

The Status of Beluga Whales, *Delphinapterus leucas*, in Cook Inlet, Alaska, and Surrounding Waters: Part I

Preface

It has been 15 years since publication of the special issue on beluga whales, *Delphinapterus leucas*, in the *Marine Fisheries Review* 62(3), featuring the depleted Cook Inlet, Alaska, population. That issue provided an overview of the status of this population (Moore and DeMaster, 2000) as well as papers focused on distribution (Rugh et al., 2000; Speckman and Piatt, 2000; Laidre et al., 2000), abundance (Hobbs et al., 2000a,b), habitat (Moore et al., 2000), pollutants (Becker et al., 2000), tagging (Lerczak et al., 2000; Ferrero et al., 2000), hunting (Mahoney and Shelden, 2000), and traditional knowledge (Huntington et al., 2000).

Since 2000, with a small, managed subsistence hunt, it was expected that the population would begin to show signs of recovery. Instead, the Cook Inlet population continued to decline. Articles focused on predation (Shelden et al., 2003), stranding events (Vos and Shelden, 2005), movement patterns (Hobbs et al., 2005), and habitat preferences (Goetz et al., 2007) of Cook Inlet belugas were published in several peer-reviewed journals. NOAA's National Marine Fisheries Service (NMFS)

completed Status Reviews in 2006¹ and 2008^{2,3} and a Conservation Plan (NMFS, 2008) just prior to listing this distinct population segment as endangered under the U.S. Endangered Species Act (ESA) (NOAA, 2008). Critical Habitat was designated in 2011 (NOAA, 2011), based in part on an observed northward contraction in range (Rugh et al., 2010) and habitat preference models (Goetz et al., 2007, 2012).

The ESA requires that Status Reviews be conducted every 5 years; therefore, in 2013, we put out a call for papers to update information presented in the *Marine Fisheries Review* 62(3) and the 2008 Status Reviews. In particular, we sought to provide a peer reviewed venue for the many research efforts as well

¹Hobbs, R. C., K. E. W. Shelden, D. J. Vos, K. T. Goetz, and D. J. Rugh. 2006. 2006 status review and extinction assessment of Cook Inlet belugas (*Delphinapterus leucas*). U.S. Dep. Commer., NOAA, Natl. Mar. Fish. Serv., Alaska Fish. Sci. Cent., AFSC Processed Rep. 2006-16, 74 p.

²Hobbs, R. C., K. E. W. Shelden, D. J. Rugh, and S. A. Norman. 2008. 2008 status review and extinction risk assessment of Cook Inlet belugas (*Delphinapterus leucas*). U.S. Dep. Commer., NOAA, Natl. Mar. Fish. Serv., Alaska Fish. Sci. Cent., AFSC Processed Rep. 2008-02, 116 p.

³Hobbs, R. C., and K. E. W. Shelden. 2008. Supplemental status review and extinction risk assessment of Cook Inlet belugas (*Delphinapterus leucas*). U.S. Dep. Commer., NOAA, Natl. Mar. Fish. Serv., Alaska Fish. Sci. Cent., AFSC Processed Rep. 2008-08, 76 p.

as monitoring reports from industrial activities occurring within Cook Inlet. This has now culminated in two special issues of the *Marine Fisheries Review* devoted to beluga whales, with a focus on Cook Inlet.

This first issue includes an update of the Cook Inlet abundance and trend time series through 2012, a synopsis of Alaska beluga whale prey based on stomach content analyses, an ethogram for wild beluga whales based on studies at Eagle Bay, three papers on the Yakutat Bay beluga group, and a novel beluga monitoring project conducted on the Little Susitna River. The second issue 77(2) includes a review of spatio-temporal changes in Cook Inlet beluga distribution, a population viability analysis and extinction risk assessment, a summary of potential natural and anthropogenic threats, a calf index for Cook Inlet, the first citizen science project developed for Cook Inlet, a note on socio-sexual behavior, and two papers on behaviors observed during Port of Anchorage monitoring studies.

We hope that these contributions will provide a sound basis for future research and management of this unique species.

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