

P 10

Photo-identification of beluga whales (*Delphinapterus leucas*) in Tigil'ski region of Western Kamchatka, Far East Russia

Karina Tarasyan (1), Irena Mamaeva (2), Elena Chaschina (2), Dmitri Udovik (2), Tatiana Shulezhko (3), Fedor Kazanskiy (3), Denis Ivanov (2), Dmitri Glazov (2), Vyacheslav Rozhnov (2)

(1) Winogradsky Institute of Microbiology, Russian Academy of Sciences

(2) White Whale Program of Permanent expedition of Russian Academy of Science studying Red Book animals and other focus species of Russia of A.N.Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences

(3) Kronotskiy State Biosphere Reserve

tarasyan_k@mail.ru

Photo identification is a widespread approach to explore many aspects of cetacean biology. PhotoID on white whales has many technical difficulties in making good quality images and analyzing animals without contrast color patterns. Although, this method was successfully used for Alaska's Cook Inlet (Alaska, USA) and White Sea belugas (Russia). Our study is also based on identification of individual animals by their natural marks and comparison of matches. The goals of our research are description of local herd of belugas summering in mouth of Moroshechnaya River (Western Kamchatka) and checking for evidences of belugas local movements between different geographical sites.

Our field season was conducted in the period of 17 August – 13 September 2011. In total we made more than 24 thousands of pictures during 47.3 hours of work. Images were underexposed for the best contrast of faint marks on white animals. All pictures were sorted by quality and analysed for identification of individual animals. We identified 28.5% (357) of total encountered animals (1274) and 29 (2.3%) animals were encountered repeatedly. There were found considerable amount of white animals, unavailable for individual identification because of absence of any visible marks. Comparing recent data with previous year, when our work site was located at 40 km to the north, we found a few animals (6) encountered during both seasons. It can be explained as low level of animal's movements as well as small pool of available photoID data in comparison of total population size.

Two field seasons allow us to begin cataloguing of our images for white whales photoID database. Collecting more long-term data from different regions we hope to learn more about little-studied population of belugas and their movements in western Kamchatka coastal waters.