

## Supporting Materials

# Whooper swans *Cygnus cygnus* nesting on offshore islands – a new occurrence or a well-forgotten old phenomenon?

### Annex S1. Historical nesting by Whooper Swans on the northern coast of the Caspian Sea

For the past 60 years, the Whooper Swan has been perceived as a wintering and migratory species but not as a breeding species of the Caspian Sea (Lugovoy 1963; Krivonosov 1979; Rusanov & Krivonosov 1990; Berezovikov & Gissov 2001, 2012; Reutsky 2014). Yet Menzbir (1895), in his review of the “Birds of Russia”, states in relation to the Whooper Swan: “Severtsov ... was found nesting in reeds on the northern coast of the Caspian Sea between the mouths of the Ural and Emba rivers, and Radde speaks very definitely about the nesting of the Whooper Swan on the western coast of the Caspian Sea”. References to primary sources with detailed descriptions of the findings are not given here.

It is worth noting that N.A. Severtsov was in the northeastern Caspian lowlands only very briefly in 1857, visiting the lower reaches of the Emba River (Bostanzhoglo 1911). We could not find any of his published detailed data on Whooper Swans in this area. However, the published results of G.S. Karelín’s expedition, which surveyed in detail the northeastern coasts of the Caspian Sea before N.A. Severtsov in 1832, state that the Whooper Swan, unlike the Mute Swan *Cygnus olor*, does not nest on the Caspian coast, but occurs only occasionally during the moult period (Karelín 1883).

V.N. Bostanzhoglo’s report, based on data from 1904–1907, stated that Whooper Swans nested on freshwater lakes in the steppe and were common during moult in the northeastern part of the Caspian Sea (Bostanzhoglo 1911). Discussing observations made on the mouth of the Ural River and the coasts of the northeastern Caspian Sea he stated that the Whooper Swan in general terms “cannot be called a common bird here” without specifying the species’ status and nesting frequency (Bostanjoglo 1911). At the same time, this author directly states that the Mute Swan was common and nested on islands and in reedbeds along the coast (*ibid*).

Writing in the first half and middle of the 20th century, I.A. Dolgushin describes that the Whooper Swan “nests near the Caspian Sea (near the Ural Delta)”, but that they nested only on large freshwater or slightly brackish lakes in Kazakhstan (Dolgushin 1960). Later studies in this region do not mention this species as nesting at the time of writing, nor in the past (Gavrilov 1999; Berezovikov & Gissov 2001, 2012).

There are no records of any Whooper Swans nesting in the Volga River delta in the literature from the 19th century and the first half of the 20th century (Yakovlev 1873; Khlebnikov 1928; Vorobyev 1936; Krivonosov & Rusakov 1991; Reutsky 2014), except for a

single report by E.E. Syroechkovsky (1955), which was later recognised to be based on erroneous data and was never mentioned again (Lugovoy 1963; Reutsky 2014).

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