# WADER RINGING AT THE TUROV ORNITHOLOGICAL STATION, PRIPYAT VALLEY (S BELARUS) IN 1996-2003

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## INTRODUCTION

The Turov ornithological station was founded in 1996, when ornithologists from Pripyatsky State Landscape Hydrological Reserve (Turov) and Institute of Zoology (Minsk) began to ring breeding waders (mainly chicks) at the floodplain meadows. Since autumn 1999 we participated in the project WWI (Wader Wetland Inland) with help and support of German colleagues from NABU and started catching migrating waders. First field ornithological camp near Turov was organised in autumn 2000 with support of APB (BirdLife Belarus). Starting from spring 2000 we worked in the frameworks of project "Tringa glareola 2000". This paper summarises results of wader ringing at the Pripyat floodplain during 1996-2003.

# STUDY AREA AND METHODS

The studies on the waders migration were conducted in the floodplain meadows of the River Pripyat in the vicinity of Turov village (Gomel Region –  $52^{\circ}04$ 'N,  $27^{\circ}44$ 'E). The research area is a small island, about 1 km<sup>2</sup>. The area is used as a pasture throughout the growing season. Large fluctuations of water level in the Pripyat in different years and seasons are characteristic features of study area. As a result large muddy areas appear and disappear in floodplain.

The main methods used to study waders migration are visual counts and trapping for ringing. Counts at the standard routes were carried out in 1998-2003 from the middle of March till the first half of October. Counts were made once or more a pentade, according to standard pentade scheme accepted after Busse (2000). All foraging and migrating birds seen along the 1.5 km transect were recorded.

The regular catches of migrating waders started in the autumn 1999 (small numbers of adult waders were caught in 1997-1999 at the nests during behavioural

studies). In Table 1 the terms of catching are presented. The most efficient catching method was the use of walk-in traps (Meissner 1998), which were controlled every three hours from dawn to dusk. During 1999-2003 the various numbers of traps were used: the maximum in spring 2003 (12) and minimum in autumn 2001 (4). Depending on the water level, the traps were moved if necessary. Mist-nets were used rarely and not regularly.

forms of water eaterning at the ringyat hoodplain during 1999 2000							
	Spring	Autumn					
1999	_	28 Aug. – 9 Oct.					
2000	7 May – 11 May	24 Jun. – 23 Sep.					
2001	1 Apr. – 8 May	2 Aug. – 11 Oct.					
2002	16 Mar. – 3 Jun.	5 Jul. – 28 Aug.					
2003	20 Apr. – 29 May	9 Jul. – 5 Sep.					

Table 1Terms of wader catching at the Pripyat floodplain during 1999-2003

All captured birds were ringed, weighed and measured, and their moult and plumage were described. Waders were weighed with electronic balance to nearest 0.1 g. Some morphological measurements were also taken: the total head length (Green 1980), bill length to feathering (Prater *et al.* 1977), bill length to nostril – the distance from the tip of bill to the edge of nostrils (Prater *et al.* 1977), tarsus length – method with bending toe back (Svensson 1992), length of tarsus and toe (Piersma 1984), length of wing – maximum chord method (Evans 1986). Wing length and length of tarsus and toe were measured with stopped rule (exact to 1 mm), the rest of measurement were taken with the use of callipers (exact to 0.1 mm). Retrapped birds were only weighed.

The chicks were ringed at the nests during behavioural and ecological studies in 1996-2003. Special ringing activities were also carried out during study period.

## **RESULTS OF RINGING**

During eight years 5447 waders from 24 species were caught (Table 2). Three species of waders dominated among the ringed birds: Ruff (*Philomachus pugnax*), Redshank (*Tringa totanus*) and Lapwing (*Vanellus vanellus*). Great numbers of ringed Ruffs were connected with catching during spring passage in 2001-2003 (Table 1). In spring the Ruff is the most abundant and numerous species in Pripyat floodplain (Mongin and Pinchuk 1999). Large numbers of such species as: Lapwing, Redshank, Ringed Plover (*Charadrius hiaticula*), Terek Sandpiper (*Xenus cinereus*) were connected with large breeding semi-colony of waders in the vicinity of Turov with breeding densities (breeding pairs per 1 km<sup>2</sup>) varying in different years: Lapwing – 100-120, Redshank were the most numerous breeding species. However, more than 90% of ringed Lapwings were nestlings, while situation with Redshank

Numbers of waders ringed at the Pripyat floodplain during 1996-2003										
	1996	1997	1998	1999	2000	2001	2002	2003	1997- 2003	
Pulli:										
Vanellus vanellus	15	36	57	33	119	170	292	86	808	
Tringa totanus			20	51	27	12	52	21	183	
Charadrius hiaticula	5	15	27	35	20	13	35	23	173	
Xenus cinereus	2	6	5	37	9	6	22	2	89	
Limosa limosa		2	16	30	5	3	3		59	
Tringa glareola								6	6	
Gallinago gallinago					4				4	
Haematopus ostralegus							2		2	
Philomachus pugnax	1								1	
Tringa nebularia								1	1	
Actitis hypoleucos						1			1	
Total	23	59	125	186	184	205	406	139	1327	
Full-grown:		I	1		1		1	1		
Philomachus pugnax				8	95	490	268	384	1245	
Tringa totanus					96	170	423	213	902	
Tringa glareola				14	120	53	155	240	582	
Gallinago gallinago				19	194	21	145	118	497	
Charadrius hiaticula		18	2	29	52	9	49	30	189	
Xenus cinereus		4	1	28	14	13	61	48	169	
Gallinago media					56	25	30	23	134	
Calidris alpina				11			49	35	95	
Actitis hypoleucos					11	11	39	28	89	
Vanellus vanellus					29	16	18	4	67	
Charadrius dubius					1	1	18	21	41	
Calidris temminckii						1	13	27	41	
Tringa stagnatilis				1	1		1	13	16	
Limosa limosa					10		1		11	
Tringa ochropus						3	5	3	11	
Calidris minuta					2	4	1		7	
Lymnocryptes minimus				5	1				6	
Tringa nebularia						2	3		5	
Limicola falcinellus							4		4	
Haematopus ostralegus						1	2		3	
Calidris ferruginea							2	1	3	
Numenius arquata					1				1	
Phalaropus lobatus							1		1	
Total	0	22	3	115	683	820	1288	1188	4119	
Grand total	23	81	128	301	867	1025	1694	1327	5446	

was quite opposite – only about 15% were nestlings. The reason of such difference was not clear.

In 1988-2003, 25 long-distance recoveries from eight countries were obtained (Table 3). The most numerous records refer to the Common Snipe (*Gallinago gallinago*) and the Lapwing. These species are game birds in France and Italy, where they have their wintering grounds, which resulted in the large numbers of recoveries from these countries. The longest distances between ringing and recovery sites were: 5188 km – an adult male Ruff ringed on 2 May 2001 was shot in Yakutia (Russia) on 18 May 2002, and about 6000 km – a juvenile Great Snipe (*Gallinago media*) ringed on 26 July 2001 was shot in Gabon at the beginning of April 2003 (Mongin 2003).

Table 3
Numbers of waders ringed on the Pripyat floodplain and recovered abroad
the Belarus during 1998-2003

Countries	FRANCE	ITALY	POLAND	SPAIN	RUSSIA	GABON	YUGOSLAVIA	LITHUNIA	Total
Gallinago gallinago Vanellus vanellus Philomachus pugnax Calidris alpina Gallinago media Tringa totanus Tringa glareola	7 8	3	1	1	1	1	1	1	11 8 2 1 1 1 1 1
Total	15	4	1	1	1	1	1	1	25

Five waders ringed in other countries were reported: four Dunlins (*Calidris alpina*) with foreign rings (BOLOGNA, BUDAPEST and GDAŃSK – 2), caught from one migration flock during two days – 13-14 May 2002; and one Ringed Plover with HIDDENSEE ring.

From the spring 2000 we started colour marking of Wood Sandpipers (*Tringa glareola*) in the frameworks of project "Tringa glareola 2000" (Remisiewicz 2002). In total 229 birds were marked.

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