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Shetland red-necked phalaropes:

improved knowledge
and better prospects





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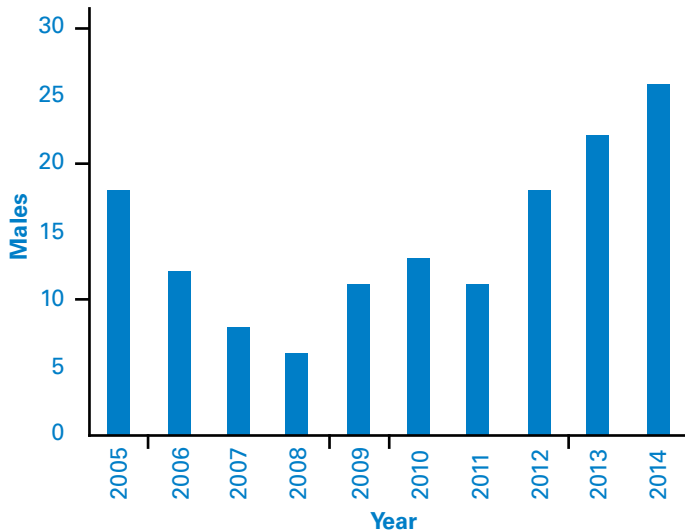
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Red-necked phalaropes are primarily Arctic-breeding wading birds, with the UK on the southern edge of their breeding range. Phalaropes are known for their reversed sexual roles in which the small, drab male is solely responsible for incubating eggs and caring for chicks.

Hope restored

Within the UK, Shetland is the main stronghold for this species with Fetlar being particularly important. Between 2003 and 2008 the percentage of the Shetland red-necked phalarope population breeding on Fetlar declined from 76% to 50%, and of particular concern was that the number of breeding pairs on RSPB reserves on Fetlar had declined from 18 in 2003, to just two in 2008.

In response to this worrying decline, we increased our management efforts on the reserves (by creating long, narrow, steep sided pools) and by working with local graziers to introduce native Shetland cattle to graze the mires. Amazingly, the management had an immediate effect and the population has been increasing year on year.



Red-necked phalaropes have been steadily increasing on reserves since 2009 when pool creation and the trial grazing of the Fetlar mires was initiated.

Tracking their migration

Red-necked phalaropes winter at sea and, until recently, the wintering location of our breeding population was unknown. The Arabian Sea is the nearest known wintering area, and that's where neighbouring Scandinavian breeding phalaropes head for in the colder months. It seemed likely that UK breeding phalaropes would winter in the same area, and when geolocators weighing less than a gram became available, we were able to find out.

Surprising discovery

In the summer of 2012, Malcie Smith and colleagues from the Shetland Ringing Group put geolocators on six male and four female phalaropes on Fetlar. In June 2013, three tagged birds returned, but two had lost their geolocators and we were unable to recapture the third. Luckily, on 19 June, a tagged male was found incubating eggs, and we managed to catch him the following day using a walk-in nest trap. The stored data on the geolocator revealed that he had made an astonishing migration to the



Creating pools and grazing by hardy stock have improved the mire condition for red-necked phalaropes.

Pacific! He left Fetlar on 1 August, crossed the Atlantic in just six days, and then slowly worked his way down the eastern seaboard of Canada and the USA, reaching the Caribbean in early September. By mid-October he was in the waters between the Galapagos and Ecuador, where he spent the next five and a half months, perhaps wandering as far as Peru. The male's return journey in spring 2013 followed a similar route, but took significantly less time.

due to the Humboldt Current, which causes upwellings of nutrient-rich cold water; and it is an established wintering site for many of North America's phalaropes. Our results suggest that Shetland's phalarope population may be affected by conditions in this area, which are influenced by El Niño. Combining our understanding of habitat management and the wintering location of phalaropes puts their conservation on firmer footing for the future.

Conclusion

The area of the Pacific where this bird wintered has a rich supply of plankton near the ocean surface

Further reading

Smith, M, Bolton, M, Okill, DJ, Summers, RW, Ellis, P, Liechti, F and Wilson, JD (2014). Geolocator tagging reveals Pacific migration of Red-necked Phalarope *Phalaropus lobatus* breeding in Scotland. *Ibis* 156: 870–873.

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Cover image: red-necked phalarope by David Kjaer (rspb-images.com). 120-0164-15-16



The RSPB is a member of BirdLife International, a partnership of nature conservation organisations working to give nature a home around the world.