Pêches et Océans Canada Sciences

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Your file Votre référence

Our file Notre référence

October 30, 2011

To Whom It May Concern:

In August 2010, I was asked by Dr. Niels van Elk of Dolfinarium Harderwijk, Netherlands, to provide expert advice on the releasability of the rescued killer whale known as 'Morgan'. My opinion, submitted in early November 2010, was that although rehabilitation to the wild would be desirable, there was a low probability that this could be achieved successfully with this whale. This opinion was based on numerous factors as described in my submission to Dr. van Elk (van Elk, 2010), but two issues in particular were pivotal:

- although genetic analysis indicated that Morgan is a member of a killer whale population known from the coast of Norway, the few vocalizations recorded from her and analysed at the time were insufficient to make a strong link to any particular group(s) of Norwegian killer whales. Killer whales tend to live in stable matrilineal kin groups with distinctive vocal dialects, and acceptance into an unrelated social group is unlikely; and,
- 2) it was my understanding that the Norwegian killer whale population no longer enters protected fjords in the winter, and is distributed far from shore in the summer, so reintroduction of Morgan to this population was logistically unfeasible.

Since providing my advice in November 2010, new information on these two issues has recently come to my attention. First, more extensive analyses of recordings of Morgan have been undertaken and vocal patterns have been compared to recent recordings of killer whales off the coast of Norway (Vester and Samarra 2011). These analyses provide a much stronger link to the vocal repertoires of at least one Norwegian killer whale group ("P" group), and thus it can be inferred that this group is either Morgan's natal group or a related kin group. Second, it appears that killer whales groups are now sighted frequently near Vesterålen in northern Norway during summer (see sighting logs archived at www.arcticwhaletours.com). Although I am not aware of any photo-identification analyses of killer whales in these recent sightings, they took place well within the range of the population that includes group "P".

Given this new information, I now believe that rehabilitation back to the wild for Morgan is potentially feasible and an effort to accomplish this warrants serious consideration. A transport and release plan could be modelled after those developed for the whales Springer and Keiko, with appropriate modifications and contingency plans. Too little is currently known about factors leading to the successful rehabilitation of injured or stranded wild cetaceans, including killer whales, and Morgan would provide an important opportunity to gain valuable experience and knowledge.



In the event that reintegration of Morgan to her natal group or another kin group is attempted but is unsuccessful, long-term holding in a floating enclosure in the sea would provide both an appropriate habitat for the whale and an opportunity to undertake a variety of important research projects. For example, studies on sound production and reception, physiology, and energetics in this semi-natural setting would provide useful and reliable information needed for conservation and management of human impacts on the species. Such studies are seldom possible in an aquatic park setting where animals undertake scheduled performances, and any results from this setting are likely to be influenced by the artificial holding enclosure and may not be representative of animals in the wild.

Should a decision be made to move Morgan to a sea pen for long-term study or for an attempt to rehabilitate her to the wild, I would be pleased to provide advice if requested and would be interested in collaborating on future research projects.

Sincerely,

John K.B. Ford, PhD Head, Cetacean Research Program Conservation Biology Section

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## References Cited:

Van Elk, N. 2010. Expert advice on the releasability of the rescued killer whale (Orcinus orca) Morgan. Dolfinarium Harderwijk- SOS Dolfijn. 14 November 2010.

Vester, H., and F. Samarra. 2011 Comparison of Morgan's discrete stereotyped call repertoire with a recent catalogue of Norwegian killer whale calls. Unpubl. manuscript dated 23 September 2011.

