Lamprey return to Umatilla in record numbers

By WIL PHINNEY
Confederated Umatilla Journal

MISSION – A record return of Pacific lamprey to the Umatilla River has fish managers optimistic that their restoration efforts are working, but it isn't stopping them from embarking on an artificial propagation program that would be the first of its kind in the United States.

This year, the Umatilla River recorded a return of 404 adult lampreys, breaking last year's mark of 319. In 2012, a total of 104 adults returned to the river. Prior to those years, the returns weren't more than a handful.

In addition to repairing habitat throughout the Umatilla River system, the Umatilla Tribes have used, are using, and will continue to use adult translocation to promote and protect growing populations in the Umatilla River. Furthermore, this spring they intend to release about 400 adult lampreys to jump-start remnant populations in the Grande Ronde River near Starkey in Union County.

About 875 adult lampreys are splashing around in seven large plastic totes at the Minthorn Springs holding facility along the Umatilla River on the Umatilla Indian Reservation. After the 400 are used for the Grand Ronde, the remainder will be released to the Umatilla River to supplement the lampreys that are expected to return this spring.

Now, however, following models used by the Finns and Japanese, tribal biologists want to incorporate artificial propagation into their mix of tools to invigorate the enigmatic species, which often is called an eel even though it is a fish. The artificial propagation element is planned for implementation in the Walla Walla and Tucannon rivers in the next few years.

What's more, researchers intend to use a variety of high-tech instruments to learn more about the passage characteristics, routes, timing and interactions between lampreys — as juveniles downstream from the river to the ocean and as adults returning from the Pacific back to upstream spawning grounds — with large-scale projects.

The CRITFC member tribes (Umatilla, Yakama, Nez Perce and Warm Springs), together with the U.S. Army Corps of Engineers, and the U.S. Department of Energy are developing a juvenile lamprey acoustic tag.

"It's been used in the salmon world for years to see how salmon interact with hydro projects. Now we need to make a miniature of an already-miniature tag for lamprey," said Aaron Jackson, Lamprey Project Leader in the Fisheries Program of the Department of Natural Resources for the Confederated Tribes of the Umatilla Indian Reservation.

CUJ/Wil Phinney

Kanim Moses-Conner holds a lamprey at the Minthorn holding facility on the Umatilla River. A record number of lamprey returned to the river this year.

The Pacific Northwest National Laboratory (formerly Battelle) is developing the tag at a cost of approximately $3.5 million, with partial funding provided by the USACOE Accord obligation of $50 million over 10 years for lamprey projects.

"It's a sweet deal" because the tribes didn't have the money for development, much less to mass produce the tag.

But the Department of Energy will foot much of the bill to develop the prototype tag, Jackson said, because it wants to use the same technology to study East Coast American Eels, which are no relation to the Pacific Lamprey.

Jackson figures it has taken 50 years or so to understand artificial propagation techniques for salmon culture – the spawning, incubation, hatching, optimal diet, and space required for rearing prior to release – and learning about lamprey isn't going to happen overnight.

The research in artificial propagation is two-fold. First, artificial propagation will create more than juveniles for release, and second, it will provide "test animals."

"Tribes aren't comfortable with experiments on existing, remnant wild populations, and we need these animals to learn critical juvenile passage issues in tributaries and the mainstem Columbia River to insure safe passage for fish going out," he said.

Currently, lamprey artificial propagation research is being conducted at the William Grant Water and Environmental Center Aquatics Lab at Walla Walla Community College. Some of the artificially propagated lamprey would be available for testing there to learn more about spawning, incubation, food, space requirements, etc.

"When it comes to recovering lamprey we think we have three methods available to use: fix the habitat and hope lamprey naturally recolonize on their own, which is not likely; use adult translocation that's now in effect; and artificial propagation. We're exploring all three," Jackson said.

Tribal members were the first to notice that populations were declining rapidly in the 1970s and their concerns "fell on deaf ears" as managers considered the lamprey a trash fish, Jackson said.

"Managers couldn't sell a tag for you to go catch a lamprey," Jackson said.

Fish counters at the major dams were having trouble seeing through the lamprey attached on the windows to count salmon. They'd push a button and shock the lamprey with an electrode and the fish would fall back downstream within the fish ladder.

On smaller-river fish ladders, which weren't constructed for lampreys in the first place, fish managers fastened angle iron to stop lampreys from attaching themselves along the sidewall of the ladder to climb over smaller dams. They were successful in that regard as lamprey drastically declined thereafter, Jackson said.

Then along came $50 million for lamprey fixes from the Bonneville Power Administration Fish Accord Settlement. Among the projects were ladders built specifically for lamprey, creating what Jackson called a "highway through existing fishways."

The 50-year-old pitted concrete fish ladders needed a smooth surface for lamprey so metal faces were attached. The first such fabrication in a Columbia Basin tributary was constructed at Three Mile Falls Dam, three miles from the mouth of the Columbia on the Umatilla River.

Success didn't come overnight. In fact it didn't happen in the next couple of years. In 2009, only six lamprey climbed the new ladder.

Jackson said lamprey have such a sensitive olfactory that the metal needed time to "season" before the it smelled enough like the river to coax the fish up the surface.

Currently, the Umatilla Tribes, in conjunction with the Yakama Nation and the Columbia River Inter-tribal Fish Commission, are developing a master supplementation plan for each tribe's respective basins. For the CTUIR, this includes the John Day, Umatilla, Grand Ronde, Walla Walla and Tucannon rivers. According to the plan, the John Day will be a "control river" with no changes to its current wild fish management practices.

Some 5,000 to 10,000 lampreys every year enter the John Day system — about 400-500 miles of river and stream. There will be no translocation, no artificial propagation — just a control sample by which the other rivers can be compared.

On the other hand, the Umatilla, Grand Ronde, Tucannon and Walla Walla "need help," Jackson said.

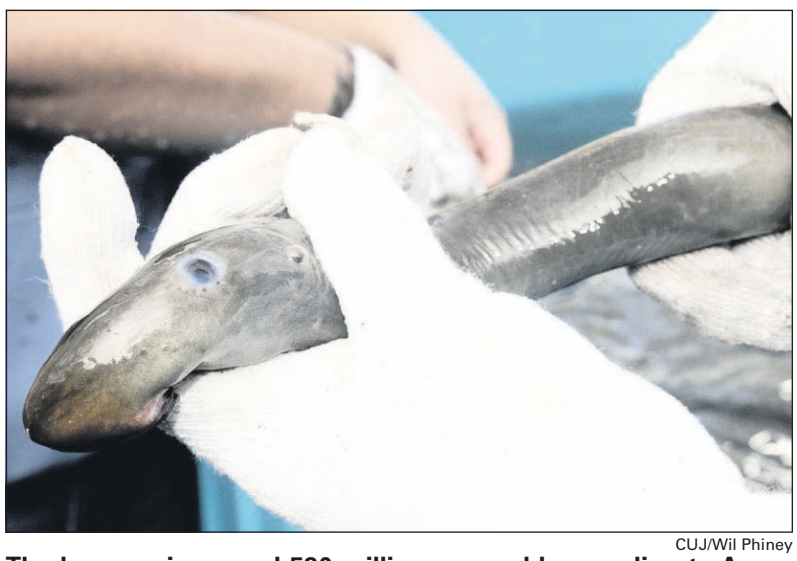
"Our work in the Umatilla looks promising, enough to think we could maybe have the opportunity some day for tribal members to harvest lamprey," Jackson said.

Lampreys that reach the Umatilla River have to navigate McNary Dam on the Columbia and four more Snake River dams to make it to the Grand Ronde.

"Lampreys have several options before they choose the Grand Ronde," Jackson said. "Knowing that challenge, we're giving them a ride right to the Grand Ronde. With a significant number to occupy and re-colonize prime habitat, they hopefully will increase pheromones, which are thought to be a key to attract more."

Jackson chalks the upwards trend in Umatilla River returns to passage improvements made particularly at the mainstem Columbia River projects and at Three Mile Falls Dam.

"The answer is unclear and just because passage is improving, we still need to understand why we're seeing the increase," Jackson said. "We would like to attribute the success we have seen in the Umatilla River to our recovery actions that began in 2000, but the lamprey will never tell us all of their secrets."



CUJ/Wil Phiney

The lamprey is around 530 million years old, according to Aaron Jackson, lamprey project leader in the fisheries program for the CTUIR.

SKI REPORT

Spout Springs
Tollgate, Ore.
CLOSED

Anthony Lakes
North Powder, Ore.
New snow: none
Base depth: 49"
Conditions: Overcast

Ski Bluewood
Dayton, Wash.
New snow: trace
Base depth: 30"
Conditions: Hard pack

Mt. Hood Meadows
Government Camp, Ore.
New snow: none
Base depth: 33"
Conditions: Some rain

Advertisements provide boost to Fossil Beds tourism

BEND (AP) — If you cleverly advertise it, they will come.

Trip visits to Smith Rock State Park, the John Day Fossil Beds National Monument and Crater Lake National Park surged in 2014 due in large part, according to parks officials, to the state's savvy "Seven Wonders of Oregon" media campaign.

"We saw a huge increase in visits," said Shelley Hall, superintendent of the John Day Fossil Beds National Monument. "The numbers for our Painted Hills unit (which was one of the seven highlighted destinations) went up 50 percent from 2013 (to 67,457 visits through November 2014), and that's even with Highway 26 closed for a week in July because of fires."

Created by the Portland advertising agency Wieden+Kennedy, the $2.3 million Seven Wonders campaign launched in March with 30- and 60-second commercials seen across the West.

While the Painted Hills unit of the John Day Fossil Beds National Monument saw the largest gain in visitors of any Central Oregon destination in 2014, other parks also benefited from the "awareness campaign."

As a whole, the John Day Fossil Beds National Monument welcomed 182,427 visitors through November last year, according to Hall, an increase of approximately 19 percent from 2013.

The national monument consists of three separate units: Painted Hills, Sheep Rock and Clarno.

Smith Rock, which has averaged a 5 percent increase in visitors each of the previous five years, experienced a 14 percent jump in 2014. And Crater Lake, one of the most popular tourist destinations in all of Oregon, had 100,000 more visitors in 2014 than it had the previous year, with 619,469 people visiting the park last year, up from 523,027 in 2013, an increase of about 18 percent.

According to Gagliano, the Seven Wonders campaign spread awareness about all of Oregon's tourism options, not just the seven highlighted destinations.

Travel Oregon gained 120,000 additional fans via social media last year, and traffic on the tourism's website has grown each month since the launch of the campaign.

"The Painted Hills and Crater Lake, neither has a lodging base," Hughson said.

According to Hughson, the highly publicized campaign delivered 5.3 million Smith Rock impressions — digital views — 3.8 million of which were video views.

The goal for Smith Rock at the start of the campaign was 3.9 million impressions — total.

In the Painted Hills, Hall and her staff used a different set of numbers to measure the fossil beds' newfound popularity.

"It was obvious in everything, from toilet paper to lines at the bathrooms," Hall said about the increase in awareness about the Painted Hills and the John Day Fossil Beds. "We had to make some adjustments."

BRIEFLY

Map highlights fishing sites for disabled anglers

The Oregon Department of Fish & Wildlife has unveiled a new online map highlighting fishing locations across the state that may provide access for disabled anglers.

"There are many places around Oregon that offer excellent fishing opportunities for people with disabilities," said Rick Hargrave, administrator for ODFW's Information and Education Division.

The Google-based map features 133 sites, with interactive icons providing information about access — such as piers, fishing platforms and docks. Anglers can also find directions to each place using the map.

The map can be found by visiting ODFW's website, www.odfw.com, and clicking on the "Maps" page.

Pint-sized Mount Hood at bottom of new beer glass

PORTLAND (AP) — Most people looking into the bottom of a beer glass see the flat bottom or perhaps some suds.

But an Oregon company formed by three designers who love the outdoors has designed a glass with a mini-Mount Hood on the bottom. It uses U. S. Geological Survey data to mold the features of the mountain in the bottom of the glass handmade at a glass-blowing studio.

They call it the Oregon Pint.

KGW reports North Drinkware asked for $15,000 on Kickstarter to launch the project. It has received 10 times that amount.

Permit system to alleviate traffic on Pacific Crest Trail

LOS ANGELES (AP) — Growing numbers of hikers on the Pacific Crest Trail, the Mexico-to-Canada route made increasingly popular by the movie "Wild," have led officials to take steps to alleviate traffic.

The Pacific Crest Trail Association announced on Wednesday a new permitting system that will limit to 50 the number of long-distance hikers heading north each day from San Diego County.

An online application process will allow hikers to schedule start dates and view projected hiker density on any given day.

The PCTA's Jack Haskel says the goal is not to limit the number of hikers, but to spread them out.

Haskel says since the movie came out in December, website traffic is up 300 percent.

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