

# Siberian Dunlins *Calidris alpina* migrate to Europe: first evidence from ringing

J. Gromadzka & V.K. Ryabitsev

Gromadzka, J. & Ryabitsev, V.K. 1998. Siberian Dunlins *Calidris alpina* migrate to Europe: first evidence from ringing. *International Wader Studies* 10: 88-90.

Recent records of ringed European-wintering Dunlin *Calidris alpina* breeding in western Siberia, and of Dunlin ringed in western Siberia and recovered in Europe confirm the breeding origins of Dunlin migrating to and through Europe in autumn. Details of ten records of winter-ringed Dunlin recovered whilst breeding in western Siberia are tabulated.

J. Gromadzka, Polish Academy of Sciences, Institute of Ecology, Ornithological Station, 80-680 Gdansk 40, Poland.

V.K. Ryabitsev, Institute of Plant and Animal Ecology, Russian Academy of Sciences, Ural Branch, 620144 Ekaterinburg, 8 March Str. 202, Russia.

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Громадзка, Я., Рябицев, В. К. 1998. Сибирские чернозобики *Calidris alpina* мигрируют в Европу: первое свидетельство, полученное кольцеванием. *International Wader Studies* 10 : 88-90

По новым находкам гнездящихся в Западной Сибири чернозобиков *Calidris alpina*, отловленных на зимовке в Европе, также как и птиц, меченных в Западной Сибири и вторично пойменных в Европе, установлены места гнездования чернозобиков, мигрирующих в и через Европу осенью. В таблице представлены подробности десяти находок чернозобиков, окольцованных на зимовке и вторично отловленных гнездящимися в Западной Сибири.

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## Introduction

Our knowledge of the origin of Dunlins *Calidris alpina* migrating in autumn to and through Europe (referred to as European Dunlins) is far from complete, although this species has been intensively studied in many European countries. One of the most intriguing questions concerns the eastern extent of the breeding grounds of European Dunlins.

Cramp & Simmons (1983) suggested that this border is the Ural Mountains. They assumed that a few more eastern recoveries (mainly from the Yamal Peninsula) were the result of wind-drifted birds rather than indicative of regular breeding. All these recoveries concern birds ringed in France, Great Britain, Norway and Sweden before the 1980s. The

birds were either shot or the circumstances of death were unknown, but it was not possible to ascertain whether they were breeding. However, some speculations have been made by different authors during the last decade on the possibility of breeding by European Dunlins in north-western Siberia (Clark 1983; Greenwood 1984; Brenning 1989; Gromadzka 1989; Goede *et al.* 1990; Rösner 1990; Meltofte 1991). The number of Dunlin recoveries from the territories to the east of the Urals has also been growing steadily.

In June 1982 a Dunlin ringed in Sweden (Ottenby, Oland) in August 1981 was recovered (probably shot) near Dixon on the western Taimyr (Liljefors *et al.* 1985; J. Pettersson in litt.). Until very recently this recovery of a European Dunlin was the most easterly known. During the 1980s ornithological studies in

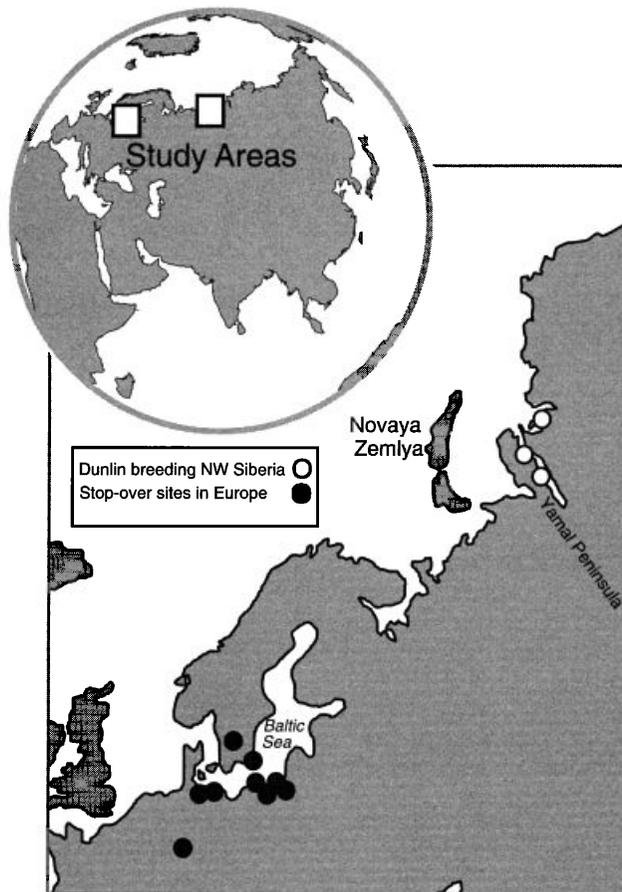


Figure 1. Dunlin breeding areas in north-western Siberia and their stop-over sites in Europe.

the Yamal Peninsula were intensified and some expeditions to parts of western Siberia were also organised (Figure 1). This activity has brought the first records of confirmed breeding by European Dunlins in western Siberia (Table 1).

## Results and Discussion

Almost the whole of the Yamal is covered by tundra habitats, and Dunlins breed mainly in the middle and northern part of the peninsula (Danilov *et al.* 1984; Lappo & Tomkovich 1998). Between 1982 and 1988 breeding birds were studied in the middle part of the Peninsula, at the station Khanovey (68°40'N, 72°52'E), near the settlement Mys Kamennyi). The density of breeding Dunlins there was 0.7-2.0 pairs/km<sup>2</sup> on a study plot of 4.5 km<sup>2</sup>. Fifteen adult Dunlins were ringed there but no foreign recoveries of these birds were reported. In July 1982, however, a male tending chicks and wearing a Rafolzell ring was discovered. The bird had been ringed eight years earlier in southern Germany (Gromadzka 1989; Ryabitsev 1990; No. 1 in Table 1).

In 1988 the ornithological station Yaibari in the northern part of the peninsula (71°04'N, 72°20'E, near the settlement of Sabetta) was established. The density of Dunlins breeding there in 1989, 1990 and 1991 was between 24 and 33 pairs on a study plot of 1 km<sup>2</sup>. In those years 204 Dunlin were ringed there (92 adults and 112 chicks). During the establishment of the Yaibari station in 1988, a chick-tending Dunlin

with a foreign ring was seen, but attempts to catch it were unsuccessful (Ryabitsev 1990).

During the 1989 breeding season one incubating Dunlin with a Hiddensee ring was found (No. 2 in Table 1). In that year a bird ringed in Yamal on 6 July 1989 was trapped on 25 July at the Vistula mouth in Poland (No. 8). On 16 July this bird had been incubating, but on 18 July its nest was found to have been destroyed by an Arctic Fox *Alopex lagopus*. Thus within seven to eight days the Dunlin had covered a distance of c. 3,000 km.

In 1990 a Dunlin with a Swedish ring was caught on the nest at Yaibari (No. 4) and three others (one male without a pair and two individuals with chicks) with foreign rings were also observed. Additionally, one bird ringed there as a chick only a few hours old was trapped at the Vistula mouth two months later (No. 10).

In 1991, at the end of July and the beginning of August, four breeding Dunlins with foreign rings were noticed at Yaibari: one of them was the same individual with a Swedish ring that had bred there the previous year (No. 4). Of the others, one was ringed in Sweden (No. 5), and two others in Poland (Nos. 6 and 7).

The expedition to the Gydan Peninsula in 1989 also brought two interesting recoveries. At the end of June an incubating male with a Hiddensee ring was caught. The ring was very worn and its number was illegible (No. 3, I. Chernichko pers. comm.). The second report concerns another incubating male ringed during the same expedition and trapped at the Vistula mouth two months later (No. 9).

International expeditions to the Taimyr in 1989, 1990 and 1991 have not yet brought any new information about movements to Europe of Dunlins breeding there. During the following two breeding seasons of 1992 and 1993, however, five other Dunlins with foreign rings were controlled on the Yamal at Yaibari: single birds had Helsinki, Hiddensee and Arnhem rings and two had Stockholm rings.

These recoveries of Dunlins from western Siberia in the last decade clearly indicate that birds breeding in this region migrate regularly to Europe.

## Acknowledgements

The work on Dunlins in northern Yamal has been possible only thanks to the help of V.K. Ryabitsev and N.A. Zvoznikov. We thank them for their assistance.

**Table 1.** Details of the first records of European Dunlins breeding (incubating or tending chicks) in north-western Siberia. **A** - recoveries of birds ringed in European countries other than Russia and recovered in northern Russia; **B** - recoveries of birds ringed in northern Russia and recovered in other European countries. Measurements taken on the breeding grounds are given in italics, other measurements were made at migration sites.

Ringing Scheme Ring number	Age/sex		Ringing data		Age/sex		Recovery data		wing (mm)	bill (mm)	mass (g)
	Date		Country	Place	Date		Country	Place			
<b>A</b>											
1. RADOLFZELL DH 31973	20.8.74	ad.	Germany	Onstein 49°36'N, 8°15'E	13.7.82	male	Russia	Yamal, Khanovey 68°40'N 72°52'E	111	-	46
2. HIDDENSEE 80757980	13.9.88	juv.	Germany	Langenwerder 71°4'N 72°20'E	13.7.82		Russia	Yamal, Yaybari 54°2'N 11°30'E			
3. HIDDENSEE	illegible		Germany		27.6.89	male	Russia	Cydan 71°30'N 79°50'E	114	35.0	-
4. STOCKHOLM 3359743	21.7.89	2nd yr.	Sweden	Ottenby, Oland 56°12'N 16°24'E	26.6.90	female	Russia	Yamal, Yaybari 71°4'N 72°20'E			
					6-7.91		Russia	Yamal, Yaybari 71°4'N 72°20'E			
5. STOCKHOLM 3329583	3.8.89	ad.	Sweden	Vattern Lake 58°5'N 14°25'E	20.7.91	male	Russia	Yamal, Yaybari 71°4'N 72°20'E			
6. GDANSK JA 32249	3.8.90	ad.	Poland	Vistula mouth 54°20'N 18°56'W	8.7.91	male	Russia	Yamal, Yaybari 71°4'N 72°20'E	118	28.9 29.0	41 55
7. GDANSK JN 16442	26.7.88	ad.	Poland	Vistula mouth 54°20'N 18°56'W	9.7.91	male	Russia	Yamal, Yaybari 71°4'N 72°20'E	117 118	30.0 29.0	40 48
<b>B</b>											
8. MOSKWA 736540	6.7.89	ad male	Russia	Yamal, Yaybari 71°4'N 72°20'E	25.7.89		Poland	Vistula mouth 54°20'N 18°56'W	122	35.5	47
9. MOSKWA 406184	12.7.89	ad male	Russia	Cydan 71°30'N 79°50'E	20.9.89		Poland	Vistula mouth 54°20'N 18°56'W	122 119	32.1 33.0	54 40
10. MOSKWA XD 259860	1.7.90	pullus	Russia	Yamal, Yaybari 71°4'N 72°20'E	28.8.90		Poland	Vistula mouth 54°20'N 18°56'W	119	34.9	40

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