Gillnet advocacy and catch-and-release survival study SUSTAINABILITY
Proposal by Matt Marinkovich MARKETING?

The 1990's saw a rash of gillnet and other commercial fishing net bans in different locations in the United States, like the complete ban on gillnets in the inner waters of Florida's coastal islands, as one example. The success rate was quite alarming, and very concerning to commercial fishermen. Fortunately, Washington soundly defeated two net-banning initiative attempts in 1996 and 1999, which seemed to put the breaks on the entire movement, until recently.

The decision to ban gillnets on the Colombia River was based on public perception and politics, and not on science or professional opinion. When one "victory" in eliminating commercial fishing is achieved, it fuels the fire for the next. These victories lend credibility to the biased or shoddy studies that helped condemn the fishery in the first place, and thereby increases the "acceptance level" of eliminating the next commercial fishery targeted.

Now the Kenai River set gillnet fishery is threatened by a net ban initiative. In the article below a study is cited, which uses the Bristol Bay as it's data base, accentuating the fact that returning spawners have net marks, and postulates half of them will not survive to spawn, and even suggests the escapement level for these rivers should be increased 5-15% to account for the mortality. Next the article uses these hypothesized numbers within the Kenai River set gillnet fishery to justify the need to eliminate them. This article does not just target the Kenai set gillnet fishery—the anti-commercial fishing lobby would just assume that all commercial fisheries be abolished.

My Proposal is in two parts:

1) The BBRSDA should use its financial and staff resources to increase advocacy and promote a positive image of commercially harvesting salmon with gillnets. In order to accomplish this a person or group of people should be contracted to keep abreast of the issues. Suggested budget of $30,000. Goals are as follows:
   a) Promote the importance, necessity, selectivity, and sustainability of harvesting salmon with gillnets.
   b) If any gillnet fishery falls under attack the BBRSDA should use it's financial or staff resources to defend it.
   c) If there is any bad press, or a study that shows gillnetting in a negative light, the BBRSDA should address the subject and proper information be brought to light via appropriate media channels.
2) In response to the negative pressure being applied to the Kenai River set gillnet fishery, I propose the BBRSDA fund a study that clearly assesses the mortality rate (all the way to the spawning grounds) on king salmon that have experienced the trauma imposed from an interlude with a "catch and release" sports fisherman. This study would clearly benefit the Kenai fishery, but it very likely will prove quite useful in the future when our Bristol Bay fishery is in the crosshairs of an anti-commercial fishing attack. I feel this study should be funded up to $50,000 by the BBRSDA.

What exactly is the impact of setnet bycatch on Alaska's Kenai River king salmon fishery?
Alaska Dispatch (http://www.alaskadispatch.com)

Craig Medred, November 20, 2013
Commercial setnet fishermen in Alaska's Cook Inlet, who find themselves under fire from an initiative aimed at shutting them down, are not alone. All along the U.S. Pacific Coast, it seems, efforts are underway to ban or restrict an old commercial fishing gear type that's unable to discriminate between various species of salmon.

Commercial fishers in Washington state this summer failed in a court [3] bid to stop a ban on gillnets in the main stem of the Columbia River. Commercial fishers in Alaska are now considering similar litigation in an attempt to stop the proposed ballot initiative imposing a set-gillnet ban in non-subsistence areas of Alaska.

The Alaska ban is aimed primarily at Cook Inlet where gillnets fishing huge runs of sockeye salmon inadvertently catch diminishing numbers of late-run king salmon bound for the Kenai River. It is a bycatch problem similar to that on the Columbia. There the issue is with the number of wild Columbia kings caught by setnetters primarily fishing for hatchery kings.

Oregon and Washington, states bisected by the lower Columbia, are solving that problem by replacing setnet fisheries with seine fisheries. Setnets catch fish by the gills and hold them by the head until they are removed by fishermen. Sometimes the fish die in the nets before removal. Sometimes they manage to pull free and continue towards their spawning grounds, but a study in Alaska's Bristol Bay indicates the damage to the escapees might be greater than what appear to be just "net marks" on their bodies.

"A substantial portion -- 11 to 29 percent -- of spawning sockeye salmon exhibited clear signs of past entanglement with commercial gillnets," a study detailed in the Journal of Applied Ecology [4] said. "Survival among such fish was significantly reduced. More than half of the fish that reach natal spawning grounds with fishery-related injuries fail to reproduce."

The researchers suggested in-river spawning goals for Bristol Bay sockeyes should be increased by from 5 to 15 percent to reflect the large number of fish injured in the commercial net fisheries and warned that it's unlikely the problems found there are limited to Bristol Bay.

"Given the magnitude of non-retention in this fishery," they wrote, "explicit consideration of non-retention mortality may be warranted across a wide range of exploited populations."

Not long after that study was complete, fisheries scientists in Washington and Oregon began studying the use of beach and purse seines as a replacement for Columbia gillnets. Plans are now underway to phase in the former gear type and get rid of the latter.

"Reforms jump-started by Oregon Gov. John Kitzhaber in mid-2012 and completed by the Washington and Oregon fish and wildlife commissions this year are bringing the most sweeping overhaul of lower Columbia River fisheries in 80 years," reported the The Columbian newspaper [5]. "The reforms...require live-capture commercial fishing methods in the main Columbia -- such as purse seines and beach seines -- designed to harvest abundant hatchery stocks and release wild fish."

Harvests of wild Columbia Chinook in mixed-stock fisheries have long been a major issue in a region where the big fish have struggled for decades because of environmental damage done to the watershed by hydroelectric dams.

Dams are not an issue in Alaska, and setnetters here have argued their bycatch of late-run Kenai River kings -- believed to be among the largest Chinook in the Pacific -- is not a problem.

"...The setnet's low 13 percent exploitation rate of Kenai River kings is nearly insignificant when compared to the threat that these fish face due to the completely unbridled growth of the in-river sport fishery," the Kenai Peninsula Fishermen's Association [6] said in a November press release.

The United Fishermen of Alaska, the state's largest commercial fishing organization, followed up with a press release [7] warning that banning a commercial gear-type by initiative would "harm Alaska's resource management traditions and methods. All resource users -- including oil, mining and timber -- should resist the temptation to have their industry managed and regulated by 'major rule'."

The press release made no mention of the Pebble Mine where "major rule" powered by commercial fishing interests appears to have set back for decades, if not killed [8], development of one of the world's largest copper deposits. But the press release did concede Alaska king salmon stocks are struggling everywhere.

However, it added that "eliminating nets doesn't target the problem, which is in-river and ocean survival of small Chinook salmon."

Alaska Department of Fish and Game biologists agree with the latter claim, but take issue with the former. In most Alaska watersheds, they say, in-river survival does not appear to be a problem. The rivers appear to be producing adequate numbers of small salmon. The problem is that the fish that go to sea don't return

in the numbers of old.

Salmon interceptions in high-seas gillnet fisheries were once implicated [9] as part of the problem for Alaska salmon declines, but those fisheries are now gone. All of which has brought the debate about interception closer to home.

While the Kenai fishermen's association claims an interception rate of only 13 percent, the reality is that no one knows exactly how many kings are killed by Kenai setnets.

State fisheries managers note the 13 percent number reflects only those kings setnetters sell to processors. Fish they keep for personal use, or sell for cash, or give to friends are not counted in the catch. The number of such fish is thought to be small, but the incentive for setnetters to make bycatch disappear in this way is huge given the political fish wars in which setnet king bycatch has been embroiled for more than two decades.

Still, the larger issue might well involve the number of kings that escape the nets injured or drop out dead. That has never been studied. State fisheries biologists say there was never a reason to spend the money on such studies. With Kenai salmon runs large and healthy, the incidental harvest, even at its historic highs when setnetters were catching an average of 14,000-kings per year [10] in the late 1980s, was insignificant from a biological standpoint.

But biologists say a 13 percent interception rate, coupled with net-related damage to as much as 29 percent of the return, results in a mortality rate of about 42 percent of a declining stock of salmon. Which could be a serious problem.

The late-run Chinook spawners returning to the Kenai this year numbered 17,028 [11], according to Fish and Game date. It was the lowest return on record, and it was the first time the number of spawners had fallen below 20,000. It would have marked the first time Fish and Game failed to meet the spawning goal, but for the fact the goal has just been lowered from a minimum of 17,800 to a minimum of 15,000 [12].

It is against this backdrop Alaska setnetters now find themselves facing the same sort of full-frontal attack that has put an end to setnet fisheries elsewhere. These are tough times for those who live and love to work the beaches of Cook Inlet in the summer.

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