on track

Hidden diversity in Bar-tailed Godwits

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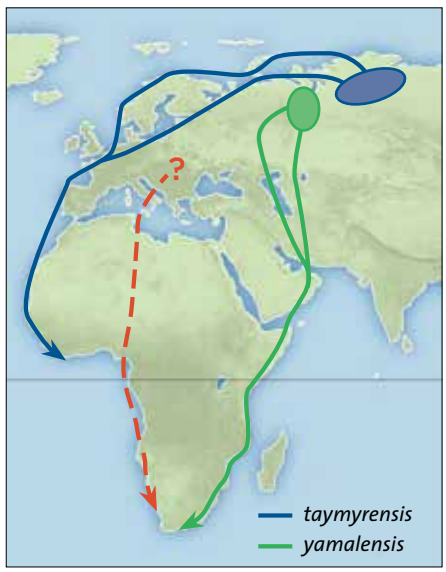
The Bar-tailed Godwit is renowned for having one of the most extreme migrations, flying non-stop from Alaska to winter in New Zealand. But this only applies to the easternmost subspecies, *Limosa lapponica baueri*, which breeds in Alaska. Four other subspecies are recognised, which breed in the Old World, from northern Scandinavia to the Bering Sea. They winter from western Europe to Australia and their migrations are less extreme because they have options to forage at staging sites along the routes.

The population that winters in Africa and the Middle East usually is recognised as *L. l. taymyrensis*, which breeds in the tundra of central Siberia from the southern end of the Yamal Peninsula to the Anabar River, east of the Taymyr Peninsula. A new tracking study by Roeland Bom and colleagues in *Ibis* (doi: 10.1111/ibi.13024) suggests that this subspecies includes two distinct sub-populations. All birds caught on the Middle Eastern wintering grounds in Oman bred in the western part of the breeding range, south and east of the Yamal Peninsula. By comparison, birds caught on the West African wintering grounds in Mauritania and Guinea-Bissau bred farther east in the Taymyr Peninsula.

The Middle East birds migrated directly across western Asia, staging on the Caspian or Aral seas on both their northward and southward migrations, whereas birds wintering in West Africa migrated along the coast of western Europe, staging in the Wadden Sea. Most crossed the Baltic Sea en route to Siberia, but a few remained on the coast, flying around Scandinavia. Interestingly, all the West Africa birds and some of the Middle East birds travelled up to 1000 kilometres north after breeding to forage along the Arctic coast before starting the long trek south.



Bar-tailed Godwits tracked from their wintering grounds in West Africa and the Middle East have distinct breeding areas in central Siberia.

The two populations differed slightly in the timing of migration. The Middle East birds typically departed for the breeding grounds a few weeks earlier and left the breeding grounds up to a month earlier than the West Africa birds. There also are subtle morphological differences, with the Middle East population being on average smaller than all other populations of Bar-tailed Godwits. And although there are no differences among these populations or the nominate subspecies in the maternally inherited cytochrome b gene, the study recommends recognising a new subspecies, *L. l. yamalensis*, for the Middle East birds.

From a southern African perspective, birds wintering along the east coast probably migrate via the Middle East. A bird ringed at the Swartkops Estuary in Algoa Bay was shot on the Caspian Sea in Iran, confirming that it belonged to the newly described *L. l. yamalensis*. *Roberts 7* suggests that godwits wintering along the southern African west coast probably fly across the Sahara to the Gulf of Guinea and then south along the coast, which is supported by the recovery on the Namibian coast of a bird ringed in Italy. The tracking study did not include any birds following such a route and it would be interesting to track some godwits from Walvis Bay or Langebaan to see where they breed. Until this question is resolved, it is uncertain whether *L. l. taymyrensis* should remain on the southern African list.

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