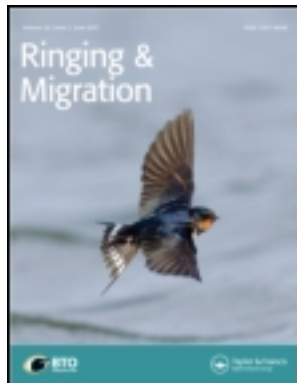


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Ringing & Migration

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/tram20>

The origins of European Swallows wintering in Namibia and Botswana

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Available online: 11 Apr 2011

To cite this article: K. H. Loske (1986): The origins of European Swallows wintering in Namibia and Botswana, Ringing & Migration, 7:2, 119-121

To link to this article: <http://dx.doi.org/10.1080/03078698.1986.9673888>

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Ringling & Migration 7: 119-121, October 1986

The origins of European Swallows wintering in Namibia and Botswana

K. H. Loske

Loske, K. H. 1986. The origins of European Swallows wintering in Namibia and Botswana. *Ring. & Migr.* 7: 119-121.

There are now 19 recoveries of swallows ringed in Europe and recovered in Namibia/Botswana or vice versa. Most of the birds wintering in Namibia/Botswana are of west- and central European origin, while 21% originated from eastern Europe. If there is a west-east-distribution in Namibia/Botswana analogous to their origins in Europe, it cannot be clearly diagnosed. Five January recoveries support the theory that there is a resident wintering population in Namibia. As the recovery rates in Europe of birds ringed in Africa are considerably higher than vice versa, gaps in our knowledge could be closed by intensive ringing in Africa.

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Received 13 January 1986; accepted 12 February 1986.

INTRODUCTION

Almost fifty years ago SCHÜZ (1937) pointed out that there is a West to East distribution of Swallow *Hirundo rustica* populations in the African winter quarters. This distribution almost exactly mirrors the distributions in the palearctic breeding areas; that is, the further west the origin, the further west the winter quarters are on average. This picture was confirmed by the subsequent increased numbers of Swallow recoveries from birds ringed in Europe and found in Africa or vice versa (DROST & SCHÜZ 1952, SCHÜZ 1970, 1971). The winter quarters of West- and Central European Swallows lie in Central Africa between 10°N and 10°S, between 10°W and 26°E. Birds from North- and Eastern Europe winter mainly in Central and East Africa between 22° and 34°E, and also in the Eastern quarter of South Africa. However in the Southern part of Africa a West- East-distribution of the populations is less prominent (Davies 1965, Rowan 1968, Mead 1970).

Despite this very well known behavioural pattern during migration and wintering, the situation in some parts of Africa is still virtually unknown. In Namibia and Botswana conditions are quite different to those in South Africa, where more than 1500

Swallows were recovered and show that a precise analysis is possible (Oatley in litt.). This number includes controls of Southern African swallows in South Africa. Schüz (1971) mentions just one record for Namibia and Botswana. In this paper I consider recoveries of Swallows in Botswana and Namibia that have occurred recently.

METHODS

Namibia and Botswana belong to the outer tropics and are characterized by dry conditions (semi-deserts, grass- and thornbush- savanna). Both countries are thinly populated and cattle farming is the main source of economy. In spite of this the Swallow is the most common palearctic migrant in both countries during the rainy season (February to April). Especially in Namibia, one can come across it in thousands in regions where rain has fallen recently. The birds are mainly concentrated in large roosts near or by water holes (Loske 1986). During a field trip to Namibia from 1 March to 30 March 1984 I ringed more than 900 Swallows. From this I recovered one bird from Finland and one from England. Inspired by this I asked for information on other recoveries from the University of Cape Town/South Africa. From there I got all known recoveries from Namibia and Botswana.

RESULTS AND DISCUSSION

Schüz (1970) divided Europe into three different Swallow populations (Western-, Central- and Eastern Europe) and according to the breeding areas he found significant

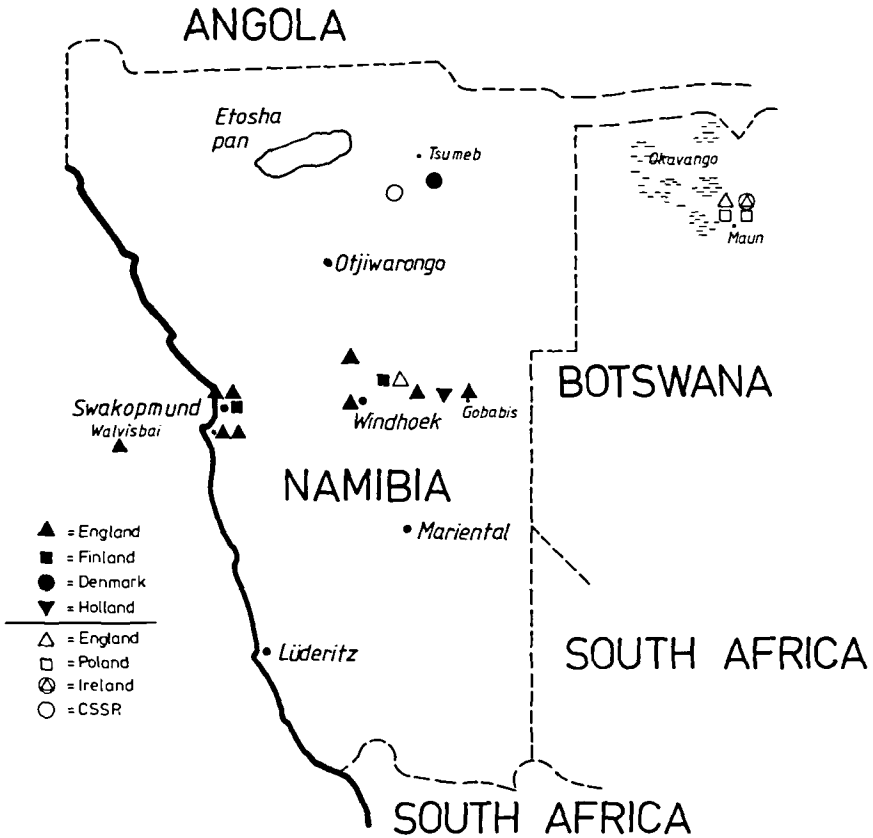


Figure 1. Recoveries of Swallows (*Hirundo rustica*) ringed in Europe and found in Namibia (black symbols) and of birds ringed in Namibia/Botswana and found in Europe (open symbols).

differences in the winter quarters. However there is a wide overlap in the winter quarters. That is why in South Africa Swallows from very different origins meet; namely from Great Britain, Scandinavia and out of the whole area from Eastern Europe to Siberia. Rowan (1968) therefore disagrees with the concept of a West-East distribution in South Africa and is of the opinion that in Southern

Africa the population of the outer edges of the breeding range (Great Britain and Siberia) meet and integrate with each other. From this one can conclude, that a West-East distribution mainly occurs in the tropics. This reflects the existence of a weak "Zugscheide" in the breeding area, which is situated at 15° E (Schüz 1970).

According to Rowan (1968) "The origins

of the swallows occurring in the dry centre and west of South Africa are still largely unknown, as there has been little ringing in these parts, but present indications suggest that they derive mainly from the British Isles." Winterbottom (1964) however emphasizes, that "the origin of the western Cape birds is unknown but it is suspected to be Scandinavia." Up until now there have been 19 recoveries of Swallows from Namibia/Botswana.

We might expect most of the Swallows wintering in Namibia/Botswana to be from Western palearctic areas (west of the 15°E Zugscheide in Europe (Schüz 1970). The origin of 15 birds (79%) lies in West- and Central Europe (11 in Great Britain, 1 in Ireland, 1 in Holland, 1 in Denmark, 1 in west Czechoslovakia), while 4 birds (21%) occur from areas lying further East (2 in Poland, 2 in Finland).

If there is a West- East distribution in Namibia/Botswana analogous to the origin of birds in Europe, it cannot be clearly diagnosed. Though Western- and Central European birds (especially British ones) predominate, the two recoveries from Finland show that the Southwestern third of Africa, as in South Africa, there is a good deal of mixing between the different populations. Five recoveries in January (included one bird from Finland at the Atlantic coast) show moreover that in the relatively dry area of Namibia there is apparently a resident winter population.

The overall picture is still incomplete.

Presumably the percentage of birds found in Namibia/Botswana is influenced strongly by the different ringing activities in the different European countries. Perhaps that is why there is a high percentage of British recoveries. Because of the small amount of data there are still large gaps in our knowledge on the origin of Swallows wintering in the western part of southern Africa. These could be closed by intensive ringing in Namibia/Botswana. Ringing there would give better results than ringing in Europe, as the recovery rates in Europe of birds ringed in Namibia/Botswana are considerably higher than vice versa.

ACKNOWLEDGEMENTS

I thank the South African Bird Ringing Unit for permission to use their recovery data in this paper. T. Oatley (Cape Town) and C. Mead (Tring) provided help with the preparation of this analysis.

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