

February 21, 2020

Dear Members of Visitor Industry Task Force,

I believe there is a significant problem with the unregulated whale watching industry in Juneau. Since 2000, the number of Juneau whale-watching vessels has increased without restraint from approximately 20 vessels to over 70. This has brought a host of planning and management challenges. If you add the fishing charter boats that whale watch, along with private boats, it is well over 100 boats on some days. Often all following the same whales. This is not good for whales or visitors.

Whale watching has been portrayed by business operators as a sustainable activity and an alternative to whaling. This is a ridiculous argument to support unregulated whale watching because the US is not going capture humpback whales. In recent years the sustainability of this activity has increasingly been questioned in the Juneau area marine waters. Research by University of Alaska scientists has shown that repeated disturbance by boat traffic can severely disrupt critical behaviors of cetaceans in the wild. Schuler et al (2019) found that significant short-term differences in humpback whale movement and behavior in the presence of vessels that could negatively impact the health and predictability on which the industry relies upon. Studies have shown when approached by whale watching boats killer whales adopt evasive tactics to evade the boats (Williams et al, 2006). The net effect of repeated whale watch boat disturbance is likely more time spent feeding to capture food. This would be analogous to you eating dinner and being interrupted by a doorbell every 5 minutes. This energetic cost is a concern for these whales because humpbacks need to get their entire annual caloric intake while in Alaskan waters because the subtropical winter migratory destination is mostly devoid of food.

It is only with rigorous scientific research that we can begin to understand the complex relationship that prevails when tourists engage with wild animals. I suggest CBJ take the initiative and ask some hard questions that need answers from both the industry and NOAA. These are some questions I believe should be addressed:

1. What is the importance of approach direction, speed, and distance in terms of the impact of the whale watching boats on the focal animals? Essentially what is the acoustic soundprint of the waters around Juneau? The underwater acoustic environment directly impacts the whale's ability to navigate, find food, and hear.
2. What is the impact to the visitor and the take home message conveyed when a whale is surrounded by vessels?
3. The Whale Sense program implemented by NOAA has not been evaluated to assess if it is successful in Alaska's marine waters. NOAA needs to be accountable for spending tax payer's dollars and CBJ should request this study. There is no evidence this program is working. To test the program's credibility the industry should fund independent observers on the boats to verify if it is working. Observers are already in place on boats harvesting groundfish in federal waters. Same with halibut harvesting boats.

Managers and industry must be responsive to the outcomes of rigorous science. Given the current trend of easing regulatory provisions by the Federal Government it is unlikely that any sort of additional restrictions be put on the whale watching industry in Juneau. However, there are actions CBJ could support:

1. CBJ can request regulations that are in place to be enforced. Enforcement of the 100-yard distance whale watching boats must keep from the whales is problematic. There are few NMFS agents to do that and without clear photographic evidence that includes the boat name or registration numbers little of consequence happens to those that violate the rule because prosecutors will not pursue the cases without evidence they need.
2. CBJ could reduce the number of cruise ship passengers that come to Juneau by limiting the available dock space at the docks they own as well as the anchoring in Gastineau Channel. That would reduce the number of whale watching excursions. See Glacier Bay comment below.
3. A nuanced and fine-grained analysis of whale watching in Juneau waters is needed. The whale watching industry could fund independent studies through

academic institutions to address the behavioral ecology and ecological constraints of cetaceans in the Juneau area as related to tourism. This would be similar to commercial salmon fishers contributing funds to enhancement of salmon via Private Non-Profit hatcheries. For example, noise pollution from boat motors/ fish finders (sonar). It is loud in the Juneau area, with unknown impacts on marine animals. The other issue is exhaust. I have seen a brown haze on the water's surface during calm days from all of the whale watching boats. What does it mean for a whale to be breathing diesel exhaust?

The question at stake here is: How much whale watching is enough? For the whales? For the visitor? There is no doubt it is a lucrative business. However, the infrastructure needs to be in place so the whale's daily living is not impeded and the visitor has a pleasant experience. Perhaps CBJ should look closely at how Glacier Bay National Park regulates tourism to benefit the animals and visitors. Numbers of ships are limited there in whale waters at certain times of year. It has been found the near shore areas are vulnerable for feeding whales and vessels are restricted from transiting within ¼ mile from shore.

Sincerely,
Tom Rutecki
Juneau, AK

Literature Cited

Alicia R. Schuler, Sarah Piwetz, Jacopo Di Clemente, David Steckler, Franz Mueter and Heidi C. Pearson, Humpback Whale Movements and Behavior in Response to Whale-Watching Vessels in Juneau, AK, *Frontiers in Marine Science*, 10.3389/fmars.2019.00710, **6**, (2019).

Williams, R., Trites A, W. & Bain, D.E. (2002) Behavioral responses of killer whales (*Orcinus orca*) to whale watching boats: Opportunistic observations and experimental approaches. *Journal of Zoology* 256, 255-270.