
RESEARCH NOTES

AN OBSERVATION OF *LAGENORHYNCHUS ALBIROSTRIS* (DELPHINIDAE, ODONTOCETI) IN KOLA PENINSULA, BARENTS SEA IN 2011**Alexander A. Zaytsev*, Andrey P. Yakovlev, Miron V. Pakhomov***Murmansk Marine Biological Institute, Kola Scientific Centre of RAS, Russia***e-mail: zaytsev@mmbi.info, yanmos@yandex.ru*

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Lagenorhynchus albirostris is one of the most common Cetacean species in the Barents Sea. However, there is not a mention of its appearance in the Kola Bay. The present report confirms the appearance of a group of *Lagenorhynchus albirostris* in the Kola Bay near the aquacomplex of the Murmansk Marine Biological Institute of the Kola Research Centre of RAS, Polyarny town, in autumn 2011.

Key words: Arctic, Kola Bay, Red Data Book, White-beaked Dolphin

The White-beaked Dolphin, *Lagenorhynchus albirostris* Gray, 1846 (suborder *Odontoceti*, family *Delphinidae* Gray, 1821, genus *Lagenorhynchus* Gray, 1846), is the northernmost species of the genus *Lagenorhynchus* (Kinze, 2002). It is one of the two *Lagenorhynchus* species known in the Barents Sea (Kovacs et al., 2009). The White-beaked Dolphin is an endemic species of temperate and subarctic waters of the North Atlantic Region. It is known both in shelf and coastal waters. Compared with the closely related species *Lagenorhynchus acutus* Gray, 1828, it prefers less oceanic waters (Kinze, 2002). *Lagenorhynchus albirostris* is one of the most common dolphin species in the shelf waters of the North Atlantic and adjacent seas (Galatius & Kinze, 2016). According to Kovacs et al. (2009), the abundance of this species in the Barents Sea is estimated at 60 000–70 000 individuals.

According to the conservation status of *Lagenorhynchus albirostris* in Russia it is a rare, poorly studied species (rarity category 3), included in the Red Data Book of the Russian Federation (2001). However, this species has not been included in the draft of a forthcoming new edition of the Red Data Book of the Russian Federation (Gavrilo & Martynova, 2017 from: Project of the Order..., 2016). The Global IUCN status of *Lagenorhynchus albirostris* is Least Concern (LC) (Hammond et al., 2012).

Throughout the year, *Lagenorhynchus albirostris* is present everywhere in the Barents Sea up to the ice edge in the north. It is the most frequently recorded Cetacean species (Klepikovskiy et al., 2012; Fall & Skern-Mauritzen, 2014; Goryaev,

2017). However, there are no published data on its presence in the Kola Bay. For the first time, we have registered *Lagenorhynchus albirostris* near the aquacomplex of the Murmansk Marine Biological Institute of the Kola Research Centre of RAS, located on Cape Tonya, on 15 September 2011. (Fig. 1). A group of animals approached the aviary complex. About 11 individuals were recorded here. Of these, 3–4 animals swam near the aviaries, while the others stayed at a distance (Fig. 2). Earlier the same day, *Balaenoptera acutorostrata* Lacepede, 1804 (*Balaenopteridae* Gray, 1864) was registered in the fairway area.

The behaviour of dolphins included a continuous change of calm swimming and alternating series of accelerations with an ever-changing trajectory of a motion. Apparently, the nature of the mentioned behaviour is an example of hunting of these animals (Simard & Gowans, 2008). The entire observation period was about two hours. Then, the dolphins left in the northeast direction. In the autumn of 2012, we registered a repeated appearance of animals into this water area. However, in subsequent years (until 2017) animals were observed only at a distance, without approaching the aviaries.

Although the aquacomplex of the Murmansk Marine Biological Institute exists since 2007, until 2011 we had not observed *Lagenorhynchus albirostris* here. Given an absence of published data on the presence of this species in the Kola Bay (Goryaev, 1997, 2017), we can assume that earlier either these animals could have appeared here in periods not covered by observations or it occurred in more northern regions.

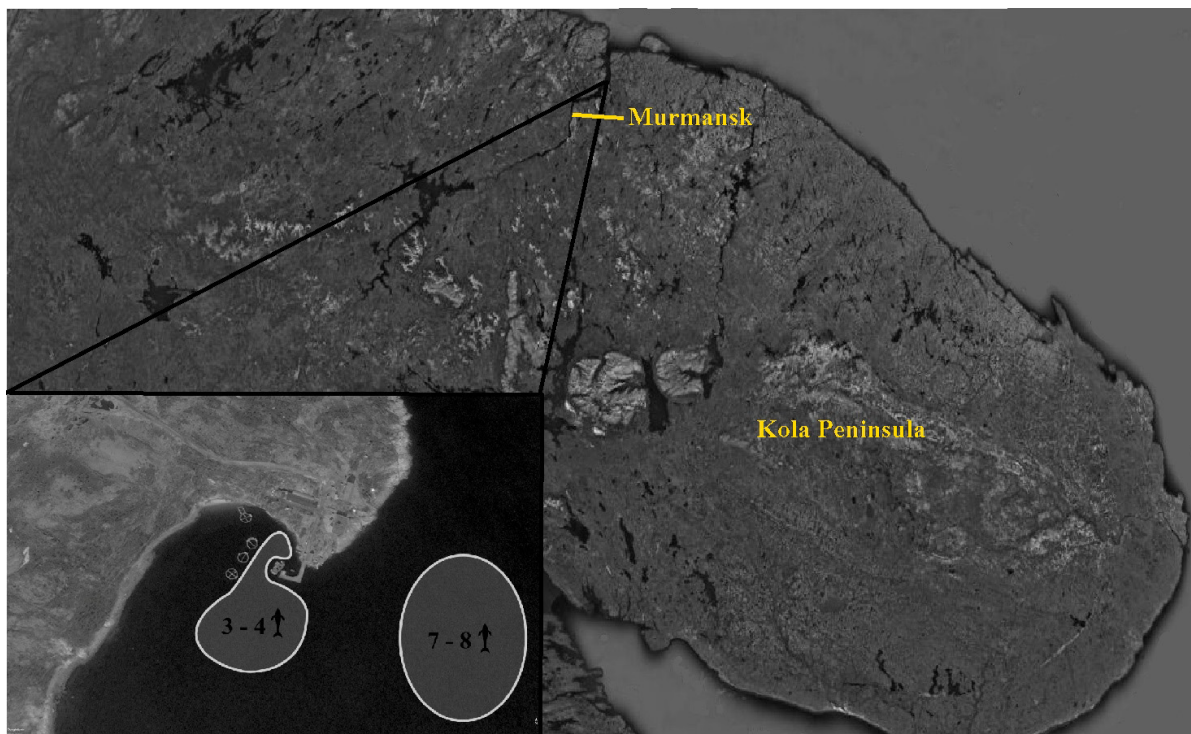


Fig. 1. *Lagenorhynchus albirostris* registration area in the Kola Bay (The map is from Google Earth pro with modifications).



Fig. 2. *Lagenorhynchus albirostris* near the aquacomplex of the Murmansk Marine Biological Institute of the Kola Research Centre of RAS, located on Cape Tonya.

The diet of *Lagenorhynchus albirostris* includes a wide range of fish species. However, the overwhelming majority is presented by *Clupea harengus harengus* Linnaeus, 1758 and representatives of the family *Gadidae*. Of these, the following species are most frequent: *Gadus morhua* Linnaeus, 1758, *Merlangius merlangus* Linnaeus, 1758, *Melanogrammus aeglefinus* Linnaeus, 1758, and *Micromesistius poutassou* Risso, 1826. The association of *Lagenorhynchus albirostris* with the last species has been noted in the southern part of the Barents Sea (Canning et al., 2008; Jansen et al., 2010; Fall & Skern-Mauritzen, 2014; Galatius & Kinze, 2016). Of the above-mentioned fish species, *Clupea harengus*

harengus (sometimes in mass), *Gadus morhua* and *Melanogrammus aeglefinus* are the most common species in the Kola Bay (Karamushko et al., 2009). Apparently, exactly these species were the hunting objects for registering White-beaked Dolphins.

Recently, communications on the discovery of *Lagenorhynchus albirostris* in the Kola Bay are increasingly reported in the media and on Internet resources. However, it is difficult to assert about the increase in the frequency of these animals entering the waters of the Kola Bay. Presumably, the reason for such a number of communications may be an increase in the availability of various types of digital photos and video equipment.

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НАБЛЮДЕНИЕ *LAGENORHYNCHUS ALBIROSTRIS* (DELPHINIDAE, ODONTOCETI) В КОЛЬСКОМ ЗАЛИВЕ БАРЕНЦЕВА МОРЯ В 2011 Г.

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Несмотря на то, что *Lagenorhynchus albirostris* является одним из наиболее массовых видов китообразных в водах Баренцева моря, упоминания о появлении особей данного вида в акватории Кольского залива в научных публикациях не встречаются. В данном сообщении представлены материалы, описывающие появление группы особей *Lagenorhynchus albirostris* вблизи аквакомплекса Мурманского морского биологического института Кольского научного центра РАН г. Полярный в Кольском заливе осенью 2011 г.

Ключевые слова: Арктика, беломордый дельфин, Кольский залив, Красная книга