



Alaska Trollers Association

130 Seward St., No. 211
Juneau, Alaska 99801
(907) 586-9400
(907) 586-4473 Fax

June 14, 2012

Dr. Ray Hilborn
Chair NOAA/DFO Expert Panel
Mr. Larry Rutter, NOAA Fisheries

Dear Dr. Hilborn and Mr. Rutter:

The Alaska Trollers Association (ATA) appreciates being invited to attend NOAA and DFO's series of workshops on Southern resident killer whales (SRKW). I offer the following comments on the first two workshops and draft final report of the Expert Panel entitled, *The Effects of Salmon Fisheries on Southern Resident Killer Whales*.

Other participants are better qualified to provide specific technical critique and recommendations on the science and modeling exercises discussed in the Panel's report. However, it's also important to share a few perspectives from fishermen receiving this information, who are concerned about future actions that might be taken in fisheries, based on the conclusions drawn by this Panel and National Marine Fisheries Service (NMFS). ATA supports sustainable management programs for all species when they are grounded in sound science. For obvious reasons, we expect the science to be relevant and management to be practical in its application and effect – or, said another way, sensible solutions to real problems.

ATA represents hook and line fishermen operating off the coast of Southeast Alaska who primarily target Chinook and coho salmon. With over 2,000 permits, the troll fishery ranks among the largest in the state and is 86% Alaska resident, with most other permit holders residing in Washington, Oregon, and California. Communities here are small and many are considered rural; for the most part, access is limited to boat or plane. Population ranges from just a few families to 30,000 in the state capitol of Juneau. Most towns are well under 3,000 people. Trollers make up the largest number of permit holders in nearly every town. About one of every 38 people in this region works on a troll boat, and that doesn't count the processing and support sectors. A great many commercial net fishermen, sport anglers, and subsistence users also rely on the Chinook caught in our region. Fishing means food, jobs, and recreation. The health of the troll industry, along with all other fishing interests, is critical to the economic and social well-being of Southeast Alaska and the state.

The troll fleet relies heavily on Chinook salmon that migrate between the Pacific Northwest and Alaska. Trollers have appropriately shouldered a significant burden of conservation through a complex web of state, federal, and international regulations. We also fight to protect critical habitat and endorse those fisheries policies that seek to maintain the health of all salmon. Conservation is a responsibility we take seriously, as these fish are crucial to the success of future generations of Alaskans. We also understand the importance of this common property resource to other West Coast residents and the nation, so do not object to restrictions or closures that result from reasonable and appropriate management strategies.

Few people appreciate the intricacies of an ecosystem like a fisherman, much less one who makes a living searching the ocean and experimenting all day with ways to entice fish to take a hook. We fish alongside various mammals and birds and experience those species a multitude of ways – from teacher to competitor. Regardless the mood of the day (say when those abundant, frolicking sea lions show up), it's safe to say that few fisherman would willingly trade away the unique experience of plying the waters with this lush array of wildlife. The point is simply that trollers accept and understand better than most what the killer whales mean in the big web of life. We are concerned about the future of this animal and the many environmental stressors that confront all ocean going creatures, including humans.

Participating in the workshops has been both fascinating and a little terrifying. A great deal of interesting information has been presented about killer whales. We've seen a variety of data from those working to learn more and find scientifically credible tools to evaluate their findings. The problem is that the data sets are so thin, and for more than half the year, mostly absent. Still, some presenters appear driven to find a state of the art tool to prove select hypotheses, despite the scarcity of data essential for objective analysis. Hopefully that impression is wrong.

Given the data presented to date, I have more questions than answers as to why anyone would believe additional fishing cuts would be an assist to increasing the numbers of SRKW. Fortunately, many of those same questions are raised in the Panel's draft report.

Understanding that the report is still draft, I'd encourage the Panel to make sure that their key findings are more clearly stated. At times, it seems like there are conflicting messages within paragraphs, or the point gets buried in the discussion of various methods of analysis.

What follows are just a few of the take away messages I get from reviewing the workshop documents and draft report, along with a few additional comments and questions.

SRKW Population and Rebuilding Efforts

The 2002 Biological Opinion alludes to significant differences of opinion between scientists charged with determining whether or not SRKW is a distinct population segment. I found it interesting that this was also briefly mentioned during Workshop 2. While this Panel is not charged with re-evaluating the listing decision, it still seems a key point when determining whether or not the SRKW's persistent, smallish population is anticipated to provide a poor (or good) prognosis for its long-term survival.

I was struck by how many whales were taken for aquarium use in the 1960's and 1970's and found the information telling. Apparently there was a very selective removal of those animals – mostly immature males from the SRKW population – and many mammals of unknown sex were also killed or injured during the capture operations. Many of those animals would likely still be in the breeding population today. How could this not be among the most significant factors affecting the current number of SRKW and the sex ratio? And how would providing additional Chinook salmon remedy this situation?

As you note, most of the current mortality appears to involve calves and older males. Females are not equally impacted, and hopefully a few more will be born, which, given the culture and breeding behavior of SRKW, should provide some good long-term calving potential.

The population appears to be growing, not declining, with the exception of some variation. I wondered whether or not that variation might reflect a normal cyclical fluctuation in population size, as we see in other mammal and fish populations.

One also has to wonder about the long-term capacity of the rearing containers known as Puget Sound and Salish Sea. Over time, are these habitats anticipated to support SRKW populations at or above the level that NMFS has designated for down- or delisting? The waterfront population is exploding its seams. Seattle has grown about 8% since 2000 and now has a density of 7,361 people per square mile; Puget Sound's combined population is well over 6.8 million, and King County alone grew 11.2% from 2000-2010. Added to that, more than half of British Columbia's population of 4.5 million resides in the Greater Vancouver area, with nearly 400K more people living in and around Victoria. There is no doubt that the SRKW critical habitat is nothing like it was in 1967, when you could still homestead in Enumclaw and these whales were at their known peak number. Nor will it ever be. Realistic goals need to be set for rebuilding programs involving any listed populations in this area, and proper parties need to be held accountable for recovery.

The relatively stable population of SRKW, coupled with questions of available habitat, begs the question: is there a problem to be solved? Is there something more to this exercise than an expectation that this population should be bigger, because historically it might have been? Isn't it also good science to consider that SRKW have proven to be resilient despite some large challenges and could possibly be at or near equilibrium? And if it's believed that the population really should be larger, then isn't it more important to focus on providing ample habitat, by improving the long-term health of ocean and estuarine ecosystems, reducing noise, preventing pollution, and relocating bomb testing sites? This is not to say that prey species are not important, of course they are, but much has already been done to deliver fish to terminal areas and this does not seem to be providing the desired results. And, if habitat were improved, it could provide additional prey abundance.

Unfortunately, it will take time to resolve many of that region's environmental issues, and also for sex ratios to balance out from the aquarium takings. However, any benefit from closing Chinook fisheries that would accrue to increasing the numbers of SRKW would seem marginal, at best, and could bring great harm to many families and communities. Costs would simply not outweigh the benefits.

Chinook Abundance and SRKW

As the draft report states throughout, correlation does not always lead to causation. In this case it's likely to be true.

As some of the presenters noted and the report clearly states, total abundance in select stocks has gone slightly down in recent years, while terminal abundance of the same fish has gone up. Those fish were available to SRKW. As we know firsthand from ESA and Treaty management, you often have to pass thousands of harvestable salmon through a fishery for a handful of a specific fish to get to the spawning grounds. There is no guarantee that SRKW would be the recipients of this foregone harvest, either due to competition from other mammals and fish, or because they feed in areas outside the migratory path of many salmon stocks. The draft report makes not of this.

It would also not serve the whales if we over-escape the Chinook stocks they feed upon. Chinook are density dependent and could experience a drop in productivity if too many fish escape. Artificially altering fishing strategies to accommodate the whales won't necessarily help them and it just might hurt.

Chinook Salmon – Preferred or Obligatory?

SRKW obviously eat many Chinook salmon in the course of the year, as they always have. It makes common sense that Chinook would be a preferred prey species for SRKW, just as it stands to reason that if you take samples when whales are feeding on salmon, you're bound to find salmon remains in the scat and surface

water. The draft report points to this sampling bias. It also seems important to re-emphasize that sample sizes throughout most of the research to date are small and key data is lacking.

What has been striking is that there is very little information, or even much discussion, about other prey species these whales most likely target. Other species, and smaller salmon, could easily be slurped down whole and not picked up in surface samples. There is also a seven month data gap relative to SRKW fall and winter foodstuffs.

During Workshop 2, some of the data presented revealed as many lingcod in available samples as Chinook, yet I don't recall seeing lingcod mentioned in the draft report. However, the report does point to a number of other species besides salmon, and also states the obvious, that a brilliant apex predator is bound to rustle up something to eat when the preferred Chinook stocks are not as abundant.

Abundance of Other Predators

Data presented, and common knowledge, indicates an abundance of pinnepeds from Southeast Alaska to California. The story of *Herschel* is well-known to most. In addition, here in Alaska, the shark population has exploded in some areas. I appreciate that the Panel questioned the impact of the full range of predators in the draft report. It is a crazy thing to contemplate - listed species competing with listed species for listed species, but in many cases that's precisely what's happening out here. Again, fishermen would like to see more attention put into rehabilitating and protecting habitats that will produce more fish for both animals and humans.

These comments were difficult to write, as it is hard to know how an industry's viewpoint will be taken by a Panel charged with evaluating the science underpinning an ESA process. I do not want to give the impression that our association or fleet is oblivious to the concerns of others or that they will not accept good science and reasonable management actions – quite the contrary. We fully appreciate that the ESA is intended to put the long term survival of a species over nearly all else. That is what makes it imperative that great care be used when wielding such a powerful Act, to ensure that there is a well-defined problem in need of addressing, and that any management prescriptions provide a high likelihood of verifiable success.

Thank you for the time and energy you are devoting to this workshop review process. It is extremely important to working fishermen that good data and analyses be the basis of any decisions affecting the resource and our livelihoods. We very much appreciate your efforts to ensure the veracity and quality of the data, and appropriateness of the decision-making process.

Best regards,

Dale Kelley
Executive Director