

## First Documented Record of Emperor Goose (*Anser canagicus*) in Iraq, with Notes on Identification and Potential Origin

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### Abstract

As part of the continuous monitoring the wildlife and biodiversity in Iraq by the Iraqi Organization for Conservation of Nature (IOC/N), an individual Emperor Goose (*Anser canagicus*) was reported on mid-August 2025 to be found in Baiji, Central Iraq, a wetland habitat with dense reedbed and a running water on the main trunk of River Tigris. This species is normally confined to a cold regions quite far from Iraq and the Middle East, the matter that impulse IOC/N team to search more on the authenticity of this odd claim. The observation was documented by the IOC/N team where several photos were taken for the individual and the location where it was found at. The species is a dweller of the subarctic Pacific region, with breeding populations in western Alaska and far eastern Russia and wintering grounds in Alaska Peninsula and other neighboring areas. Except few published records reported from captivity in the UAE, there were no records obtained from the Middle East. This observation, therefore, represents an unprecedented extralimital occurrence. In this paper, we provide the details, description, and the photographic evidence of the occurrence of Emperor Goose (*Anser canagicus*) in Iraq, and a discussion of possible origins, including escape from captivity.

**Keywords:** *Anser canagicus*, Emperor Goose, Bird, wetland, Iraq

### Introduction

The Emperor Goose (*Anser canagicus*) is a least concern (LC) bird species, and one of the least migratory of all Northern Hemisphere goose species, with most individuals moving only short distances between breeding and wintering grounds [1,2]. The species breeds predominantly on specific Deltas in Alaska, and in small numbers in eastern Siberia, Russia. In winter, the population shifts to the ice-free shores of Alaska Peninsula [3,4].

Vagrancy outside the Bering Sea region seems rare, but occasional records occurred as far as British Columbia, Washington, and Oregon, in addition to East Asia, including Japan and Korea, while records from Europe are very rare and often originated from captivities [5].

Except the tiny in-captivity population in Al-Qudra wetlands in the UAE, no confirmed observations of Emperor Goose have been reported from the Middle East [6], including Iraq [7,8]. This paper documents the first confirmed occurrence, through finding and photographing

an individual adult, describes its identification, and discusses possible explanations for its presence.

## The Observation Area

The observation site, Tigris River trunk in Baiji sub-district, is located around the central coordinates (34.944794, 43.518419) in northern of Salah Al-Deen Governorate, Iraq. The habitat comprises running water of quite wide cross-section with dense vegetation of aquatic and water-related vegetation (mainly the dominant *Phragmites australis*), in addition to dense patches of *Populus euphratica* trees and other wetlands dwellers plants. Despite that the majority of lands on both sides of the river are cultivated, it seems that the area holds relatively significant biological diversity due the diversity of the topographic morphs and the presence of dominant water source. It has been reported by the locals that several species of ducks (mainly of the Genus *Anas*) and other waterfowl found in the area during their wintering and passage seasons.



**Figure 1.** Part of the Middle East area, showing Iraq (right); and the area where Emperor Goose was first found close to Baiji, Salah Al-Deen (left). The red circle in the ME map shows the location of the nearest existing population in the UAE in-captivity.

## Observation Conditions

The bird was searching for food near the reeds, but displayed a characteristically shy behavior, preceded by several attempts to hide within the reed thicket and attempt to fly. It then suddenly flew north for a relatively long distance, landing again on an open area in the middle of the river, allowing a good amount of time for documentation. The bird was alone, as no other individual was seen in the same location. The bird appeared to be healthy and uninjured, as it suffered no difficulty in flight or being harmed.

The photos below are some of the shots taken when first observed the bird in Tigris River in Baiji area along with a landscape shot showing the wide wetland area with Himreen Mountain at the background.



**Figure 2.** Shows clearly the Emperor Goose individual observed in the wetlands close to Baiji sub-district. The photo to the right represents the natural landscape where Emperor Goose found. ©Adel Al-Saleh.

The observed adult Emperor Goose has a combination of pure white head and neck, blackish throat and front-neck, scaled grey body. The plumage of the observed individual was quite distinctive and demonstrates clear difference from the other *Anser* group members that might be found in the area. Once observed, it has been thought that this individual could be a hybrid bird due to its plumage, when other species can be superficially similar, but these typically show intermediate features absent in the present observed bird. The size and structure of the observed bird was relatively similar to Graylag Goose, however, with longer neck and greyish bill.

## Discussion

The occurrence of *A. canagicus* in Iraq is remarkable and very inexpectable. Even long-distance vagrancy in this species is quite uncommon, and most extralimital records have been observed within a few thousand kilometers of its breeding range [3]. Potential extralimital explanations of some individuals of birds include:

1. **Natural vagrancy** – Unusual/severe weather systems (like strong winds during migration) may have displaced a migrant bird far outside its normal range. The species' strong site fidelity and low dispersal tendency make this unlikely, and might be even impossible.
2. **Escape from captivity** – Emperor Geese are maintained in private and public waterfowl collections, including in Europe, the Arabian Gulf region, and Asia. Escapes have been documented in the UK, Netherlands, and Japan. The lack of leg bands in this case does not preclude captive origin.



3. **Assisted movement** – The bird may have been transported unintentionally by human agency (e.g., ship, aircraft).

When carefully checking this observation, the closest factor (out of the three above) that might be applied to the observed individual in Baiji is being escaped from captivity, however, we might not tend to demonstrate this observation as an escape from the UAE in-captivity population despite that the Geese there (in Al-Qudra Lakes) are free to move and fly. This might be excluded as a potential due to the distance between this cluster of ponds and the location where the present observation was made, in addition, the time of the observation – being in mid-summer. Therefore, the most possible scenario that could be applied for this observation is an escape from a nearby captivity. IOCN team has experienced the same issue when finding a group of White-faced Whistling Duck *Dendrocygna viduata* in more than one area in Iraq where the individuals were also from an origin quite far from Iraq and the ME region, and then the most analysis of this observation was to conclude of their being originated from nearby captivity escapes [7]. We think that This record should be regarded as an escape from a nearby captivity (within Iraq) rather than from a remote source across huge desert areas.

## Conclusion

This documented observation of Emperor Goose at Baiji, Central Iraq, represents the first confirmed record for Iraq. Whether of near or far captive origin, this case underscores the importance of detailed documentation of unusual waterfowl in the Middle East, and highlights the value of systematic and necessity of the continuous observation and documentation of unusual bird species in the region, which can contribute significantly to our understanding of avian distribution and vagrancy.

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