



# ODFW Field Reports

Oregon Fish and Wildlife Commission  
February 9, 2018

## EAST REGION

Bruce Eddy, Region Manager

### Fish Transport and Liberation

Many enterprises embrace the “just-in-time” (JIT) philosophy in manufacturing and inventory control. JIT became a common industrial strategy in the 1960’s with auto and electronics manufacturing and is most obvious today when UPS delivers your Amazon order.



What many do not realize is that JIT has been part and parcel of the department’s hatchery program almost since its inception. Each year the agency raises and releases more than 45M salmon, steelhead and trout. Most of these fish are raised at a department hatchery to a specific size then moved to an acclimation pond, release location or lake. In most cases these moves are made just-in-time to meet a biological, (imprinting or acclimation), regulatory (federal permit raceway loading requirement) or fishery need. This scheme takes advantage specific hatchery attributes (water temperature, available space, etc.) to meet the needs of a particular species of fish as efficiently as possible.

To move fish between locations, the department maintains a fleet of trucks, tanks, and qualified drivers. Trucks and tanks range from 100 gallon slip tanks that fit into the bed of a pickup to heavy haul trucks that tow 5,000 gallon multi-chambered

tank trailers. Occasionally coolers or, buckets or milk jugs are used to move eggs or small numbers of fry.

Late winter through summer are a particularly busy for the fish transport and liberation drivers. Salmon and steelhead are being moved from their hatcheries to acclimation and release facilities and eggs are being moved from spawning to incubation facilities in winter and spring. Trout releases are also beginning and will continue through summer so our trucks and crews are on the road continuously.

### Mid-C Steelhead Conservation and Recovery

The Mid-Columbia River steelhead population includes 17 existing and three extirpated populations in Oregon and Washington and was listed as threatened under the federal Endangered Species Act in 1999. The Conservation and Recovery Plan for Oregon Steelhead Populations in the Middle Columbia River Steelhead Distinct Population Segment (Mid-C Plan) was adopted by the Fish and Wildlife Commission in February 2010 and provides a blueprint for the recovery of steelhead using Oregon Columbia River tributaries between Fifteenmile Creek and Walla Walla river basins.



Photo: Shelley Tattam (ODFW)

Staff recently completed a review of the first seven years of plan implementation. The report will be released later this year. Highlights of progress made since Plan adoption include:

- Implementation of the Fifteenmile Creek Action Plan to stabilize water temperatures;
- The first adult steelhead returning as part of the Pelton-Round Butte reintroduction effort;
- National Marine Fisheries Service (NMFS) classification of the Upper Deschutes-Crooked River as an experimental population under ESA Section 10(j);
- Formation of the John Day Basin Partnership to facilitate strategic basin-wide habitat restoration;
- Irrigation dam removals in Birch Creek (Umatilla River); and,
- Irrigation efficiency improvements and instream water protection in the Walla Walla River basin.

More than 60% of 1,557 habitat restoration projects completed in mid-Columbia tributaries over the last seven (7) years address one or more Oregon Mid-C Plan recovery actions and 75% of the projects implemented under the Plan addressed high/highest priority recovery actions.

As of December 2016, four (4) of Oregon's 10 existing populations met or exceeded viable (low-extinction risk) status and the North Fork John Day summer steelhead population is the only highly viable population within the Mid-C area.

Few high priority monitoring actions included in the Mid-C Plan have been fully funded and implemented to date. As a result, the trends in threat reduction and status of habitat connectivity (quantity & quality), fish-habitat use relationships, and management action effectiveness at the population-scale are not as clearly documented, as we would like.

Recent monitoring has found that somewhere between 30 and 70% of returning wild adult Mid-C steelhead swim past their natal tributary in Oregon, go past McNary and Ice Harbor Dams and are lost in the mainstem Columbia/Snake system. This is a significant issue for Fifteenmile Creek, John Day

River, Umatilla, and Walla Walla River populations.

Staff is developing recommendations as part of this review to improve and focus Plan implementation.

## WEST REGION

Bernadette Graham- Hudson, Region Manager

### Diamond Lake Benthic Surveys

Umpqua Fish District staff are working through analysis of benthic invertebrate samples taken from Diamond Lake this past fall. Through mid-January, more than 2,500 chironomids were counted from one site they are currently working through. This is already more than they found in all of the samples from 2015 which is the last time benthic invertebrates were sampled at Diamond Lake. The chironomids, however, appear to be smaller than what was seen in 2015, so it will be interesting to see what that means for the pounds/acre estimate this year and how it relates to previous years' estimates. The benthic invertebrate counts were covered by two local newspapers.



### Northwest Steelheaders Volunteer Projects

The Mid-Valley Northwest Steelheaders (NWS) contribute numerous hours to the Corvallis South Willamette Fish District. The group recently helped staff reskin hoop traps and repaired the EE Wilson windmill's diaphragm and re-erected it. The windmill aerates the EE Wilson Pond to maintain good levels of dissolved oxygen for fish.

District STEP Biologist Karen Hans says the NWS is truly an enjoyable group to work with. Their

members participate in many STEP and District projects including: building fishing platforms, repairing boat ramps and slides, checking fish traps, helping with Family Fishing events, delivering salmon and trout eggs to classrooms, river clean ups, and helping with Boy Scout fishing events.



### Life Cycle Monitoring Project Update

The Salmonid Life Cycle Monitoring Project (LCM) began in 1997 as part of the Oregon Plan for Salmon and Watersheds to monitor mitigation and survival of salmonids in western Oregon. The LCM project’s goals are to estimate abundance of spawning adult and out-migrating juvenile salmonids that pass six ODFW LCM sites, and to estimate marine and freshwater survival rates for coho salmon at these same sites. ODFW monitors sites from North Scappoose Creek to the Winchester Creek near Coos Bay.

The timing of this year’s coho salmon return has been protracted, and mid-way through January, coho salmon still outnumber winter steelhead at LCM adult traps. While preliminary results suggest adult coho abundance will be higher in 2017, the fish returning to spawn have been noticeably smaller than in previous years.

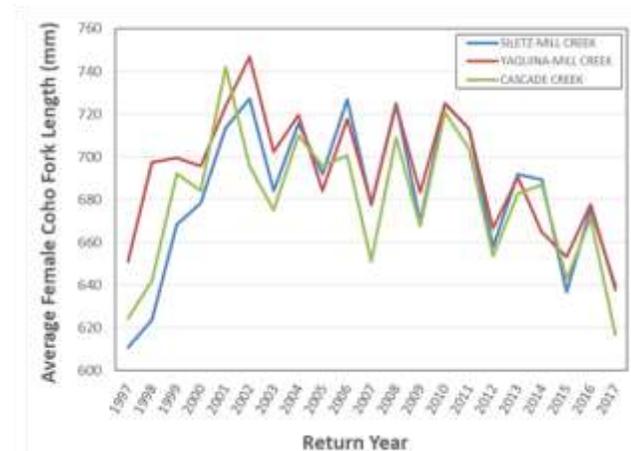
Staff first noticed the change in size of returning adults in 2015, a year when a strong El Niño and “the blob” resulted in low marine survival for coho salmon. In addition to low survival, returning adults were smaller than usual. This can result in fewer juveniles the next year and overall lower freshwater production, as small females have fewer eggs for spawning.

Adult returns were low and fish were smaller in the 1990s, coinciding with poor ocean conditions. Once ocean conditions improved early in the 2000s, abundance and size of returning fish

increased. Over the past seven years, however, as returns have varied, adult size shows a declining trend. Returns in 2015 and 2017 stood out for the abnormally small size of returning females.

Variation in coho salmon size may be driven by fluctuations in the marine environment as changes in temperature and upwelling affect the amount and type of food available to salmon. We currently use oceanographic data to help predict the number of returning adults, and now that we have established a time series of fish size at ODFW’s LCM sites, we can begin investigating the other ways marine conditions affect salmon beyond abundance. The decrease in adult size in 2017, even as abundance rebounds from the low in 2015, indicates the effects of the warm ocean in 2015 continue to be evident.

The figure below shows average female fork length at the three mid-coast LCM sites each year since monitoring began back in 1997. This year’s fish are the smallest seen since the early years of the project and continue a general downward trend over the last several years.



### INFORMATION AND EDUCATION

Roger Fuhrman, Information and Education Administrator

#### We Wish You a Merry Fishmas

ODFW’s Twitter feed was in the holiday spirit in December with the #25DaysOfFishmas campaign. The Marine Resources Program Lynn Mattes proposed the campaign to focus on her favorite ocean fish. After conversation with others, the concept was expanded to include other fish. Each week focused on a major region of the state – one week on marine fish, another on the high desert, and a week on the fish of the Columbia Basin.



ODFW @MyODFW · 24 Dec 2017  
24 - Green Sturgeon, (*Acipenser medirostris*) can be found in several Oregon coastal rivers. They are equally as fascinating as their white sturgeon cousins, even if they are not pursued as a sportfish with the same fervor - [ow.ly/Ht0h30wqj8X](https://twitter.com/MyODFW/status/941339369964630016) #25DaysOfFishtmas

Twitter followers were treated to information about and pictures of black rockfish, Albacore Tuna, Cabezon, Chinook salmon, steelhead, Pacific Lamprey, and rare fish like the Foskett Speckled Dace and the Borax Lake chub. This campaign received some of the highest engagement ODFW has seen on Twitter in two years. All of the posts received likes and were retweeted. Although the post of the Green Sturgeon (*Acipenser medirostris*) was the most popular, the final post was saved for the *Acipenser transmontanus*. At risk of pushing the bad holiday carol puns a bit too far, you might say we were “dreaming of a White Sturgeon”.

Here is the link to the entire campaign:  
<https://twitter.com/i/moments/941339369964630016>

## OREGON STATE POLICE

Captain Jeff Samuels, Fish & Wildlife Division

Oregon State Police Fish and Wildlife Troopers (OSPFW) from the Albany office received information regarding four potentially unlawfully taken doe deer. The Troopers responded to a residence near Sweet Home and contacted a male and female. During interviews with the suspects an additional suspect was developed. It was determined three doe deer had been taken unlawfully and were subsequently seized as evidence. Two rifles were also seized as evidence. One subject was criminally cited for *Take Antlerless Deer, Fail to Validate Big Game Tag, and Attempt to Exceed Bag Limit*. The second subject was cited for *Take Doe Deer, Exceeding Bag Limit and Fail to*

*Validate Big Game Tag. The third subject was cited for Take Antlerless Deer – No License/Tag.*

OSP Troopers from the Portland office responded to a report of a trespasser who had killed a bull elk in a field west of Forest Grove. During the recovery, OSP received a report of a second bull elk shot without permission on the adjacent property. All associated landowners wished to press charges. The Troopers seized one elk, one tag, and cited one hunter for *Hunting on the Cultivated or Enclosed Lands of Another*. The Troopers also received word of a dead spike elk nearby that had been shot five times but was unclaimed. The reporting party had voluntarily field dressed the elk to assist responding troopers. While loading the elk, the Trooper noticed the back straps had been removed from the elk. The one individual who had field dressed the elk admitted to removing the back straps and tenderloins as a “finder’s fee” for calling in the elk and cleaning it. That subject was warned for *Unlawful Possession – Spike Elk and the meat was recovered*. The seized elk were cut and wrapped for storage as evidence while the salvaged elk was donated to the local food bank.

OSP Trooper was contacting rabbit hunters at E.E. Wilson Wildlife Area and checked a hunter who was hunting with toxic shot. The subject was identified by his hunting license and ID card and determined to be on felony probation. The subject admitted he knew he was a felon. During the interview with the subject, the Trooper learned the subject had harvested two rabbits, and was also planning on hunting the 1st Coast Elk Season with a rifle. The Trooper cited and released the subject for *Felon in Possession of Firearm, Possession of Toxic Shot, Unlawful Take/Possession Rabbit, and Possession of Falsely Applied for License/Tag*. The subject’s shotgun, tags, and rabbits were seized as evidence.

During the Coastal Elk Season, OSP Troopers from the Astoria office used a spike elk decoy (WED) in the Saddle Mt. Unit, which is a three (3) point or better unit. During the WED operation, a vehicle stopped and the driver immediately got out and fired multiple rounds at the WED without looking to verify what it was. The driver then started running uphill towards the WED to shoot at it some more. The driver was contacted and had a Saddle Mountain tag, but admitted he did not know if it was a three (3) point elk or if it was even a bull or a cow. The subject was cited and released

for *Unlawful Taking Spike Elk*, and was warned for *Shooting from a Roadway*. Later that day, another vehicle stopped after observing the WED. The driver immediately started firing multiple rounds within seconds of stopping, and did so from the driver's seat and out of the window. The subject had a Saddle Mountain tag, but did not count the antler points before firing. The subject was cited and released for *Unlawful Taking Spike Elk, and for Hunt from a Motor Vehicle*.

OSPFW Troopers from the Prineville office received information of a vehicle observed dumping two fresh deer carcasses on Bureau of Land Management (BLM) land near Prineville. After collecting DNA samples and garbage left at the scene, the Troopers drove to the suspect's house. Following questioning, the subject came clean and admitted he had intentionally run the two deer over (a doe and fawn) killing one and then shot the other to kill it. The subject stated he thought it was legal to pick up. While retrieving the meat from a freezer in the garage, Troopers observed a large set of velvet buckhorns in the corner with no tag. Troopers questioned the subject and he stated he legally killed it a couple years prior.

When the Troopers confronted him about the online reporting the subject came clean and admitted he killed it and never tagged it so he could continue to hunt. After seizing the meat, the velvet buckhorns and the .22 the subject used to kill the deer, Troopers asked the subject if there was anything else illegal at the residence. The subject led Troopers to a tree near the edge of the property and showed them a large spike bull head concealed in a tree. The subject stated he and a friend found it in the Maury Unit and claimed it was a cougar kill. The elk head was subsequently seized and the subject received criminal citations for *Unlawful Take of Mule Deer – Vehicle and Illegal Possession of Game Mammal Parts*. Numerous warnings were also issued.

OSPFW Troopers from the Oakridge office responded to a report of individuals cutting up a deer in the back of a residence. Patrol Division Troopers also responded and secured the location and made initial contact with the suspect. Investigation revealed the suspect brought a road struck spike deer home and had salvaged some of the meat. In the process, his bow deer tag was

validated to claim the deer. The tag was validated for December 15, 2017. There were no open bow deer seasons on that date. The late bow deer season in the Unit had closed on December 10, 2017. The subject was advised that the road kill salvage law was not in effect. The subject was issued citations for *Unlawful Possession of Deer and for Mutilated Game Tag*.

## **CONSERVATION PROGRAM**

Andrea Hanson, Oregon Conservation Strategy Coordinator

### **Mountcrest Working Forest Conservation Easement**

The 1,771-acre Mountcrest Forest, managed by the Parsons family for nearly 100 years is home to many imperiled species in southwest Oregon. It sits on the historic Siskiyou Pass and forms key wildlife connectivity between the Rogue River-Siskiyou National Forest and the Cascade Siskiyou National Monument. After five years of collaboration between many partners, this slice of biodiversity is permanently protected.

The Parsons family practices sustainable forestry and see the benefits to wildlife from healthy habitats. They voluntarily sold a conservation easement to Pacific Forest Trust to ensure Mountcrest Forest will never be broken up or developed, and that it will continue to be owned and well managed by the family for timber, wildlife habitat, and watershed values.

The easement is noteworthy because it is unprecedented in Oregon for public agencies to fund a conservation easement that both ensures sustainable timber harvest and protects significant habitat for threatened and endangered species. The project shows how private landowners can make a difference for water quality, wildlife habitat, recreation, and the economy, and it has won praise from Senators Ron Wyden and Jeff Merkley.

Habitat here supports many Oregon Conservation Strategy Species including Northern Spotted Owl, Pacific Fisher, Western Pond Turtle, Northern Goshawk, Coho salmon and Gray Wolf. The property is in the Klamath Mountains ecoregion and Siskiyou Conservation Opportunity Area 104. Habitats on the property identified in the Strategy include Oak Woodlands, Oak Savannah, Alpine Meadows, Mature Conifer and a bit of Aspen in

some wetlands. The property also has headwaters for several creeks.



### Bald Eagle Surveys

The North Willamette Wildlife District completed Columbia River Bald Eagle surveys on January 13, 2018. Preliminary results show 86 adults and 26 juveniles counted along the Oregon and Washington sides of the river between Scappoose Bay and Cathlamet, WA.

Last year, staff were unable to complete the survey due to extreme and unsafe weather conditions. This year staff experienced crisp, clear weather with light winds and calm waters. Thanks to our boat captains from the Saint Helens Oregon State Police who also proved their skills at spotting eagles.

These counts go back decades and occur along the entire Columbia River. In 2016, records show a banner year with 105 adults. Overall, the population is increasing.



### Big Butte Creek Gravel Project

As part of the 2007 Rogue Spring Chinook Conservation Plan, a gravel augmentation pilot project has proven successful. A 150 meter segment of Big Butte Creek received gravel four years ago, and a log structure was constructed downstream to create spawning beds for Rogue Species Management Unit (SMU) Spring Chinook Salmon. Gravel was monitored for movement via Passive Integrated Transponder (PIT) tags and 90 percent stayed in this reach of stream.

Lack of suitable spawning gravel historically prohibited Spring Chinook from spawning in this part of Big Butte Creek, but the fish have used this reach since gravel was added, and 10 to 20 redds are now established annually. Southern Oregon/Northern California (SONC) coho salmon were confirmed using this reach in mid-January in an area Spring Chinook did not use.

SONC coho are federally listed as threatened while Rogue SMU Spring Chinook are state sensitive. Both fish are Oregon Conservation Strategy Species of concern.



## **OCEAN SALMON AND COLUMBIA RIVER PROGRAM**

Tucker Jones, Ocean Salmon and Columbia River Program Manager

### **Development and Use of a Chinook Salmon Age-at-Spawning Database**

Coastal fall Chinook salmon are an important biological and economic resource for Oregon. Their life histories can be complex, with fish spending between two and six years at sea before returning to their natal rivers and streams to spawn. Given this complexity, precise age specific abundance estimates are necessary for accurate and timely forecasts that are useful for local and international fisheries managers. Each year, ODFW staff analyzes thousands of lines of Chinook salmon biological data generated from creel, spawning ground surveys and tagging studies. These data extend back 30 or more years coast-wide; have been collected with variable methods by different projects, and used by many staff within the agency. To date, the data have existed in largely unconsolidated electronic spreadsheets and databases, leading to data quality issues and barriers to efficient sharing.

In 2016, ODFW staff secured a Restoration and Enhancement Board (R&E) grant to contract the creation of an integrated database to facilitate information transfer and rigorous data analysis. This database, intended to unite the three primary projects that currently contribute data for coastal fall Chinook: the Oregon Adult Salmonid Inventory and Sampling (OASIS) Program, the Coastal Chinook Research and Monitoring Program (CCRMP), and the Fish Life History Analysis Project (FLHAP). This step toward data centralization is a key component of a broader agency-wide move toward improved data-sharing efforts.

As an initial step, key staff from OASIS, CCRMP, and FLHAP met with frequent users the Chinook

age data to determine the critical needs for the new database. Simultaneously, OASIS, CCRMP and FLHAP staff moved forward with finding and contracting with a database developer. These two processes' timelines converged last winter. Database design was built around the identified needs, including the flexibility to incorporate data collected with different methodologies, using a common database platform that interfaces easily with existing agency databases.

The database went live at the end of the 15-17 biennium, providing sufficient time for staff to become comfortable with the interface and to populate the database with a subset of historic coastal fall Chinook age data prior to the 2017 fall field season. We are now using the database in real time to share biological and age data; greatly increasing data sharing efficiency between projects and improving data quality, through use of unified data set that each project accesses and helps populate.

While OASIS, CCRMP and FLHAP collectively find this process intuitive and effective, work remains before agency-wide adoption. The next step involves designing a user interface that allows any staff member to generate the dataset that they need for their purposes. In the next year, funding will be pursued to complete this final step toward having a fully functional database accessible agency-wide to staff who need access to coastal fall Chinook data from the 1980's to present.

### **END OF FIELD REPORTS FOR February 9, 2018**