## Historical example of egg-collection by man of Bar-headed Goose Anser indicus eggs on lake Karakul, former Tajik Soviet Socialist Republic

**ROLF NESSING** 

The Bar-headed Goose *Anser indicus* is a monotypic species with a global population of 52 000–60 000 individuals in the wild (Wetlands International 2015). The Bar-headed Goose breeds in various wetlands on the high plateaus of central Asia, exhibiting a discontinuous breeding range extending from Kyrgyzstan to central China as far north as Mongolia (Fomin & Bold 1991, Wurdinger 2005, Batbayar *et al* 2014), and from the Tian Shan mountains (Ma & Cai 1997, Ming & Dai 1999) as far as Ladakh (Prins & Wieren 2004) and Kokonor, Qinghai (Schäfer 1938, Scott & Klös 1961).

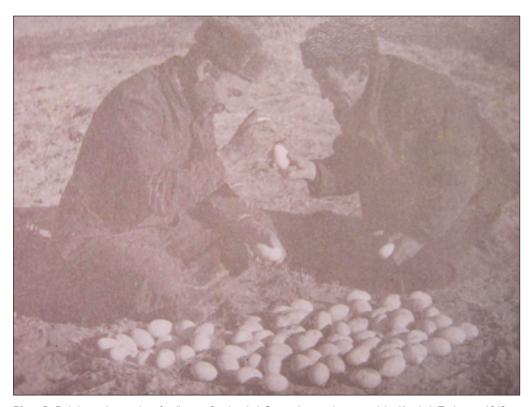
There appears to be no detailed information on the current status of *A. indicus* in the western part of its breeding range, in central Asian parts of Tajikistan and Kyrgyzstan. Soviet authors stated that, although the bird was once fairly common it had suffered a severe decline (Gole 1982). There was a maximum of 100 breeding pairs in Tajikistan (van der Ven in Miyabayashi & Mundkur 1999). Around 1971, no more than 1000 individuals lived in the then known areas of occurrence in the Soviet Union—Tajik SSR (lakes Karakul, Zorkul), Kirghiz SSR (lakes Sonkul, Chatyrkul), Gorno-Altai (lake Ukok) and Tuva



Plate 1. Raft crossing to the Bar-headed Goose Anser indicus breeding grounds on lake Karakul, Tajikistan, 1963 or 1964. © Daler Kaziev



Plate 2. A Bar-headed Goose Anser indicus nest, lake Karakul, Tajikistan, 1963 or 1964. © Daler Kaziev



**Plate 3.** Delight at the results of collecting Bar-headed Goose Anser indicus eggs, lake Karakul, Tajikistan, 1963 or 1964. © Daler Kaziev



Plate 4. The Bar-headed Goose Anser indicus eggs collected were transported in a wooden crate (here empty, evidently on the outward journey), lake Karakul, Tajikistan, 1963 or 1964. © Daler Kaziev

(Boehme 1981). The Bar-headed Goose was included in the first Soviet Union Red List (Krasnaja Kniga 1978). Human persecution during migration and habitat loss at stopover and wintering sites are commonly regarded as the most serious threats (Köppen *et al* 2010).

The accompanying historical photographs (Plates 1–4), taken in 1963 or 1964, show egg collection in a Bar-headed Goose colony on lake Karakul (39° 00′ N, 73° 30′ E) in the northeast of the Tajik SSR (today Tajikistan). The lake is currently managed within the Tajik national park and as a wetland of international importance under the Ramsar Convention (BirdLife International 2015).

Plate 1 shows local people using a home-made raft constructed from pneumatic tyres and with spades as paddles, navigating to the islands in lake Karakul to collect Barheaded Goose eggs. Plate 2 shows a clutch of at least 7 eggs. Plate 3 evidently shows the collection total of at least 72 eggs, which must therefore have originated from at least a dozen clutches. Daler Kaziev (pers comm 2014) was informed by his mother, a wife of one of the egg-collectors, that the Bar-headed Goose eggs were later cooked and eaten. BirdLife International (2015) refers to 25–50 breeding pairs at lake Karakul 2002–2006, although the current population size appears unknown. I saw on an island in the lake, 11 June 2015, a breeding Bar-headed Goose and a flying pair.

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## LITERATURE CITED

Batbayar, N, JY Takekawa, T Natsagdorj, KA Spragens & X Xiao. 2014. Site selection and nest survival of the Bar-headed Goose (*Anser indicus*) on the Mongolian Plateau. *Waterbirds* 37(4): 381–393.

BirdLife International. 2015. Important Bird Areas factsheet: Karakul lake and mountains. www.birdlife.org. [Accessed 21 March 2015]

Boehme, RL. 1981. [Birds of Forest and Mountain of the Soviet Union]. Moscow. [In Russian]

Fomin, VE & A Bold. 1991. [Catalogue of birds of the Mongolian People's Republic.] Nauka, Moscow. [In Russian] Gole, P. 1982. Status of Anser indicus in Asia with special reference to India. Aquila 89: 141–149.

Köppen, U, AP Yakovlev, R Barth, M Kaatz & P Berthold. 2010. Seasonal migrations of four individual bar-headed geese *Anser indicus* from Kyrgyzstan followed by satellite telemetry. *Journal of Ornithology* 151(3): 703–712.

Krasnaja Kniga CCCP [Red Book of the Soviet Union]. 1978. Izdatelsvo 'Lesnaja Pomyshlennost', Moscow. [In Russian]

Ma, M & D Cai. 1997. Aggregated distribution of *Anser indicus* nest in Bayinbuluke of Tianshan Mountains and its breeding ecology. *Chinese Journal of Applied Ecology* 8: 287–290.

Ming, M & C Dai. 1999. Breeding ecology of Barheaded Goose in Tianshan, Xinjiang. Casarca 5: 177-181.

Miyabayashi, Y & T Mundkur. 1999. Atlas of Key Sites for Anatidae in the East Asian Flyway. Wetlands International, www.jawgp.org/anet/aaa1999/aaaendx.htm. [Accessed 4 December 2014]

Prins, HH & SEV Wieren. 2004. Number, population structure, and habitat use of bar-headed geese *Anser indicus* in Ladakh (India) during the brood rearing period. *Acta Zoologica Sinica* 50: 738–744.

Schäfer, E. 1938. Ornithologische Ergebnisse zweier Forschungsreisen nach Tibet. *Journal für Ornithologie* 86 Sonderheft.

Scott, P & HG Klös. 1961. Das Wassergeflügel der Welt. Hamburg/Berlin.

Wetlands International 2015. Waterbird Population Estimates. wpe.wetlands.org. [Accessed 21 March 2015]

Wurdinger, I. 2005. Bar-headed Goose Anser indicus. In: Kear J (ed). Bird Families of the World: Ducks, Geese and Swans. Oxford University Press, UK.

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