecal DNA and a spatial capture-recapture analysis to estimate Roosevelt elk density in the Tioga and McKenzie Wildlife Management Units (WMU). The project goal was to determine if fecal sampling and spatial recapture models could be used as an alternative to current ODFW helicopter surveys to document elk density in varied habitat.

The graduate student, Jennifer Nelson, placed six square-mile sampling grids within each WMU

and stratified them based on landownership and dietary digestible energy (DDE) levels with the assumption that higher DDE levels equates to high elk density. Three transects within each sampling grid were walked to collect fecal samples for DNA analysis. Nelson compared the estimated elk density to DDE level, distance to nearest road, percent slope, distance to forage, average daily precipitation, and distance to crops.

OSU graduate student Jennifer Nelson

In the Tioga WMU, the best density predictive model was a combination of distance to road, distance to cover, and average daily precipitation. Nelson estimated just over 3,000 elk while ODFW's estimate was 7,250. In the McKenzie WMU, the best predictive model was a combination of distance to crops and percent slope. Nelson's estimate was just over 1,200 elk while ODFW's was 1,970.

This method is not as precise on WMUs with lower elk densities (just 168 samples were collected in the McKenzie WMU compared to 1,084 in the Tioga), but it did indicate higher density of elk on private lands, likely related to availability of forage. Environmental and land practice factors influencing elk densities in the two WMUs were documented during the study.

Results showed fecal DNA spatial capture-recapture methods do work but may require high sampling intensity; results are currently in the process of being published.

Collecting Roosevelt elk fecal samples for DNA analysis

## Information and Education

Roger Fuhrman, Information and Education Administrator

## Over the top outreach shows potential

I&E recently completed a pilot project using OTT (over the top) advertising techniques to recruit and retain anglers. OTT ads run on streaming services and are targeted based on zip code and the viewer's interests. The angler retention/recruitment advertising campaign ran between Memorial Day and Labor Day and was supported by a grant from the Recreational Boating and Fishing Foundation (RBFF).

The campaign was aimed at engaging new or potential anglers and encouraging them to buy a fishing license online. Two versions of video ads were made—one using female voices and actors and another using male talent. Ads ran on streaming services like Paramount Plus, Sling, etc. Messaging urged viewers to visit MyODFW.com (specifically the Start Fishing page) to learn more and then buy a fishing license.

Recipients were identified based on an analysis of 2020 license sales data and a survey of customers who bought their first license last year. The survey found that these "pandemic participants" saw fishing as a relaxing, safe recreational activity during the pandemic. They are also interested in camping, hiking, boating, biking and other outdoor recreation activities. This should mean that, with some encouragement, they will renew their license in 2021.

Results show that there was great interest with ads generating more than 715,000 impressions with 96% of the ads watched to completion. Although a lot of customers were reached, not many followed through by visiting MyODFW.com. The first week of the campaign had 181,000 total impressions but only 495 visits to the Start Fishing page.

OTT advertising may not have been the right tool to recruit or retain anglers; however, it could be very effective for other outreach efforts. OTT advertising was a relatively inexpensive way to reach a large audience. Viewers were interested enough to watch the ads and absorb the message. This could make OTT a cost-effective way to communicate with the public about other important issues like invasive species, leaving wildlife in the wild, climate change and stopping poaching.

### Give the gift of the outdoors

With the holidays quickly approaching, ODFW is encouraging people to put an Oregon fishing or hunting license on their holiday shopping list this year. Licenses for 2022 go on sale beginning December 1 and the agency hopes to get a jump on sales for the new year with an ad campaign in November and December.

Almost 400 replays of radio ads will reach more than 691,000 Oregonians on five different stations. Ads will promote giving the gift of the outdoors this Christmas like a 2022 fishing or hunting license. The messaging will then shift to encouraging people to treat themselves and get their own license before the new year begins.

Search engine marketing (SEM) ads will target people searching online for hunting, fishing, hiking and camping gear as well as other gifts for outdoor enthusiasts. SEM ads will appear at the top of the search engine results as paid ads. Display ads with artwork and photos will appear on the side of the screen like more traditional online ads.

Geofencing will focus on visitors to stores that sell outdoor gear. Digital ads will show up on customer's phones, tablets and other internet-connected devices.

The gift of a fishing or hunting license is a great way to encourage friends and family to get outside. It supports the management and conservation of Oregon's fish and wildlife. And, for the gift giver, there are no worries about supply chain issues disrupting holiday shopping plans.

### Oregon State Police

Captain Casey Thomas, Fish & Wildlife Division

OSP Fish and Wildlife Division members apprehend subject in NW Oregon

During decoy operations, a Fish and Wildlife pilot was operating Oregon State Police aircraft over the Trask Unit and spotted a vehicle consistently spotlighting clear cuts just outside of Willamina. Fish and Wildlife Division members made contact with the lone male subject, who had a spotlight and .30-06 rifle loaded within arm's reach. The subject was determined to be a felon, driving while suspended (DWS), and did

not have the required ignition interlock device (IID) installed. The subject was cited for Felon in Possession of a Firearm, DWS-Violation, No IID, and Casting Light While Possessing Certain Weapons.

OSP Fish and Wildlife Division members responded to a report of two cow elk shot in the Tioga Wildlife Management Unit. It was reported that the suspects covered up one elk while the other was being salvaged and that all involved subjects would hide in the brush when vehicles drove past them on the nearby roadway. Troopers located the group of hunters packing out a cow elk when they arrived on scene. All of the hunting party initially denied knowledge of another elk being shot. Further questioning resulted in a confession that two elk had been harvested – one legally and the other being covered with camo clothes and sticks. The second cow elk was salvaged and donated to charity and an adult subject was criminally cited for Aiding/Counseling in a Wildlife Offense and Unlawful Possession - Cow Elk. A youth hunter, who allegedly shot both elk, was warned for Exceeding Bag Limit - Elk. The rifle used was seized and placed in evidence.

Elk covered up by subjects exceeding the bag limit

Fish and Wildlife Troopers were patrolling the Ukiah Wildlife Management Unit during rifle elk season. During the patrol, they were contacted by a land owner regarding a trespass where two bull elk were harvested. The Troopers responded to the area and contacted four hunters that were dressing two bull elk on private property that they did not have permission to hunt on. Two of the hunters admitted to shooting the elk while the other two stated they were there to help with recovery. They stated they knew that they were on private property but had hunted there for years and had never had any issues. The subjects were cited for Trespass and the elk were seized.

Bull elk seized by OSP as a result of trespassing

## Conservation Program

Andrea Hanson, Oregon Conservation Strategy Coordinator

## Coastal marten research funded

The SW Region Wildlife Conservation Biologist and partners will expand research efforts on the coastal subspecies of pacific marten in southwestern Oregon after the agency was awarded a U.S. Fish and Wildlife Service grant this month.

Coastal marten in snow, Oregon, Dec. 2020. Photo by West Region Research, ODFW

Wildlife biologists will use the funding to fill knowledge gaps in the understanding of coastal marten ecology and to inform adaptive conservation actions. Coastal marten are listed as a federally threatened species and a state endangered species in California.

The $488,657 grant will fund the project, *Promoting Transboundary Recovery of Coastal*

*Marten*, and will support work by ODFW, California Department of Fish and Wildlife and Oregon State University (OSU) to determine population size, distribution, habitat associations and presence of co-occurring species for marten populations in southwestern Oregon and northwestern California.

Funding provided through the Competitive State Wildlife Grant Program will allow ODFW and counterparts in California to work more closely with partners like Dr. Sean Matthews, an associate research faculty member at OSU specializing in the ecology of carnivores and other wildlife species in the Pacific Northwest. Through a subaward to OSU, Dr. Matthews and research faculty will lead the partnership's efforts to provide critical data to support on-the-ground conservation measures for the coastal marten.

## Annual art contest results

The winning artwork was selected for ODFW's 2022 Habitat Conservation, Upland Game Bird and Waterfowl stamp art competitions.

Winning artwork will be the face of the 2022 collector stamps and other promotional items to benefit Oregon's native wildlife and their habitats.

2022 Collector Stamp Art Winners:

Waterfowl, first place, Northern Shoveler by Buck Spencer of Junction City, Ore.

Upland Game Bird, first place, Chukar by Debra Otterstein of Cove, Ore.

Habitat Conservation, first place, Long-billed Curlew by Kathy Peckham of Ridgway, Colo.

Spencer, Otterstein, and Peckham will receive a prize award of $2,000 for their winning artwork.

## Marine Resources Program

Caren Braby, Marine Resources Program Manager

## 2021 Coastwide rockfish survey – field work completed

Crew members of the R/V Pacific Surveyor retrieve the BASS cam during the 2021 coastwide rockfish survey

Oregon's rocky reefs are home to a special community of marine species including several rockfish species that are popular targets of sport fishermen, black rockfish being arguably the most important or our "bread and butter" species for sport anglers. Because federal stock assessments underpin our sustainable harvest quotas and because federal surveys are not conducted in the nearshore and do not include rocky reef habitats (since their survey tool is a trawl net), ODFW has made rocky reef surveys a high priority to inform sustainable management.

Six years in the planning and three years in the implementation, our most recent rocky reef survey has just been completed using a combination of acoustics, video and hook & line techniques, deployed from a contracted fishing vessel. The survey team spent 44 days at sea, completed 595 transects (3,570 km), and took 51 hours of video data and 229 conductivity temperature depth (CTD) casts for oceanographic measurements. This great volume of information will now be analyzed to produce scientific estimates of species, habitats, and oceanographic context.

Already, we know from the 2021 surveys that our biologists documented one of the more severe hypoxia (low oxygen) seasons on record.

This was evident in the oceanographic measurements and was evident in low abundance of the rockfish species for which the survey was designed (black, blue, Deacon). Perhaps analogous to the hypoxia season that affected the halibut surveys off of the Washington coast in 2017, the 2021 rockfish survey may inform both fisheries stock assessment as well as our understanding of how coastal species are responding to and impacted by changing ocean conditions.

This one-time survey was funded through competitive grants awarded by the Restoration and Enhancement Board, and through the federal competitive Saltonstall-Kennedy granting opportunity. The Department intends to repeat this survey in the future, as funds are secured to do so.

**End of field reports for December 17, 2022**