The Okanagan Desert Salmon

Among all the stories about salmon fisheries in B.C., restoration of the historic sockeye salmon run in the desert of the South Okanagan is one of the most unusual—in part because it's a jewel that sparkles amid the darker stories of other runs.

But also because anglers are fishing there in shorts and sandals, under the warm sunshine of an Okanagan summer day. It's a far cry from the usual salmon fishing experience—in oilskins and rubber boots while grey skies cry torrents of rain all over your day on the water.

For the past two years, recreational anglers have been converging on Osoyoos Lake in the Okanagan in August to take home the unique desert salmon now returning up the Columbia River system after three years spent swimming off the west coast of Vancouver Island.

The Okanagan salmon were a threatened species due to loss of habitat; barriers to their return up the Columbia River from impassable dams; over-harvest; and climate change, until the Okanagan Nation Alliance, along with governments and corporations on both sides of the international border, embarked on a joint effort in 2003 to re-establish the historic runs.



An Okanagan Nation Alliance using a seine net to fish commercially fish for sockeye salmon on Osoyoos Lake. Photo credit: the Okanagan Nation Alliance.

Salmon is one of the traditional foods revered by the eight member communities that make up the ONA and it is also a spiritual fish in the culture of the bands: the Upper Nicola, Okanagan Indian Band, Westbank First Nation, Penticton Indian Band, Upper and Lower Similkameen Bands, Osoyoos Band and the Colville Confederated Tribes, south of the border.

That's why it was so important to restore historic returns of the salmon to first Osoyoos Lake, but also ultimately to Skaha and Okanagan Lakes, explains Howie Wright, program manager of the large fisheries department at the ONA.

This is the 11th year of a 12-year plan being led by his department, in collaboration with the federal and provincial governments, to re-introduce and re-establish indigenous Columbia River salmon stocks in their historic habitat in the Okanagan Basin.

Years of meetings, research, impact monitoring, habitat restoration, egg taking, incubation and fry releases were rewarded in 2010 when an unprecedented return of sockeye salmon to Osoyoos Lake allowed a food fishery to return this special fish to the diet of the



Angler Marina Coyne proudly displays a newly-caught sockeye. Photo credit: BCFishn.com



John Hall of the Penticton Indian Band, an eco-guide for the desert salmon fishery and a traditional 'knowledge-keeper' for the Syilx people, holding up a sockeye salmon. Photo credit: the Okanagan Nation

Syilx people and to the environment of the arid Okanagan,

It also allowed a recreational fishery to be re-instated by the Department of Fisheries and Oceans and astounded salmon anglers found themselves quickly filling their two-fish-a-day quota there in 2012 and 2013.

Osoyoos Lake is one of the most productive in Canada, generating 10,000 salmon fry per hectare, but the size of the run is still limited by spawning habitat in the system, making it viable for both an ONA commercial fishery, which has used seine boats in the past couple of years, a recreational fishery and a food and ceremonial fishery.

"This is a responsible, respectful and relevant fishery," notes ONA fisheries biologist Richard Bussanich, adding, "We expect to be able to maintain this fishery in perpetuity. We want a balance."

He notes that the small 'artisanal fishery' is based on annually-appropriate harvests, depending on the number of fish returning to the Okanagan from their 1,200-kilometre, three-year migration into the ocean and back up the danger-fraught Columbia River system.

As a result of the rigours of the journey and the inhospitable climate of the Okanagan, this sockeye salmon has evolved into a virtual 'protein bar,' with smaller size than other sockeye, but more-dense protein and calories, explains Bussanich.

Instead of the five or six-pound sockeye in other runs, these are 3.3-pound fish, but a compact, high-energy sockeye.

"Other stocks couldn't survive in this system," he says, due to the higher water temperatures and lower oxygen levels they experience here.

"They evolved for the environment they live in. They're unlike any other fish," he notes. "It confounds what you would expect after travelling 1,200 kilometres upstream, but when they were tested at UBC it was found that they contained a higher caloric count than any other salmon stock. They're a very unique fish."

One of the top three runs of sockeye to return since 1938 (before dams were built on the system, limiting fish access) is forecast to for this August and perhaps into September, with the possibility of returns of chinook salmon as well.

As a result, even more recreational anglers will be able to participate in it as part of a pilot project that is unique among Canada's diverse angling opportunities, planned by the Okanagan Desert Salmon Community Initiative.

It's a group of volunteers from the ONA, federal and provincial governments, B.C. Wildlife Federation Region 8, Okanagan Fisheries Foundation, the Inland Salmon Producers Association, B.C. Sports Fishing Association, Nk'Mip Desert Cultural Centre, Thompson-Okanagan Tourism Association, Slow Food Thompson-Okanagan and Codfathers' Seafood Market.

Anglers would register at a central location in the Nk'Mip Campground on the shore of Osoyoos Lake, go out and lish, report their catch and land their lish back at the registry, where the catch

would be shared so that a portion of the catch could be sold for cost recovery of the fishery. That would help keep the fishery sustainable, paying for the ongoing costs of research and development, habitat work, monitoring and general stewardship of the resource.

The goal is to keep the footprint small, so that the catch is sold wholesale, retail and consumed in the valley, re-circulating the returns in the local economy and adding value continuously, instead of just benefiting one group.

There will also be opportunities for youth to work on a commercial fishing boat as part of this fishery, or for anglers to become involved in a guided fishing adventure.

For up-to-date information, go to: http://www.syilx.org/operations/fisheries-and-aquatics/salmon-harvest/

