

A wild goose chase across Central Asia to the Middle East

Researchers tried for a decade to track Lesser White-fronted Geese breeding in the west of their range to the wintering grounds. Birds had been followed part of the way, to Kazakhstan, but then their signals stopped. In autumn 2004, one goose was finally followed for the whole of its remarkable journey. Ingar Jostein Øien and Tomas Aarvak of NOF (BirdLife in Norway) and Vladimir Morozov of the Russian Research Institute for Nature Protection (RRINP) take up the story.





The Fennoscandia Lesser White-fronted Goose Conservation project (FLWGC), jointly run by NOF and WWF-Finland, began satellite tracking Norwegian breeding Lesser White-fronted Geese *Anser erythropus* in 1995. This revealed that birds first flew east to the Kanin Peninsula in northern Russia, where they stayed for several weeks. Many then headed south-west to wintering grounds in the Evros Delta on the border between Greece and Turkey. Several BirdLife Partners are now co-operating on a EU-LIFE project to secure the migration stopover sites on this route.

The remainder carried on east, crossing the Ural Mountains in Russia and heading south along the Ob Valley towards staging grounds in northern Kazakhstan. But where they went beyond that, we had no idea; signals from tagged birds stopped—some birds no doubt shot by hunters. We guessed they were probably heading for the Caspian Sea coast.

In March 2004, Tomas Aarvak from FLWGC and Vladimir Morozov from

RRINP met in Odessa, Ukraine. They decided that if Morozov could receive satellite transmitters before 10 May, he would fit them that summer to moulting birds near the town of Vorkuta in northern European Russia. Time was of the essence.

Three transmitters were sent to the USA for new batteries and programming by the Microwave Telemetry company.

Transmitters are too valuable to send

Opposite: A pair of Lesser White-fronted Geese *Anser erythropus* close to their Norwegian breeding grounds

Above: Lesser White-fronted Geese *Anser erythropus* and White-fronted Geese *A. albifrons* at their main staging grounds in northern Kazakhstan

Maps: (Upper) Migration route of the two male geese. One transmitter stopped working in Kazakhstan (blue line), the other bird was tracked all the way to Iraq (red line). (Lower) The goose's journey within Iraq, and the three Important Bird Areas visited





A goose is carefully released after being fitted with a satellite transmitter

through the ordinary post, so when the three arrived back in Norway, they were sent straight to Finnmark by express mail. Once there, they were driven to the Finnish border town of Karigasniemi and sent by express mail to Helsinki. A WWF-Finland courier took them that evening to Moscow.

But Morozov had already left. Fortunately, one of his students had stayed behind and carried the transmitters the final 2,500 km to Vorkuta by train where, by the end of July, they had been fitted to an adult female and two adult male Lesser White-fronted Geese.

Shortly afterwards the female was lost, probably shot by hunters, but the two males began moving south at the end of August. They travelled separately, visiting stopover sites along the Russian Ob Valley and arriving 1,900 km later, in late September, at the lake complex in the Aktybinsk and Kustanay region of Kazakhstan, an important autumn staging area. Once there, Lesser White-fronted Geese usually congregate at Lake Kulykol, but neither bird visited this site, and observers confirmed that few geese were using the lake that year. This was an important finding and indicates the problems associated with conserving staging sites for long distance migrants when birds may change their favoured locations from year to year.

Both birds remained in the area until 20 October, when one transmitter failed. The tracking team's hopes of finding the wintering grounds in 2004 now rested on one bird.

In early November, excitement mounted when the team received signals from the Samur River delta on the Caspian Sea in northern Azerbaijan, a country where up to 6,000 Lesser White-fronts had previously wintered. But a week later, the

bird had moved to the mountainous Armenia-occupied regions of Nagorno Karabach. Following several days there, the journey continued to Arazlisu reservoir on the border with northern Iran; a new and unexpected country on this incredible journey. Things were beginning to get really interesting!

The bird next turned west and settled at Lake Haçli in the mountains of Kurdish eastern Turkey, a BirdLife Important Bird Area (IBA) where Lesser White-fronted Geese were previously unknown. Haçli is a high-altitude lake, and we doubted it could be the final wintering ground. Even before we could check on the ground, our restless goose was off again! This time, it did stop at its final destination: in the war-torn country of Iraq.

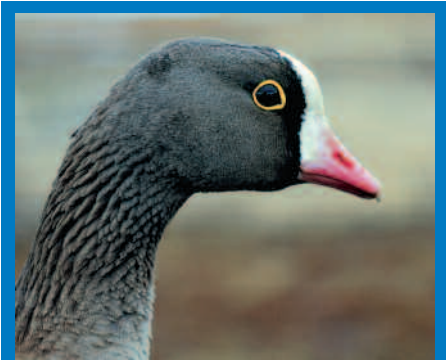
For three months, our male goose lived in the huge wetlands between the Euphrates and Tigris Rivers of Mesopotamia. Throughout December, it stayed at Haur Al Shubaicha, an IBA 80 km east of Baghdad, which BirdLife's *Important Bird Areas in the Middle East* (1994) says "appears never to have been visited by ornithologists" but is "shown on maps as an extensive marsh...possibly of great importance to wintering waterbirds". It was a hunch that seems destined to prove right.

January was spent in the wetlands between Baghdad and Al Amarah, while in February our goose spent time at another IBA, Haur Al Suwayqiyah, north of Al Kut city and a traditional wintering ground for the species. The lake was partly drained in 1945, but still held large numbers of geese in 1968. At the end of February the goose moved to a third IBA, Haur Chubaisah north of Al Amarah city, another area known as an important wintering site in the 1960s.

The vast wetlands of Mesopotamia were once amongst the most productive in the world and a haven for millions of wildfowl, but decades of human conflict in the region, drainage and damming of rivers, has reduced them to 7% of their original size. In 2003, following the toppling of Saddam Hussain, local people destroyed dams and ditches across Mesopotamia, re-flooding two-fifths of the wetlands. The marshes are regenerating and will once again provide a healthy environment for the people and wildlife of the area.

A single Lesser White-fronted Goose and its transmitter has provided a remarkable insight into the habits of the species, and led us on a merry dance across Central Asia and the Middle East. If the transmitter continues to function, who knows where it will take us this spring?

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Lesser White-fronted Goose *Anser erythropus* is classified as Vulnerable because of recent declines up to 49% in its main breeding grounds in Russia, where birds occur in three areas: the White Sea to Ural/Yamal, the southern Taimyr, and north-eastern Siberia. The total population is believed to number 20,000–25,000 individuals. Those nesting in the east of the range winter in central China. A small, genetically distinct population in Fennoscandia decreased by more than 98% during the 20th Century and is now on the verge of extinction, numbering just 20–30 pairs in 2004.

The Lesser White-fronted Goose is closely related to the White-fronted Goose *A. albifrons* but differs in its smaller size. Adults have more white on the forehead and a bright yellow eye-ring.

The main threats to the species are hunting, particularly of adults on the staging and wintering grounds, and habitat loss and deterioration. Location and management of the wintering and staging sites are key conservation measures for the species.

Further reading

Aarvak, T & Øien, I J (2003) *Moult and autumn migration of non-breeding Fennoscandian Lesser White-fronted Geese Anser erythropus mapped by satellite telemetry*. *Bird Cons. Int.* 13: 213–226.

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See also, www.piskulka.net