

FIELDWORK RESULTS OF WADER RESEARCH STATIONS WORKING IN POLAND IN 2002-2003

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In years 2002-2003 there were 7 active wader research stations working in Poland. One of them conducted only counts, others concentrated on ringing. Their localisations are shown in Figure 1. The characteristic of each station is described below.

The Reda Mouth (RM)

The station was organised by the Waterbird Research Group "Kuling" and University of Gdańsk. Among reported seasons it worked only in autumn 2002 (14-26 September). The description of the study area is placed elsewhere (Meissner and Remisiewicz 1998). This was the last season of fieldwork in this area, aimed mainly at collecting data on ecophysiology of fattening in Dunlin (*Calidris alpina*).

Nisko (NI)

The station of the WRG "Kuling" was organised with the support of Gdańsk University and University of Warmia and Masuria. It was located in Warmian-Masurian Voivodship, near town of Reszel. Wader ringing was conducted in both years during spring and autumn migration. Birds were caught in mist-nets and walk-in traps, on shores of Lake Pleśno (ca 340 ha) and by the River Sajna, in

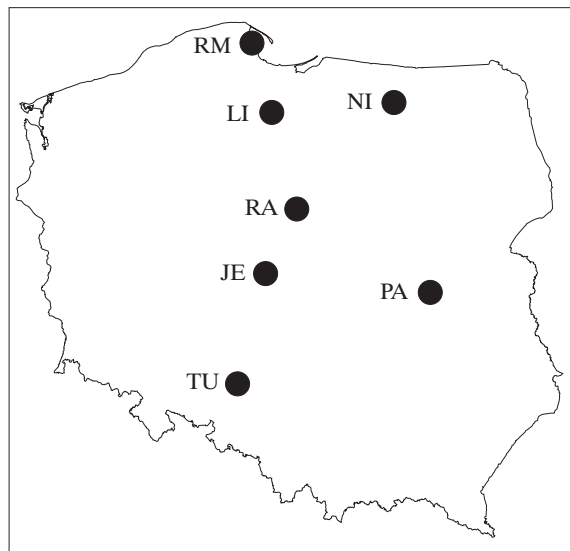


Fig. 1. Localities of research stations: RM – the Reda Mouth, NI – Nisko, LI – Lisewo, RA – Lake Rakutowskie, JE – Jeziorsko, TU – Turawa, PA – Pawłowice.

a temporarily flooded wetland (ca 50 ha), densely covered by mosaic of reedbeds, rushes and aquatic plants. More about this place can be found in Meissner *et al.* (2002). Terms of fieldwork were: 28 April – 16 May and 25 July – 3 September 2002; 26 April – 16 May and 4 July – 23 August 2003.

Lisewo (LI)

A new station of the WRG “Kuling” was organised in cooperation with “Cormorant Group” from Warmia and Masuria University. It was placed on the right bank of the Vistula, *vis-a-vis* Tczew (Pomeranian Voivodship). The fieldwork was conducted in periods: 25 July – 20 August 2002 and 1 July – 15 September 2003. Main research topics were: migration strategy of the Common Sandpiper (*Actitis hypoleucos*) and post-breeding ecology of wagtails (*Motacilla flava* and *M. alba*). Waders were caught during the day in up to 15 walk-in traps, placed on rocky spurs and sandy islets emerging during low water, and also on small, ephemeral water bodies on a grazed meadow. Moreover, at nights mist-nets with tape luring were used. Additionally, all waders were counted twice a day.

Lake Rakutowskie (RA)

The fieldwork was conducted in August 2002. Ringing site was localised in the “Lake Rakutowskie” nature reserve (Kuyavian-Pomeranian Voivodship, 20 km SE from Włocławek), which covers area of 414 ha (ca 180 ha of open water). A wide belt of vegetation around the lake comprises mostly reeds, rushes, and willows. Birds were caught in 10 walk-in traps.

Jeziorsko (JE)

The station of the University of Łódź was situated by the water reservoir on the River Warta (Łódź Voivodship). The study area was described previously by Bargiel and Włodarczyk (1998). Birds were trapped in 28 walk-in traps, and in 2002 additionally in 3 mist-nets.

Turawa (TU)

The ringing station was placed by the Turawa reservoir (max. 7.5×3.2 km) on the River Mała Panew, 20 km E from Opole (Opole Voivodship). During low water level its predominantly sandy bottom emerges, with some small muddy pools and lagoons. In years 2002 and 2003 ringing activity was conducted in periods 5 July – 20 August and 6 July – 20 August, respectively. Forty walk-in traps were used.

Pawłowice (PA)

The station of the Academy of Siedlce was located by the Vistula, 20 km N from Dęblin (Masovian Voivodship). In this place, the river creates sandy islets and lagoons, where waders can rest and forage. Year 2003 was the first season of the fieldwork, lasting from 1 to 29 August. Everyday 3 counts of waders were conducted along the riverbank. It is planned to establish ringing station there in the next year.

In both seasons most numerous species caught in Poland were inland migrating waders, *i.e.* Wood Sandpiper (*Tringa glareola*), Snipe (*Gallinago gallinago*), Ruff (*Philomachus pugnax*) and Common Sandpiper (Table 1 and 2). Additionally, in 2002 Dunlin was the commonest wader on the coast, at the Reda Mouth ringing site. In previous years, when catching of waders was focused on the Baltic coast (with ringing stations in the Vistula Mouth and by the Puck Bay), most numerous caught species were those linked more closely to marine habitats, *i.e.* Dunlin, Little Stint (*Calidris minuta*), Curlew Sandpiper (*Calidris ferruginea*), Knot (*Calidris canutus*). Also the species rarely recorded inland were more frequent: Grey Plover (*Pluvialis squatarola*), Turnstone (*Arenaria interpres*), Bar-tailed Godwit (*Limosa lapponica*) – *cf.* Gromadzka and Zieliński (2002), Meissner *et al.* (2002).

Present knowledge on inland migration of waders through Poland is rather poor. Results of regular counts were published for some places (Dyrz 1981, Lontkowski *et al.* 1988, Kuźniak and Lorek 1993, Stawarczyk *et al.* 1996, Mitrus *et al.* 1998a, Polakowski and Juniewicz 1998, Wiehle 1999, Kruszyk and Zbroński 2002). Also biometric analyses on Wood Sandpiper and Common Sandpiper migrating in autumn in the Bug valley (Mitrus *et al.* 1998b, Mitrus *et al.* 1998c) were presented. The intensification of research gives a chance to fulfill the knowledge on inland wader migration in this part of Europe.

Table 1

Numbers of birds ringed in Poland in 2002 at the six wader ringing stations. Abbreviations as in the text and in Figure 1.

	Spring	Autumn						Total
	NI	NI	RM	LI	TU	JE	RA	
<i>Actitis hypoleucos</i>	1	34	3	88	209	163	3	501
<i>Arenaria interpres</i>	-	2	-	2	-	-	-	4
<i>Calidris alba</i>	-	1	1	-	-	-	-	2
<i>Calidris alpina</i>	5	14	233	16	1	11	8	288
<i>Calidris canutus</i>	-	3	3	-	-	-	-	6
<i>Calidris ferruginea</i>	-	2	4	4	-	3	6	19
<i>Calidris minuta</i>	-	1	7	5	2	-	8	23
<i>Calidris temminckii</i>	2	12	-	27	20	3	3	67
<i>Charadrius dubius</i>	2	15	-	17	60	20	5	119
<i>Charadrius hiaticula</i>	-	2	6	7	-	6	5	26
<i>Gallinago gallinago</i>	-	224	8	14	190	263	27	726
<i>Gallinago media</i>	-	2	-	-	-	-	-	2
<i>Limicola falcinellus</i>	-	1	-	7	1	1	-	10
<i>Limosa lapponica</i>	-	-	27	-	-	-	-	27
<i>Phalaropus lobatus</i>	-	1	-	-	-	1	-	2
<i>Philomachus pugnax</i>	46	48	2	61	10	13	5	185
<i>Pluvialis squatarola</i>	-	-	3	-	-	-	-	3
<i>Tringa erythropus</i>	1	2	-	-	4	3	-	10
<i>Tringa glareola</i>	198	174	-	24	459	678	48	1581
<i>Tringa nebularia</i>	-	5	-	-	-	1	1	7
<i>Tringa ochropus</i>	-	3	-	2	23	3	-	31
<i>Tringa stagnatilis</i>	-	-	-	-	-	2	-	2
<i>Tringa totanus</i>	4	4	1	3	3	4	-	19
<i>Vanellus vanellus</i>	3	3	-	1	10	11	-	28
<i>Xenus cinereus</i>	-	-	-	-	-	1	-	1
Total	262	553	298	278	992	1187	119	3689

Table 2
Numbers of birds ringed in Poland in 2003 at four wader ringing stations. Abbreviations as in Table 1.

	Spring	Autumn				Total
	NI	NI	LI	TU	JE	
<i>Actitis hypoleucos</i>	-	6	60	103	44	213
<i>Arenaria interpres</i>	-	-	14	-	-	14
<i>Calidris alpina</i>	-	-	72	22	-	94
<i>Calidris canutus</i>	-	-	16	-	-	16
<i>Calidris ferruginea</i>	-	-	82	2	-	84
<i>Calidris minuta</i>	-	-	20	11	-	31
<i>Calidris temminckii</i>	10	-	32	10	-	52
<i>Charadrius dubius</i>	-	4	32	43	7	86
<i>Charadrius hiaticula</i>	-	-	86	1	-	87
<i>Gallinago gallinago</i>	3	144	37	86	243	513
<i>Gallinago media</i>	-	-	-	1	-	1
<i>Limicola falcinellus</i>	-	1	1	-	-	2
<i>Numenius arquata</i>	-	-	8	-	1	9
<i>Philomachus pugnax</i>	61	11	142	10	80	304
<i>Pluvialis apricaria</i>	-	-	1	-	-	1
<i>Tringa erythropus</i>	-	-	1	-	4	5
<i>Tringa glareola</i>	385	55	34	400	1137	2011
<i>Tringa nebularia</i>	-	-	-	1	2	3
<i>Tringa ochropus</i>	-	9	2	12	19	42
<i>Tringa totanus</i>	1	2	26	3	17	49
<i>Vanellus vanellus</i>	4	2	1	4	34	45
Total	464	234	667	709	1588	3662

In the species composition in Pawłowice, the dominant with almost half of all waders counted is the Lapwing (*Vanellus vanellus*) – see Table 3. It is in agreement with the results from autumn counts in southwestern Poland (Dyrz 1981, Stawarczyk *et al.* 1996, Kruszyk and Zbroński 2002). Also in spring, in wide, open areas of river valleys, Lapwings are most numerous waders (Kube 1988, Wójcik *et al.* 1999).

Table 3
Total number of birds recorded in all counts in Pawłowice in 2003

	Total no. of observed birds	Dominance (%)
<i>Actitis hypoleucos</i>	609	13.9
<i>Arenaria interpres</i>	4	0.1
<i>Calidris alba</i>	1	0.0
<i>Calidris alpina</i>	21	0.5
<i>Calidris ferruginea</i>	10	0.2
<i>Calidris temminckii</i>	65	1.5
<i>Charadrius dubius</i>	102	2.3
<i>Charadrius hiaticula</i>	165	3.8
<i>Gallinago gallinago</i>	235	5.4
<i>Limosa lapponica</i>	1	0.0
<i>Limosa limosa</i>	2	0.0
<i>Numenius arquata</i>	116	2.7
<i>Philomachus pugnax</i>	36	0.8
<i>Pluvialis apricaria</i>	1	0.0
<i>Pluvialis squatarola</i>	1	0.0
<i>Tringa erythropus</i>	10	0.2
<i>Tringa glareola</i>	440	10.1
<i>Tringa nebularia</i>	399	9.1
<i>Tringa ochropus</i>	38	0.9
<i>Tringa totanus</i>	15	0.3
<i>Vanellus vanellus</i>	2100	48.0
Total	4371	100.0

REFERENCES

- Dyrz A. 1981. *Birds of Otmuchowski Reservoir*. Acta zool. cracov. 25: 69-102.
- Bargiel R., Włodarczyk R. 1998. *Catching waders at the Jeziorsko reservoir (western Poland)*. Ring 20, 1-2: 77-82.
- Gromadzka J., Zieliński P. 2002. *Wader ringing at the Vistula mouth in years 1999-2000*. Ring 24, 1: 127-130.
- Kruszyk R., Zbroński R. 2002. *Migration of waders (Charadrii) at the sediment-ponds and floods of coal-mines in Jastrzębie Zdrój*. Ring 24, 1: 105-119.
- Kube J. 1988. *Zum Limikolendurchzug im Unteren Odertal (1976-1986)*. Beitr. Vogelkd. 34: 177-193.
- Kuźniak S., Lorek G. 1993. [*Birds of the Wonieść reservoir and adjacent grounds*]. Prace Zakł. Biol. i Ekol. Ptaków UAM. 2. Poznań. (In Polish).

- Lontkowski J., Okulewicz J., Drazny T. 1988. [Birds (Non-Passeriformes) of irrigational fields and adjacent grounds in NW part of Wrocław]. Ptaki Śląska 6: 43-96. (In Polish).
- Meissner W., Remisiewicz R. 1998. *Wader Studies of the Waterbird Research Group "KULING" in 1983-1998*. Ring 20, 1-2: 21-33.
- Meissner W., Ściborski M., Włodarczyk A. 2002. *Wader studies of the Waterbird Research Group "Kuling" in 1999-2001*. Ring 24, 1: 131-135.
- Mitrus C., Kuczborski R., Słupek J. 1998a. *Report on ringing and observations of waders at the Bug river (central-eastern Poland) in 1986-1990*. Ring 20, 1-2: 73-76.
- Mitrus C., Kuczborski R., Słupek J. 1998b. *The autumn passage of the Wood Sandpiper (Tringa glareola) in the Bug valley – dynamics and biometry*. Ring 20, 1-2: 107-116.
- Mitrus C., Kuczborski R., Słupek J. 1998c. *Autumn passage of the Common Sandpiper Actitis hypoleucos in the Bug River valley – dynamics and biometry*. Not. Orn. 39: 13-25.
- Polakowski M., Juniewicz M. 1998. *Autumn migration of waders at the Sewage Treatment Plant in Fasty near Białystok (eastern Poland)*. Ring 20, 1-2: 59-68.
- Stawarczyk T., Grabiński W., Karas A. 1996. [Migration of Charadriiformes on Nyski and Turawa Reservoir in years 1976-94]. Ptaki Śląska 11: 39-80.
- Wiehle D. 1999. *Migration of waders (Charadrii) in the fishponds in Spytkowice in years 1995-1999*. Ring 21, 2: 91-105.
- Wójcik C., Rydzkowski P., Ściborski M. 1999. *The spring migration of waders Charadrii in the lower Vistula valley*. Ring 21, 2: 79-90.