



A publication of the Northwest Indian Fisheries Commission

Northwest Treaty Tribes

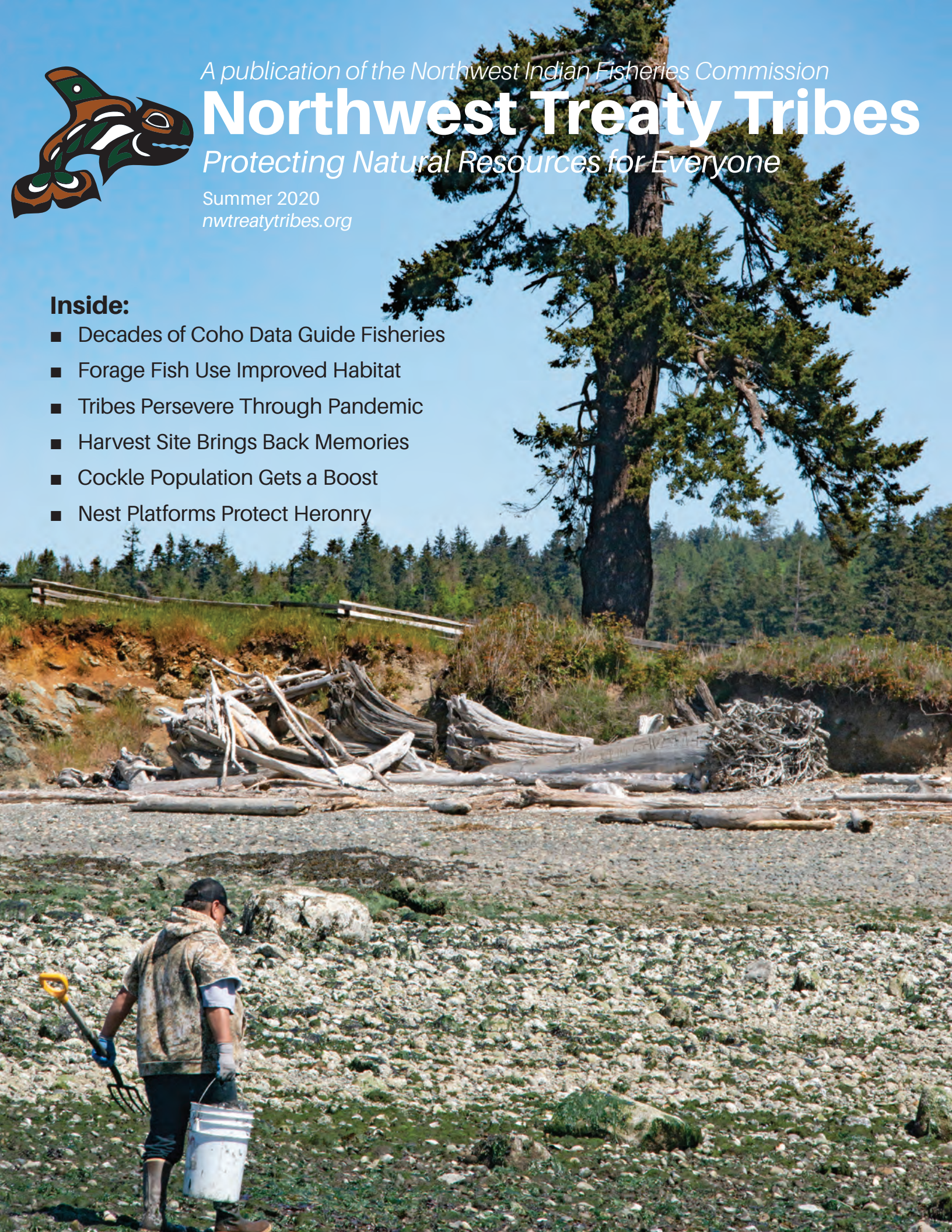
Protecting Natural Resources for Everyone

Summer 2020

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Habitat is Key to Salmon Recovery



by Lorraine Loomis
NWIFC Chair

Until we take real action to protect and restore salmon habitat, we are looking toward a future with more tightly restricted fisheries for everyone.

That's the lesson after treaty tribal and state fisheries managers reached an agreement in April through the North of Falcon process on a package of salmon fishing seasons for the 2020-21 season that provides greatly reduced harvest opportunity compared to recent years while still contributing to ongoing salmon recovery efforts.

The main reason for the decline of salmon throughout western Washington is that their habitat is being lost faster than it can be restored and protected, and the trend shows no signs of improvement.

We plan fisheries based on impacts to individual salmon stocks depending on their overall abundance and how many are needed to escape harvest and spawn. Treaty tribal and nontribal sport and commercial fisheries are structured to limit impacts on stocks of concern that are not expected to reach spawning goals.

Anticipated weak returns of chinook to the Stillaguamish River and mid-Hood Canal this year required extensive closures to protect dwindling populations. Coho returning to the Queets and Snohomish rivers also were stocks of concern.

We also are challenged by increasing predation by seals and sea lions, and the food needs of endangered southern resident orcas. Meanwhile, the ongoing effects of climate change threaten salmon and their habitat with drought, low stream-flows and higher water temperatures.

The reductions we had to make this year are painful for both tribal and nontribal fishermen and fishing communities.

We already have steadily reduced tribal fisheries over time in response to declining salmon runs. Depressed chinook stocks mean there will be no tribal fishing on river systems in the Strait of Juan de Fuca, such as the Hoko, Elwha and Dungeness.

Unfortunately, the state had to substantially reduce its popular winter chinook recreational fishery in the Strait of Juan de Fuca, San Juan Islands and Hood Canal areas, to protect imperiled Stillaguamish chinook.

Stillaguamish chinook presented a management constraint greater than usual this year because only 990 total fish were forecast to return: 363 natural origin and 627 hatchery fish.

Under Endangered Species Act guidelines, the National Marine Fisheries Service determined that we need at least 400 returning Stillaguamish chinook to reach spawning grounds. That decision made the returning hatchery salmon especially important because they are produced for escapement, not harvest. They are key to an integrated recovery program that uses both hatchery and natural origin salmon to increase the abundance of adults returning to the spawning grounds.

Tribes rely on ceremonial and subsistence fisheries to feed our families and preserve our cultures. The Stillaguamish Tribe hopes to harvest just 30 chinook from the river this year for its annual First Salmon Ceremony and other traditions. Many tribal chinook fisheries have disappeared altogether. Tribal fishermen haven't had a directed salmon harvest on chinook in the Nooksack River for more than 40 years.

We won't be able to manage our way around the ongoing loss of salmon habitat much longer, but hope may be on the horizon.

A bright spot appeared this year when – for the first time – treaty tribal and state salmon co-managers included habitat recovery as part of fisheries management planning. Washington Department of Fish and Wildlife director Kelly Susewind pledged to work with the tribes to address habitat issues in the watersheds that are limiting natural production of salmon. Part of that effort will include a science-based instream flow assessment from a salmon point of view.

This is cause for hope because habitat protection and restoration – and cooperation – are the keys to salmon recovery. Working together to address habitat is the most important thing we can do to help salmon. We know what the future holds if we don't.



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On the cover:

Swinomish tribal member Ben James carries a bucket of butter clams across the shellfish beds at Lone Tree Point. See story, Page 12. D. Preston

Decades of Data Support Fisheries Planning

For more than 38 years, Quinault Indian Nation fisheries crews have counted Queets River coho in several stages of life to assist the management of commercial and recreational fisheries on the Washington coast and beyond.

Quinault's smolt trapping and tagging program provides the only long-term continuous data set for coho freshwater production and marine survival on the north coast of Washington. The data also is critical to planning fisheries through the Pacific Salmon Treaty (PST) between the U.S. and Canada. Funding for the program comes from the PST.

The goal each year is to capture, tag, clip and release 35,000 coho smolts from the Queets River basin, including the Clearwater River. Smolt traps also recapture fish downstream to shed light on survival rates and how smolts stay upstream before beginning the journey to the ocean.

"We don't always get the 35,000 because excessive storms mean we have to pull traps until flow waters come down, or the opposite problem can happen with not enough water," said Catrina Bean, Quinault fisheries biologist. "But we also exceed that number many times. Again, it just depends on the weather."

The traps usually are installed in early March with trapping continuing until the end of June. A crew also recaptures a percentage of smolts with a seine near the mouth of the Queets and Clearwater rivers.

The data helps estimate the number of juvenile coho out-migrating to the ocean each spring and, along with adult coho abundance data, enables managers to estimate marine survival. In addition, smolt estimates also are used to forecast ocean abundance each year for planning ocean and terminal (in-river) fisheries in the U.S. and Canada.

Despite reduced fishing and studies showing that harvest does not inhibit the stock, coho have not exceeded the minimum return goal for 27 years of the data set. – D. Preston



D. Preston (2)

Top: Quinault Indian Nation fisheries personnel, left, Catrina Bean, fisheries biologist, and fisheries technicians Jordan Curley and Austyn Davis count and tag young coho on North Creek, a tributary of the Queets River. The fish are released after receiving a coded-wire tag in the nose. Above: A coho fin is clipped to identify it as a Queets River smolt versus a Clearwater River smolt to help with recapture data.



Puyallup Spring Chinook Fishery

The Puyallup Tribe of Indians holds a ceremonial and subsistence fishery for elders in late spring. Elders can be assisted by a younger tribal member. Left: Chris Phinney, harvest management biologist for Puyallup, checks for a coded-wire tag in the head of a chinook. Below right: Jay Dillon, father, and son Myron Dillon, fillet their chinook salmon to take home. Bottom left: Arnie Williams drifts through a stretch of river called Arnie's drift, named after his father. Bottom right: Fishing was slow, despite heavy rain and a friendly tide that led fishermen to expect better luck. Williams had time to check his email, catching only one fish all day. The tribe closed the fishery recently based on their return data.



D. Preston (4)



Lummi Nation Revives Mother's Day Fishery

Lummi tribal fishermen donned protective masks in May to harvest Nooksack River spring chinook in the *Paq wet sut* Mother's Day spring fishery.

The fishery was named for Randy Kinley Sr., Lummi Nation policy representative, who passed away in 2017.

Under Kinley's guidance, Lummi worked with the state to create a 10-year plan to increase hatchery production to mid-1980s harvest numbers, said Lisa Wilson, Lummi ESA manager.

"He saw a need to create a task force to protect our hatchery fish. From there a coalition was created that included the Upper Skagit, Tulalip and Lummi tribes," Wilson said. "Randy's vision was timely in the sense that five years later during one of our most troubling times with the COVID pandemic that we would bring back hope to our people by getting our fishermen out on the river to fish for our sacred spring chinook."

Lummi Natural Resources (LNR) drew names for 20 fishermen to participate in the fishery on May 8, and another 20 on May 21. The fish were taken home for subsistence.

In addition to the Mother's Day fishery, LNR conducted its annual tangle net fishery this spring, harvesting hatchery chinook for cultural events, and gathering information about salmon recovery efforts.

This year, LNR staff and fishermen all wore gloves and masks in accordance with the Centers for Disease Control

and Lummi Public Health guidelines for limiting the spread of coronavirus. They also reduced the number of people on each boat and in the small airplane used to track the radio tags in aerial surveys.

In past years, natural-origin fish were anesthetized before being radio-tagged and released, but staff adjusted their procedures this year, making sure none of the fish harvested by tribal members contained trace amounts of anesthesia.

"Since we couldn't use anesthesia, we worried about how we could insert tags without causing the fish stress," said Devin Flawd, Lummi stock assessment manager.

Some of the elder fishermen suggested holding the fish still in the dip net while tagging the fish.

"We found that the fish were able to be processed and released as efficiently as when using anesthesia, and in some cases even more quickly," Flawd said.

The radio tags are tracked by aerial and ground surveys that tell fisheries managers how long the chinook spend in the Nooksack River before spawning or returning to the Skookum Creek Hatchery.

Midway through the 2020 tangle net fishery, early data indicated that the tagged fish showed a high degree of survival.

"We're seeing the fish still alive in the river, and hope to track them up to the spawning grounds," Flawd said.

— K. Neumeyer



Lisa Wilson, Lummi Nation (2)



Lummi fishermen Jeremiah Shanburn, top, and Alfonso Washington, bottom, display the spring chinook harvested during the Mother's Day fishery in May. To protect the community from the coronavirus, fishermen were required to wear masks when within six feet of each other.