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ABUNDANCE AND DISTRIBUTION OF BELUGA WHALES (*DELPHINAPTERUS LEUCAS*) IN MARCH, 2008 AND 2010 IN THE WHITE SEA (RUSSIA)

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Until present, there have been no reliable data on beluga presence/abundance in the White Sea (WS) in winter. It was suggested that a small part of WS summer stock is residential, and the rest migrate to the Barents and Kara Seas in winter. To check this hypothesis, we conducted aerial surveys in WS in March 2008 and 2010. The surveys were flown in line transects with different intervals. On March 14-18, 2008 we flew over the central part of WS. Belugas were detected in groups of 1 to 13 individuals throughout the surveyed area. In March 19-23, 2010 we uniformly covered the entire WS water-area, both over open water and ice. Belugas were detected in groups of 1 to 15 individuals. Based on visual observations and aerial photographs, the number of detected belugas was 134 in 2008, and 237 in 2010. Estimated beluga abundance on the surveyed area was 1665 ± 634 individuals in 2008 and 2183 ± 836 in 2010; average density- 69 and 48 belugas per 1000km^2 of surveyed area, respectively. No correction for availability bias was applied. Most belugas were detected in cracks and clearings amongst dense ice-fields, sometimes far from the open water, in the central part of WS, Onega and Dvina Bays. The weather conditions in March 2008 and 2010 differed dramatically. In 2008, ice formation in WS started on February 17, and by middle March (survey period) the thickness of ice was only 10-20cm. In March 2010, ice thickness reached 80cm, and during the survey over 80% of WS was covered with ice. Thus, irrespective of ice situation in WS, a big portion of the beluga summer stock remains in WS for winter and prefers deep regions with relatively high density ice-cover. The work was conducted under White Whale Program supported by Russian Geographic Society and Utrish Dolphinarium, Ltd.