

WADER STUDIES OF THE WATERBIRD RESEARCH GROUP “KULING” IN 1999-2001

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INTRODUCTION

The Waterbird Research Group KULING has studied wader migration since 1983, mainly in the region of the Gulf of Gdańsk (N Poland) and occasionally in other regions of Poland. Besides several scientific papers, several reports containing ringing results were published (WRG KULING 1985, Brewka *et al.* 1987, Meissner 1992, Meissner and Kozakiewicz 1992, Meissner and Remisiewicz 1998). The last report summed up all ringing activities of KULING up to year 1998. The present report shows results obtained in years 1999-2001.

STUDY AREAS

Spring of 1999 was the last season of regular counts performed on wet meadows between Mikoszewo and Drewnica (Fig. 1). Waders were also caught there, but the results were negligible (only 21 birds ringed). The study on dynamics of wader migration was published in “The Ring” (see *Appendix*).

In spring 2000 wader catching in Mechelinki Meadows (Fig. 1) was conducted for the last time. Only 41 waders were ringed, mainly Wood Sandpipers (*Tringa glareola*) – 37 birds. In that season the number of waders foraging there was very low, because of temporarily extremely low water level on the meadows. In December 2000 this area was designated as a nature reserve. Further research in this area is not planned.

An attempt of catching waders was made in Górki near Wiślica in southern Poland (Fig. 1) between mid-April and the first week of May 2000. The area consists of several fishponds and some of them were emptied slowly from mid-April. On such fishponds waders were caught with walk-in traps and mist nets. In total, 129

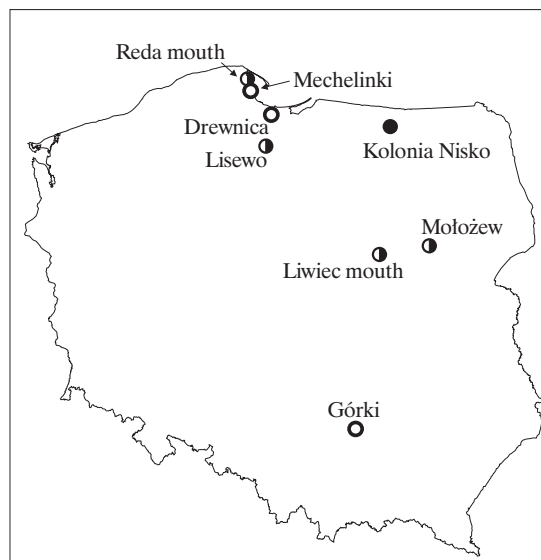


Fig. 1. WRG KULING ringing sites in 1998-2001. Open circles – spring, half-filled circles – autumn, filled circle – both seasons.

waders were ringed. The most numerous species were: the Wood Sandpiper – 46 birds and the Little Ringed Plover (*Charadrius dubius*) – 44 birds. The fishponds area in Górki has a great importance for waders during migration (Zięcik unpubl.), but the catching results strongly depended on the water level, which is difficult to predict before the season. Thus, the research on wader migration at this place was abandoned.

In years 1999-2001, the research was continued in the traditional site – the mouth of the Reda river (Fig. 1). A drastic decrease in birds numbers was observed. One of the reasons seems to be the loss of suitable resting places for waders due to liquidation of electric power station ash dump located within the site. The autumn of 2001 was the last season in which waders were caught and ringed in this area. In 2002, only data on feeding ecology of the Dunlin (*Calidris alpina*) and the Little Stint (*Calidris minuta*) will be collected there.

In 2001, both in spring and autumn, the research on wader migration started in Kolonia Nisko, eastern Poland (Fig. 1). In this place there was a shallow 400 ha reservoir, surrounded by arable fields, on which some small but quite stable pools of rain-water were appearing. About 1 km south to the reservoir there was a small, permanently flooded terrain, occupied in spring by a colony of Black-headed Gulls (*Larus ridibundus*). In spring, when vegetation was low, edges of these reservoir were an ideal place for foraging and resting waders, and flocks up to 900 Ruffs (*Philomachus pugnax*) and Wood Sandpipers were seen. Thus, mainly these two species were caught in mist-nets and walk-in traps. In summer, the vegetation was very high and dense, so there was much less suitable places for waders migrating to their wintering grounds. The situation changed after the harvest in mid-August,

when more Common Snipes (*Gallinago gallinago*) and Wood Sandpipers gathered on small pools, and these species dominated among birds caught and ringed. We also started research on feeding ecology of inland-migrating waders, concentrating primarily on the Wood Sandpiper. The obtained results are promising and we want to continue studies in this site.

Besides regular camps we conducted test catching of waders in some places localised along rivers Vistula and Bug. Only three of them seemed to be suitable for wader catching: Lisewo – on the Vistula, the Liwiec mouth and Mołozew – on the Bug (Fig. 1). In total, 15 waders were ringed during these expeditions.

RESULTS OF RINGING

From the beginning of our activity, the Dunlin was the most numerous species caught in each of subsequent years (Table 1). The percent share of this species among all ringed waders reaches 62%. In the case of seven other species, the total number of ringed birds exceeds one thousand. High numbers of ringed Dunlins, Knots (*Calidris canutus*), Curlew Sandpipers (*Calidris ferruginea*) and Little Stints were connected with main places of our studies, localised in coastal habitats of the Gulf of Gdańsk. These species are not so numerous on inland stop-over sites where the new constant ringing sites are planned to be established. Thus, in next years we expect to concentrate our research more on “inland” species like: Wood Sandpiper, Ruff, Common Snipe and Common Sandpiper (*Actitis hypoleucos*).

Table 1
Wader species ringed by WRG KULING from the beginning of activity

	1983-1998	1999	2000	2001	Grand total 1983-2001
<i>Calidris alpina</i>	27 813	1 524	994	629	30 960
<i>Tringa glareola</i>	2 558	112	110	470	3 250
<i>Actitis hypoleucos</i>	1 789	181	106	157	2 233
<i>Calidris canutus</i>	2 026	22	19	52	2 119
<i>Calidris ferruginea</i>	1 719	182	107	50	2 058
<i>Gallinago gallinago</i>	1 635	44	100	169	1 948
<i>Tringa totanus</i>	1 425	21	42	13	1 501
<i>Calidris minuta</i>	1 175	107	43	16	1 341
<i>Philomachus pugnax</i>	607	30	71	107	815
<i>Charadrius hiaticula</i>	508	38	79	28	653
<i>Pluvialis squatarola</i>	472	9	14	8	503
<i>Arenaria interpres</i>	458	-	4	15	477
<i>Limosa lapponica</i>	338	6	8	5	357
<i>Calidris alba</i>	293	1	-	1	295
<i>Charadrius dubius</i>	137	27	58	5	227
<i>Calidris temminckii</i>	100	26	19	3	148
<i>Limicola falcinellus</i>	113	1	7	2	123

	1983-1998	1999	2000	2001	Grand total 1983-2001
<i>Tringa ochropus</i>	71	3	1	6	81
<i>Tringa erythropus</i>	66	8	4	2	80
<i>Haematopus ostralegus</i>	66	2	1	3	72
<i>Tringa nebularia</i>	50	-	3	9	62
<i>Numenius phaeopus</i>	61	-	-	-	61
<i>Vanellus vanellus</i>	16	3	5	15	39
<i>Lymnocyptes minimus</i>	16	2	17	3	38
<i>Pluvialis apricaria</i>	24	1	-	1	26
<i>Numenius arquata</i>	12	1	-	-	13
<i>Phalaropus lobatus</i>	10	1	-	1	12
<i>Gallinago media</i>	-	-	-	3	3
<i>Limosa limosa</i>	1	1	-	1	3
<i>Calidris pusilla</i>	-	-	1	-	1
Total	43 559	2 353	1 813	1 774	49 499

The total number of waders caught with foreign rings is shown in Table 2. The very high number of controlled birds with Polish rings was caused by catching many Dunlins ringed at the Vistula mouth ringing station, situated only *ca* 40 km eastwards to the Reda mouth.

Table 2
Waders with foreign rings caught at WRG KULING ringing stations in years 1999-2001

Ringling centre	GDAŃSK	BOLOGNA	HIDENSEE	LONDON	STOCKHOLM	PRAHA	KAUNAS	TUNIS	KIEV	HELGOLAND	BUDAPEST	RIGA	HELSINKI	Total
<i>Calidris alpina</i>	253	7	5	5	4	1	2	2	1	1	1			282
<i>Calidris ferruginea</i>	10													10
<i>Calidris canutus</i>	9											1		10
<i>Charadrius hiaticula</i>	3													3
<i>Tringa totanus</i>	2	1												3
<i>Tringa glareola</i>						2			1					3
<i>Calidris minuta</i>	1												1	2
<i>Charadrius dubius</i>	1				1									2
<i>Gallinago gallinago</i>	1													1
Total	280	8	5	5	5	3	2	2	2	1	1	1	1	316

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- WRG KULING 1985. *Wader studies in the Gulf of Puck, Poland, 1983-84*. Wader Study Group Bull. 45: 23-24.

APPENDIX

Papers on waders published by WRG KULING in 1998-2001

1. Meissner W., Włodarczak A. 1998. *Wiosenna migracja siewkowców na terenie projektowanego rezerwatu "Rzeczne Łąki" nad Zatoką Pucką*. Not. Orn. 39: 219-229.
2. Meissner W. 1998. *Fat reserves in Dunlins (Calidris alpina) during autumn migration through Gulf of Gdańsk*. Ornis Svecica 8: 91-102.
3. Meissner W. 1998. *Some notes on using walk-in traps*. Wader Study Group Bull. 86: 33-35.
4. Wójcik C., Rydzkowski P., Ściborski M. 1999. *The spring migration of waders (Charadrii) in the lower Vistula valley*. Ring 21: 79-90.
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6. Meissner W. 1999. *Biometrics of Redshank (Tringa totanus) caught in the region of the Gulf of Gdańsk during autumn migration*. Vogelwarte 40: 110-116.
7. Meissner W., Włodarczak A. 1999. *Autumn migration of Sanderling (Calidris alba) in the Puck Bay region (southern Baltic coast)*. Ring 21: 57-67.
8. Meissner W., Koziróg L. 2000. *Jesienna migracja kamusznika Arenaria interpres przez Zatokę Gdańską*. Not. Orn. 41: 213-223.
9. Meissner W. 2000. *Autumn migration of the Redshank (Tringa t. totanus) in the region of the Gulf of Gdańsk (Poland)*. Vogelwarte 40: 179-188.
10. Meissner W. 2000. *Long-term ringing data on snipes in the coastal region of Poland. Methods, preliminary results and the overview of the new planned survey*. OMPO News. 21: 63-71.
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12. Meissner W., Koziróg L. 2001. *Biometrics of Turnstone Arenaria interpres migrating in autumn through Gulf of Gdańsk region*. Ornis Svecica 11: 181-188.