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Title Mr.

Last Name of PRESENTING Author Glazov

Middle Name or initials of PRESENTING Author M.

First Name of PRESENTING Author Petr

Country of PRESENTING Author Russia

Institution, organization or general address Institute of geography RAS

Theme 2: Observing in Support of Adaptation and Mitigation

Theme -Theme 5: Arctic Observations in the context of Global Observing initiatives

Author list (in order) *Glazov, Petr; Loshchagina, Julia; Kondratyev, Alexander; Kruckenberg, Helmut; Zaynagutdinova, Elmira; Anisimov, Yuriy; and Pokrovskaya, Olga

Poster title (brief) Long-term monitoring of bird population on Kolguev Island in the Barents Sea

Abstract - text box

Kolguev Island is located in the Pechora Sea, the south-eastern part of the Barents Sea. It is an example of the unique ecosystem with the total absence of the rodents and specialized predators such as weasels. At the same time, non-specialized predators such as Arctic fox and Red fox are common on the island, the same as Rough-Legged Buzzard.

Monitoring of Kolguev avifauna has carried out since 2006. The avifauna of the island is relatively poor. At present, 111 species have been recorded here, of which 58 are nesting. The absence of rodents and favorable climate conditions led to the high abundance of many bird species: Willow Grouse, several species of geese (White-fronted Goose, Bean goose and Barnacle Goose), some ducks (Long-tailed Duck, Greater Scaup, Velvet Scoter) and waders (Dunlin, Grey Plover). Analysis of the literature sources shows that Anseriformes community has undergone tremendous changes during XX century. White-fronted Goose became the dominant goose species instead of Bean Goose. The numbers of Barnacle Goose increased sharply at the end of XX century.

The high breeding density of many bird species on Kolguev Island indicates a high international conservation value of the island. Long-term monitoring of the ecosystems of Kolguev Island should be included in international programmes for monitoring of the Arctic ecosystems. The transformation of the island ecosystem reflects the impact of climate change on bird population in lemming-free ecosystem. The absence of lemmings on the island makes Kolguev Island unique place for monitoring lemming-free ecosystem, of which there are very a few examples in the Arctic.