

## A Feast to Commemorate—and Mourn—the Eulachon

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## A Feast to Commemorate—and Mourn the Eulachon

Fisheries biologists joined indigenous communities from along the coast of British Columbia, Canada, this spring for a gathering of "mourning and shame" to publicize and protest the population decline of eulachon (Thaleichthys pacificus), a fish important to traditional cultures. The event, held in Bella Coola, British Columbia, 11-12 June, combined traditional dances and personal remembrances of eulachon-also known locally as "ooligan"-with presentations by fisheries scientists. Along the Bella Coola River, eulachon populations have diminished so sharply since 1994 that a run of millions has dwindled to just a few dozen stragglers.

"The word 'shame' came to be used because there is a feeling that perhaps all of us deserve some blame and shame for early indifference to the loss," says Norman Dale, former administrator of the Nuxalk-Wuikinuxv-Kitasoo tribal council. Also sharing blame, he says, are government fisheries management officials, for not responding quickly enough to a situation First Nations communities regard as a crisis. "There was very, very little work being done on ooligan compared to other fish harvested commercially and by nonnatives," says Dale. "We're just barely getting around to the point where people do serious research on nontarget species."

Nearly half of known eulachon spawning rivers are in British Columbia. The June gathering—a traditional feast followed by a conference—was hosted by First Nations communities, including Nuxalk (Bella Coola) and Wuikiniuxv (Rivers Inlet), which last had a harvestable run of eulachon in 1998. All First Nations involved in the event have traditions of either harvesting or trading for the fish, prized for its high oil content.

One hypothesis is that increased shrimp trawling in the 1990s and related eulachon bycatch exacerbated the decline. "A problem that was made pretty serious by the changing ocean temperatures was probably made worse by Canada encouraging shrimp trawling to grow enormously in the 1990s," says Dale. The charge is controversial. A published report from a February 2007 government workshop of Fisheries and Oceans Canada in Richmond, British Columbia, calls shrimp bycatch a "potentially important" factor in the decline. However, greater predation of juveniles by warm-water species and the effects of pollution on spawning fish were both identified as having more definite links to the decline.

Eulachon have little commercial significance throughout North America, where they occur from northern California to the Bering Sea. But the small anadromous fish has been such a critical part of culture and trade among First Nations peoples for so long that some anthropologists have dubbed it a "cultural keystone species." The fish, whose oil is used as a tonic, has long been associated with health and plenty. As a food, eulachon has been described as an "acquired taste"-one acquired by, among others, Meriwether Lewis, of the Lewis and Clark expedition, who noted it to be the best fish he'd ever eaten. The use of eulachon oil as a valued trade item was widespread throughout the Pacific coast; the ooligan, also known as "oorigan," may even be the eponym for the state of Oregon.

On a video recorded and posted on the Web by the *Toronto Globe and Mail*, several unidentified members of First Nations describe the effects of the loss on their culture. "It was a medicine and a very important staple in our diet," one says. "A break has occurred between generations because of this," says Dale.

Among those presenting summaries of research on the Bella Coola run was former Fisheries and Oceans Canada biologist Doug Hay, who summarized the two most important objectives for eulachon survival: ensuring good spawning habitat and good marine habitat. "It's simply, you want to stop killing them," he said. "It's such common sense that if you want to recover ooligans, you have to have a place for them to live, and you have to stop killing them until they are recovered."

Future research, he suggested, should focus on three areas: developing coastwide assessments; learning more about the role of the estuarine environment on eulachons and their salinity tolerance; and collecting more information on marine and offshore bycatch issues, including impacts on fish that may be killed or injured by trawling.

Hay also suggested that current support for funding climate change research may present a good opportunity to fund studies of eulachon spawning areas. He urged international collaboration. Dale says this is on the horizon. The indigenous groups envision a provincewide body, modeled after others in Washington and Oregon; they have begun by organizing a task force, which first met in July.

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