Why Orcas Are Malnourished

Neither Wild nor Hatchery Salmon are Plentiful in the Columbia Basin
Hatchery fish are not "plentiful" when it comes to orca nutrition. At best, all they’re doing is maintaining a degraded baseline for orcas. The National Marine Fisheries Service based the 2014 BiOp on the notion that there are enough hatchery Chinook to offset the fish currently killed by the hydrosystem and thus concluded that the FCRPS does not diminish the current supply of salmon for the orcas.

What this argument misses, of course, is that current Chinook abundance is manifestly NOT sufficient to feed even today’s perilously low orca population. Starving whales don’t lie. At best, hatcheries may be helping to keep an already inadequate food supply from getting significantly worse, but they are not meeting the orcas’ nutritional needs.

The federal agencies’ narrow focus on the current numbers of hatchery salmon ignores the critical question of what the orcas actually need to survive and recover. Given where we currently are (even with hatchery fish) compared to historic abundance, the answer to that more relevant question is “a lot more Chinook than we have now.” By ignoring the appropriate question, the agencies have presented a meaningless conclusion that today’s FCRPS operations will not significantly exacerbate existing orca malnourishment.

Orcas Need Salmon Throughout the Year
In addition, using generic total annual numbers of fish (even Chinook) ignores the real need of orcas for Chinook in the right places at the right time. The timing of salmon runs is a huge factor in meeting their nutritional needs.

Since orcas don’t have freezers, they need an available and properly distributed supply of Chinook at all times of the year. The most plentiful hatchery runs (and the healthiest wild runs, like Hanford Reach Chinook) are Fall Chinook. These fish are massing on the coast and returning to the mouth of the Columbia in the summer months when the whales are in the inland waters, feeding on the Fraser River and Puget Sound runs.

While orcas are opportunistic eaters and have been traveling to the outer coast in the summer more frequently in recent years, the critical seasonal overlap between orcas and Columbia Basin Chinook is the winter and early spring months when the orcas are almost exclusively found ranging along the outer coast.

This is also the time of year when orcas are most nutritionally stressed. As confirmed by years of NMFS’s own monitoring and prey sampling, orcas are predictably found the mouth of the Columbia from January to April.
searching for Columbia and Snake River Spring Chinook that have the high fat content they need.

Unfortunately, the numbers for Columbia and Snake River Spring Chinook are way down, even when you add in hatchery fish.

**The Snake River Basin Historically Produced Half of the Columbia Basin’s Spring Chinook**
The Snake River Basin once produced half of the nearly two million Spring Chinook that flooded through the mouth of the Columbia River each year. This habitat is still in excellent condition. Above the lower Snake River dams is cool water flowing through thousands of miles of wilderness and its protected rivers and streams. Because of its historic productivity and excellent condition today, scientists have highlighted this basin for its very high recovery potential. The high recovery potential is the reason that salmon advocates are focused on removing the four lower Snake River dams.

**2016 Ruling Does Not Justify Agencies’ Continued Reliance on Out-dated Science**
In the most recent round of litigation, Judge Simon sided with the federal agencies on the plaintiffs’ orca claim. Judge Simon’s relatively short discussion of this issue deferred to NMFS, finding that the agency’s 2013 data did not establish the exact correlation between Chinook abundance and orca survival.

However, more recent studies provide much more information about the whales’ caloric and seasonal distribution needs, including the correlation between Chinook abundance and orca survival. The agencies cannot ignore this accumulating evidence and must base future decisions on this new data and take actions to restore Columbia and Snake River Spring Chinook as soon as possible.

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