







Newsletter

Number 33

December 2007





Newsletter 33

Compiled by Yves Ferrand Coordinator

Office national de la chasse et de la faune sauvage Research Department Migratory Birds Unit BP 20 F 78612 Le Perray-en-Yvelines Cedex

December 2007

This Newsletter is published with financial assistance of Office national de la chasse et de la faune sauvage





This Newsletter seeks to be a contact organ to inform the members of the Woodcock and Snipe Specialist (research unit of Wetlands International (WI) and of IUCN-The World Conservation Union. The subjects of WSSG are species of the genera *Scolopax*, *Gallinago* and *Lymnocryptes* that in several respects differ remarkably from all other wader species. For this reason a separate research unit was established.

CONTENTS	Page
Editorial	3
Study of Snipes migration during autumn 2007 in Southern Belarus Pavel Pinchuk, Natalia Karlionova, Dzmitry Zhurauliou, Ivan Bogdanovich, Denis Kite & Yauheni	4 SLIZH
2007 Belarus Woodcock Report Edward Mongin & Youri Bogutski	7
Spring migration of Woodcock (Scolopax rusticola) in Central Russia Sergei Fokin & Petr Zverev	9
First record of a short-bill woodcock in North-West Russia	12
The European Woodcock (Scolopax rusticola) in Germany – interpretation of bag statistics ag background of hunting modalities JÖRG E. TILLMANN	ainst the 13
Roding Woodcock (Scolopax rusticola) census in the "Vormsi Island Woodcock Sanctuary" Lorris Galli, Silvio Spano & Tarvo Valker	16
2006/07 French Woodcock report François Gossmann, Claudine Bastat, Michel Guenezan & Yves Ferrand	18
First observation of an American Woodcock in France and in the Western Palearctic	24
Evaluation of the 2006/07 Woodcock hunting season in France JEAN-PAUL BOIDOT, JEAN-FRANÇOIS CAU & JEAN-MICHEL GAU	25
2006/07 French Snipes report Gilles Leray & Yves Ferrand	28
Northern Forest Woodcock Initiative	

ent Woodcock and Snipe publications

No rest for the Woodcock & Snipe Specialist Group ! All research teams have been continuing to work on their respective topics.

Russia is always a crucial area for European populations of Woodcock and Snipes and an important effort is being made in this country. In Central Europe, things are also moving. Closer contacts with Polish colleagues could lead to a reinforced cooperation in Snipe research in Europe. Precise data on German Woodcock hunting bags are now available (in this issue). We hope this will continue in order to have more and more comprehensive information on the situation of the European species of Woodcock and Snipes.

Unfortunately, it is always difficult to collect precise information outside Europe, except in North America where habitat management actions are in progress (in this issue) to stop the decrease of American Woodcock populations. But in South America, Indonesia and Africa very little research is carried out on our favourite species. This is our main challenge, which requires to devote more time to contact biologists and researchers in the concerned countries.

The first IUCN SSC Chairs' Meeting which will be organised on 11-14 February 2008 in Al Ain, Abu Dhabi (United Arabian Emirates) could be an opportunity to enlarge our network. Your coordinator will attend this meeting where 80 Chairs of SCC Specialist Group, IUCN Regional Directors and colleagues of the IUCN Species Programme will be present.

Four years ago we organised our Sixth Workshop in Nantes (France). Since, new projects have been launched and most of them probably have already preliminary results to present. We have to think about the Seventh Workshop ! It could be organised in 2009 or 2010. I know that it is still far for everybody but the earlier we prepare it the better it is. Nothing is defined but it could take place in Russia, in the Leningrad region.

Finally, I would like to underline this incredible first observation of an American Woodcock in Europe (this issue). Could it not be a sign of the necessity to increase exchange of information between all regions of the World ? even if this does not follow the "classical flyways" !

I wish you a very happy New Year and much success with your scientific work.

Yves Ferrand Coordinator

Office national de la chasse et de la faune sauvage Research Department – Migratory Birds Unit BP 20 F – 78612 Le Perray-en-Yvelines Cedex Telephone : +33 1 30 46 60 16/00 ; Fax : +33 1 30 46 60 99 e.mail : <u>yves.ferrand@oncfs.gouv.fr</u>

Study of Snipes migration during autumn 2007 in Southern Belarus

PAVEL PINCHUK, NATALIA KARLIONOVA, DZMITRY ZHURAULIOU, Institute of Zoology NASB, Academichnaya Str., 27, 220072 Minsk, Belarus *E-mail:* ppinchuk@mail.ru, bym@biobel.bas-net.by IVAN BOGDANOVICH, DENIS KITEL, Brest State University, Belarus YAUHENI SLIZH, Grodno State University, Belarus

Migratory waders travel across Eastern Europe much slower in the autumn than in spring and use a wide spectrum of wetlands for resting and refueling (Glutz von Blotzheim *et al.*, 1975). Snipes migrate mainly through inland parts of Europe. The river floodplains are among the main suitable stop-over places for waders in inland Europe during autumn migration. However, stop-over places situated on the floodplains of rivers are characterized by changeable water conditions, which limit availability of food resources (Meissner, 2001).

Studies of wader migration started at the Pripyat floodplain in 1998. Waders were counted and caught practically every year, but we covered almost all the period of autumn migration only in 2007. The main aim of this paper is to describe autumn migration of three Snipe species through the Pripyat floodplain in 2007.

Methods and study area

During June-October 2007 we carried out studies on the autumn migration of three Snipe species (Jack Snipe Lymnocryptes minimus, Common Snipe Gallinago gallinago and Great Snipe Gallinago media) on the floodplain meadows of the Pripyat river in the vicinity of the town of Turov, Gomel Region, southern Belarus (52°04'N, 27°44' E; Figure 1). Large seasonal and year-to-year fluctuations of water level are characteristic features of the Pripyat floodplain (Pinchuk *et al.*, 2005). The area was used as a pasture throughout the growing season.

Counts of migrating waders along standard routes were made twice or more per pentade, according to the standard pentade scheme accepted after Berthold (1973). All the flushing and flying birds seen along the route of about 4 km were recorded.

The most efficient method for catching migrating Common Snipes was the mist-nets with playback of recorded Snipe calls (Pinchuk & Karlionova, 2006). Most Jack Snipes were caught in walk-in traps (Meissner, 1998) and Great Snipes were caught using both methods.

All caught birds were ringed and aged according to the criteria of Prater *et al.* (1977) and CICB & OMPO (2002).

Results

Jack Snipe Lymnocryptes minimus

First migrating Jack Snipes were recorded in the study area as from the second half of September (first record: 18 September; Table 1). It was observed 11 times for a total number of 12 birds. 2 birds were counted only in one case.



Figure 1: Localisation of the study area (black dot).

Species	First record	Last record	N count	N caught
Jack Snipe Lymnocryptes minimus	18/09	14/10	12	8
Common Snipe <i>Gallinago gallinago</i>	26/06	14/10	4123	997
Great Snipe <i>Gallinago media</i>	26/06	29/08	90	16

Table 1: Migration terms and number of counted and caught Snipes on the Pripyat floodplain during autumn 2007.

8 Jack Snipes were caught. All caught birds were adults. One bird ringed in the study area on 14 October 2005 as an adult was controlled on 10 October 2007 at the same site.

We probably recorded only the beginning of Jack Snipe migration. In previous years birds were recorded till the end of November. Another problem is that the Jack Snipe is a well camouflaged species with a very short take off distance (less than 1 m). This can lead to a significant underestimate of the numbers of this species.

Common Snipe Gallinago gallinago

Common Snipe is the most numerous wader species in the Pripyat floodplain during autumn migration and was present in the study area during all periods of observation.

Two migration peaks were recorded (Figure 2). The first one was noted in the beginning of July. During this period, the largest concentration was observed on 2 July (140 birds). A rapid rise of water level in the first decade of July led to a rapid decrease in Common Snipes numbers. Later, when water level was stable and started to slowly decrease, the number of birds increased.

The second peak, which can be considered as the main migration peak, was observed from mid-August to mid-September. During this period, the largest concentrations were observed on 29 August (285 birds).

Adult birds were trapped during all the autumn migration period (Figure 3). This result tends to suggest that common snipes from other

breeding populations possibly cross Southern Belarus during autumn migration. However, birds from local breeding populations can stay in the area till mid-August. Two 5-day chicks were found in the study area on 12 July. Thus, these birds might start flying only in mid-August.

54 birds were recaptured in the study area (5.4% of total number) from 1 to 57 days after the first capture. The mean stop-over period was 14.6 days. 8 birds were recaptured 3 times and one bird 4 times. No birds ringed during the first migration peak were recaptured during the second peak of migration and only one retrap was obtained during the first peak.



Figure 2: Dynamic of autumn migration of Common Snipe Gallinago gallinago in the Pripyat floodplain in 2007 (bars: maximum number of birds per count; line: mean number of birds per pentade).



Figure 3: Catching dynamics of first-year (grey bars) and adult (black bars) Common Snipes Gallinago gallinago in the Pripyat floodplain in autumn 2007.

Great Snipe Gallinago media

Great Snipe breeds in the Pripyat floodplain. A lek of about 25 males was located about 1 km from the study area and nests were found very close.

As in Common Snipe, two migration peaks were recorded (Figure 4). A first peak occurred at the end of June (we probably observed the end of first peak). In this period, the largest concentration was observed on 26 June (27 birds), in the first day of regular counts. A second migration peak was recorded in the second half of July. A maximum of 10 birds were observed on 23 August.

The first peak was mainly formed by adult birds (Figure 5). The first juvenile was caught on 14 July. During the second peak of migration only one adult bird was caught. There was no recapture of Great Snipe during the study period.

Conclusion

Common Snipe and Great Snipe showed an example of different migration strategies during autumn migration in the Pripyat floodplain. These differences are due to the winter grounds distribution of these species. Great Snipe is a long-distance migrant and adopts an S-strategy during migration (Alerstam, 1993). This explains short terms of autumn migration of this species in Southern Belarus. On the contrary, winter grounds of Common Snipe are located close to the breeding grounds, and this species is a typical example of B-strategy migration (Alerstam, 1993; Meissner, 2001). Autumn migration of Common Snipe in Southern Belarus lasts more than three months and birds can stay at the stop-over sites about two months.

Changes in water level in the Pripyat river significantly influence terms of Common Snipe migration. A rapid rise of water level reduced stop-over time owing to a lack of suitable foraging habitats during autumn migration. However, obtained retraps point to a prolonged stop-over duration of birds in case of a stable or slightly changeable water level. Our data confirmed the importance of the Pripyat floodplain as a stop-over site for migrating waders.



Figure 4: Dynamic of autumn migration of Great Snipe Gallinago media in the Pripyat floodplain in 2007 (bars: maximum number of birds per count; line: mean number of birds per pentade).



Figure 5: Catching dynamics of first-year (grey bars) and adult (black bars) Great Snipes Gallinago media in the Pripyat floodplain in autumn 2007.

Acknowledgements

We are grateful to all colleagues who helped in the fieldworks at the Turov ringing stations: A.Zyatikov, A.Usau, A.Rak, T.Briginets, M.Koloskov, D.Harkovich.

References

Alerstam T. 1993. Bird migration. Cambridge University Press. Cambridge, 409 pp.

Berthold P. 1973. Proposals for the standardisation of the presentation of data of animal events, especially migratory data. Auspicium, Suppl.: 49-57.

CICB & OMPO. 2002. Key to ageing and sexing of the Common Snipe *Gallinago gallinago* by the study of feathers. CICB & OMPO, Paris.

Glutz von Blotzheim U.N., Bauer K.M. & E. Bezzel. 1975. Handbuch der Vögel Mitteleuropas. 6. Akademische Verlag. Wiesbaden, 840 pp.

Meissner W. 1998. Some notes on using walk-in traps. Wader Study Group Bulletin 86: 33-35.

Meissner W. 2001. Strategie wędrówkowe siewkowców (Charadrii) zachodniej Palearktyki Wiadomóści ecologiczne XLVII, 2: 119-141

Pinchuk P., Karlionova N., Zhurauliou D. 2005. Wader ringing at the Turov ornithological station, Pripyat Valley (S Belarus) in 1996-2003. Ring 27: 101-105.

Pinchuk P., Karlionova N. 2006. Use of playback calls for catching migrating Common Snipe *Gallinago gallinago* in autumn. Wader Study Group Bulletin 110: 64-65.

Prater A.J., Marchant J.H. & Vuorinen J. 1997. Guide to the identification and ageing of Holarctic waders. BTO Guide 17, 170 pp.

2007 Belarus Woodcock Report

EDWARD MONGIN, APB-Birdlife Belarus, Institute of Zoology NAS, Academicheskaya str. 27, 220072 Minsk, Belarus

E-mail: edward.m@list.ru

YURI BOGUTSKI, Berezinski Biosphere Reserve, Domzeritsi, Vitebsk Region, Belarus

This year the APB-Birdlife Belarus (NGO Akhova Ptushak Batskaushchyny) and the Institute of Zoology continued the monitoring survey of Woodcock on the territory of Belarus. Roding censuses, ringing and night counts were carried out.

Breeding survey

A census of the breeding population from the observation of roding males was carried out at 60 listening points, randomly chosen in 10 squares (12x12 km), during a period of around a one-month (mid-May-June). Observations took place at dusk during 120 minutes. Roding males were recorded at most listening points. In total 727 contacts with roding males were registered at the census points. Average number of woodcocks per 2 hours was 12.1 ± 8.16 . Maximum number of contacts at one point was 33. The occupation rates of the high and low abundance sites are 0.833 and 0.150 respectively. The data collected in 2005-2007 are presented in Table 1.

This season we conducted additional counts of roding woodcocks based on questionnaires distributed among forestry workers of different state-supported institutions. We received 233 questionnaires from 24 districts. Unfortunately preliminary analysis showed that many forestry workers (51%) did not use current count methods or sent unrealistic data. Existing forestry practice does not promote effectiveness of such a method of Woodcock count at present.

Ringing and survey during the migratory period

Woodcock ringing and study of migration were carried out in the Berezinsky Reserve vicinities. The study period was 15 September

Year	2005	2006	2007
N. listening points	60	60	60
High abundance sites	0.867	0.717	0,833
Low abundance sites	0.133	0.283	0,150
Proportion of positive sites	1	1	0,983
Average number of contacts	11.6 <u>+</u> 6.91	10.5 <u>+</u> 7.56	12.1 <u>+ </u> 8.16

Table 1: Proportion of high and low abundancesites and average number of contacts during two-hour counts.

- 5 November. This autumn season was very droughty and a few foraging birds were observed during night trips. Water level in soilreclamation canals was reduced by 0.5 metres compared with the last autumn. Duration of a night trip was about 2 hours. We recorded 188 feeding birds during 53 night trips and 55 woodcocks were caught and ringed. We also recaptured a bird which had been ringed two years before at the same place.

Passage dynamics according to records of

nocturnal contacts is given in Figure 1. Age ratio (juv/ad) among caught woodcocks was 0.5 and thus 32.7% of caught birds were juveniles. This is probably related to a bad breeding success in Belarus and the central part of Russia. Passage dynamics of Woodcock and age-ratio of caught birds according to grouped observations by pentads are shown in Figure 2. The main peak of passage was observed between the sixth pentad of September and the second pentad of October.

Acknowledgements

We thank Oleg Ostrovsky, Maxim Tarantovich, Nikolay Cherkas, Marina Dmitrenok, and all the volunteers who participated in the survey. We also thank Alexander Kashtalian and other assisted our work. We are grateful the *Office national de la chasse et de la faune sauvage* for funding the survey.



Figure 1: Passage dynamics of Woodcock according to records of nocturnal contacts in vicinities of the Berezinsky Reserve in 2007. The black dot indicates day without count.



Figure 2: Passage dynamics of Woodcock and age-ratio of caught birds. Data are grouped in five-day periods.

Spring migration of Woodcock (*Scolopax rusticola*) in Central Russia

SERGEI FOKIN, PETR ZVEREV, State informational-analytical center of game animals and environment (Federal state office "Centrokhotcontrol") - Russian Ministry of agriculture - Teterinsky per., 18/8, 109004, Moscow, Russia

E-mails: rog@mk.ru,_peterzverev@mail.ru

Research on Woodcock in Russia is carried out annually since 1993 in cooperation and with the financial support of the French *Office national de la chasse et de la faune sauvage* (ONCFS).

In the present article, we focus on some results on Woodcock spring migration which could be a basis to optimize periods of spring hunting in Russia.

Methods

Regular ornithological observations are carried out every spring in the district of Petushki (Vladimir region) at two sites which represent two types of habitat: flood woods in Klyazma river valley (vicinities of Pokrov - 55° 54 'N, 39°12' E ; altitude: 110-120 m) and mixed forest in the same area (vicinities of Drovnovo - 56° 05' N, 39° 09' E; altitude: 150-170 m). This study area represents a typical Woodcock breeding area Central Russia. The observations were carried out daily in spring by researchers of the Woodcock scientific group within the framework of special spring expeditions and by local birdwatchers. Data on bird arrival and spring migration have been collected for Woodcock since 1984 and since 1993 for other species.

During migration, censuses of roding woodcocks were carried out at optimal listening points from the beginning to the end of the roding period. Time and direction of flight of each male was registered.

Birds arrival during spring migration

The Woodcock is an early migrant. Its migration is linked to a daily temperature average above 0°C and thaw. Small places with no snow can be sufficient for Woodcock to stay. The front of Woodcock spring migration is located at the snow-melt front. Observations shown that the average date of Woodcock arrival (first roding male) is 8 April (n = 23) for the 1984-2007 period (Table 1).

Usually, the date of the first Woodcock observation in the forest and the beginning of roding coincide. Exceptions are linked to changes in weather conditions (cold spell) and the return of winter temperatures. In this case, the Woodcock can stay in the forest but does not rode. From data on arrival dates of other migratory bird species, we found that 10 bird species could serve as indicators of Woodcock arrival (Table 2).

Usually the Woodcock arrives simultaneously or in 1-2 days after the first trushes (*Turdus philomelos* and *T. Iliacus*) and robins (*Erithacus rubecula*). Data shows that the first roding male can be observed, in average, 4 days after the arrival of the White Wagtail (*Motacilla alba*) and Common Snipe (*Gallinago gallinago*), 1 week after the Skylark (*Alauda arvensis*), Lapwing (*Vanellus vanellus*) and Common Blach-headed Gull (*Larus ridibundus*), 12 days after the Starling (*Sturnus vulgaris*) and 1 month after the first rooks (*Corvus frugilegus*).

1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
8.04	15.04	10.04	14.04	-	1.04	2.04	6.04	6.04	6.04	12.04	8.04
1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
13.04	5.04	17.04	13.04	7.04	5.04	9.04	14.04	26.03	10.04	9.04	22.03

 Table 1: Dates of the first roding Woodcock observation in the study area for the 1984-2007 period.

Years	Scolopax	Motacilla	Turdus	Turdus	Erithacus	Larus	Vanellus	Gallinago	Corvus	Sturnus	Alauda
	rusticola	alba	iliacus	philomelos	rubecula	ridibundus	vanellus	gallinago	frugilegus	vulgaris	arvensis
1993	06.04	02.04	05.04	06.04	06.04	27.03	01.04	01.04	15.03	26.03	27.03
		(+4)	(+1)	(0)	(0)	(+10)	(+5)	(+5)	(+22)	(+11)	(+10)
1994	12.04	07.04	11.04	11.04	11.04	04.04	30.03	12.04	11.03	02.04	01.04
		(+5)	(+1)	(+1)	(+1)	(+8)	(+14)	(0)	(+32)	(+10)	(+11)
1995	08.04	06.04	10.04	10.04	11.04	-	-	31.03	-	-	05.03
		(+2)	(-2)	(-2)	(-3)			(+8)			(+3)
1997	05.04	04.04	04.03	03.04	06.04	02.04	02.04	02.04	28.02	31.03	31.03
		(+1)	(+1)	(+2)	(-1)	(+3)	(+3)	(+3)	(+36)	(+5)	(+5)
1998	17.04	09.04	17.04	18.04	18.04	01.04	30.03	08.04	23.02	27.03	28.03
		(+8)	(0)	(-1)	(-1)	(+16)	(+18)	(+9)	(+43)	(+21)	(+20)
1999	13.04	02.04	02.04	07.04	02.04	29.03	02.04	11.04	03.03	25.03	01.04
		(+11)	(+11)	(-6)	(+11)	(+15)	(+11)	(+2)	(+41)	(+19)	(+12)
2000	07.04	03.04	08.04	07.04	07.04	03.04	30.03	03.04	01.03	29.03	01.04
		(+4)	(-1)	(0)	(0)	(+4)	(+8)	(+4)	(+33)	(+9)	(+6)
2001	05.04	05.04	05.04	05.04	05.04	04.04	04.04	06.04	13.03	21.03	03.04
		(0)	(0)	(0)	(0)	(+1)	(+1)	(-1)	(+23)	(+15)	(+2)
2002	09.04	07.04	08.04	05.04	11.04	30.03	11.03	20.03	01.03	12.03	13.03
		(+2)	(+1)	(+4)	(-2)	(+10)	(+29)	(+20)	(+39)	(+28)	(+27)
2003	14.04	05.04	12.04	12.04	12.04	05.04	09.04	12.04	11.03	29.03	05.04
		(+9)	(+2)	(+2)	(+2)	(+9)	(+5)	(+2)	(+34)	(+16)	(+9)
2004	26.03	28.03	26.03	26.03	26.03	26.03	26.03	26.03	05.03	22.03	22.03
		(-2)	(0)	(0)	(0)	(0)	(0)	(0)	(+21)	(+4)	(+4)
2005	10.04	4.04	09.04	09.04	09.04	03.04	03.04	08.04	16.03	03.04	06.04
		(+6)	(+1)	(+1)	(+1)	(+7)	(+7)	(+2)	(+25)	(+7)	(+4)
2006	09.04	31.03	06.04	06.04	06.04	04.04	04.04	04.04	16.03	03.04	05.04
		(+9)	(+3)	(+3)	(+3)	(+5)	(+5)	(+5)	(+24)	(+6)	(+4)
2007	22.03	27.03	31.03	22.03	26.03	22.03	22.03	28.03	07.03	11.03	18.03
		(-5)	(-9)	(0)	(-4)	(0)	(0)	(-6)	(+15)	(+11)	(+4)
Average	07.04	(+3.8)	(+0.6)	(+1.1)	(+0.4)	(+6.7)	(+7.9)	(+3.8)	(+29.8)	(+12.1)	(+8.1)

Table 2: Date of the first roding Woodcock observation and of arrival of 10 migratory bird species for the 1993-2007 period in the study area (Vladimir region). In brackets, number of days between the date of Woodcock arrival and the date of other species' arrival (+ when other species arrives before the first roding male; - when other species arrives after the first roding male).

Direction of migrations

As in autumn, Woodcock spring migration occurs only by night. However, it seems that the start of migration could take place at the same time as roding.

In order to test this hypothesis, directions of roding woodcocks were registered in the evening and in the morning during 3 consecutive springs (2005, 2006 and 2007) at the same site. Results showed that a large proportion of males flied in the east and north direction from 9 to 21 April (Table 3). This period corresponds to the usual Woodcock migration period in Central Russia. After 22 April, no particular roding direction could be determined.

In 2005, 2006 and 2007 the number of roding woodcocks that flied towards the east and/or

north represent 66%, 61% and 62% respectively.

This tends to show that during the Woodcock spring migration period, roding males mainly fly in the north and east direction, and could confirm that migrating woodcocks participate in roding. Of course, local birds also participate in roding flights following no special direction, which explains the proportion of opposite directions registered.

Many migrants were flying already in the darkness during a "third" evening wave of roding. This does not exclude also the presence of males presumably local flying in different directions, but the migrants follow the main direction more.

Roding features during migration

During migration, roding in the morning is usually more intense than in the evening, and the main northeast direction is more marked. It begins in full darkness, approximately 1h 30 min before sunrise and stops 20-30 minutes prior to dawn just before the songs of Black Grouse, Robin and trushes songs begin.

Roding can be observed in untypical habitats such as floodplains, meadows, fields and villages, for example.

The migration peak is usually observed within 2-4 days, however total migration can stretch over last 2-3 weeks.

After an intense roding period during migration, the number of roding males drops, especially in the morning. This coincides with the beginning of nesting when males are busy with females. After the start of incubation, males are "free" and roding activity again increases (Ferrand & Gossmann, 1995). In our study area, the number of roding males was at its minimum on 25 April and then increased again some days later after 5-7 May.

Quite often, cold weather conditions and snow return in April. In this case, it is possible to observe « return migration » and a major part of roding males fly in a general south-west direction (Fokin & Zverev, 2003). Analysis of Woodcock wings collected by hunters have shown that the first roding males are mainly adults (Fokin & Blokhin, 2000; Fokin & Zverev, 2003). If hunting opens early, the proportion of adults in hunting bags increases, and conversely.

Intensity and dates of migration depend on spring conditions. In case of an early and mild spring, adults and juveniles arrive simultaneously, as for example in 2001.

The Woodcock starts to nest very early, sometimes just after arrival of the first birds. We already found females on nests with a laying clutch of 4 eggs in the middle of April, when woods are still bare. At this time the snow has not yet completely disappeared in the forest. In our study area, the earliest Woodcock nests were found on 22 April 2000 and on 22 April 2002. But we also found broods corresponding to earlier egg laying: 16 April 1999 and 8 April 2001, for example. In both cases, this was 3 days after the arrival of the first Woodcock. Usually, the breeding and roding periods last mid-July. Therefore, the total Woodcock till breeding period in Central Russia stretches over 3.5 months or more.

Year/Direction	East	North, North-West and North-East	West	South, South-West and South-East	Total
2005	62 (48%)	23 (18%)	18 (14%)	26 (20%)	129
2006	34 (24%)	53 (37%)	29 (20.5%)	26 (18.5%)	142
2007	72 (35.7%)	53 (26.3%)	35 (17.3%)	42 (20.7%)	202

Table 3: Number of roding male registered at the same site in 2005,2006 and 2007 from 9 to 21 April according to the direction of roding.

Spring migration and hunting period

In Russia, Woodcock spring hunting is allowed during 10 days and only for roding in the evening. It opens simultaneously with other kinds of spring hunting: male ducks, geese, Black Grouse and Capercaillie. Each year, hunting opens in different periods depending on spring conditions. Dates of spring hunting are defined so as to correspond to the peak of migration of ducks and geese. Thereby, periods allowed for spring hunting do not always coincide with the period of the Woodcock migration peak (Table 4).

Because of the high abundance of Woodcock in Ural and in north and east European Russia, and considering the low level of Woodcock spring hunting bags compared with those in wintering areas, we think that an earlier Woodcock spring hunting opening in Central Russia, guided by the migration peak, could be considered.

References

Ferrand Y. & F. Gossmann. 1995. La Bécasse des bois. Paris, Eds Hatier, 166 pp.

Fokin S. & Y. Blokhin. 2000. Roding activity, spring hunting and hunting bags of Woodcock (Scolopax rusticola) in Russia. Fifth European Woodcock and Snipe Workshop. Proceedings of an International Symposium of the Wetlands International Woodcock and Snipe Specialist Group, Czempin, Poland 3-5 May 1998. Wetlands International Global Series. 4: 19 - 24. Fokin S. & P. Zverev. 2003. Woodcock and hunting on it. Moscow: Veche, 384 pp.

Year	Woodcock migration peak	Hunting period	Time difference
1980	19-23.04	25.04-04.05	In late
1982	11-17.04	23.04-02.05	In late
1984	24-27.04	13-22.04	In early
1985	20-25.04	20-29.04	In time
1986	23-25.04	19-28.04	In time
1987	27.04-02.05	18-27.04	In early
1989	12-20.04	15-24.04	In time
1993	20-24.04	17-26.04	In time
1994	13-25.04	23.04-02.05	In late
1995	08-15, 21-23.04	22.04-01.05	In late
1997	16-22.04	17-26.04	In time
1999	11-15.04	17-26.04	In late
2001	06-13, 17-23.04	21-30.04	In late
2002	14-20.04	13-22.04	In time
2003	20-25.04	19-28.04	In time
2004	09-16.04	17-26.04	In late
2005	11-16, 21-23.04	23.04-02.05	In late
2006	15-22.04	forbidden	forbidden
2007	24-25.03, 9-13.04	14-23.04	In late

Table 4: Peak of Woodcock spring migration and period of Woodcock spring hunting (Vladimir Region).

First record of a short-bill woodcock in North-West Russia

VADIM VYSOTSKY, Zoological Institute, Russian Academy of Sciences, Universitetskava nab. 1, 199034, St.Petersburg, Russia.

E-mail: avesvgv@zin.ru

As is known in Russia short-bill woodcocks have rarely been recorded in autumn (Fokin et al., 2003) and only one observation was made in spring (Povarenkov, 2004). A.S.Malchevski & Yu.B.Pukinski (1983) described a woodcock from the Leningrad Region with a damaged short bill. The abovementioned specimen was erroneously cited by Fokin et al. (2003) & Povarenkov (2004) as the shortbill form of the woodcock. A short-bill woodcock was shot by the author during roding in the Karelian Isthmus 65 km north of St.Petersburg near the village of Tsvelodubovo (N 60° 25' 40", E 29° 35' 07") on 1 May, 2004. This male demonstrated very frequent display sounds ("psci-psci" only). The male had well developed gonads (10x22 mm), a normal weight (280 g), rather short wings (185 mm), and a short bill (40,5 mm). Its bill was normally developed, without trauma. This is the first documented record of the short-bill woodcock during the breeding season in North-West Russia. This specimen is deposited at the Department Ornithology, Zoological Institute of the Russian Academy of Sciences, St.Petersburg.

References

Fokin S., Kormilitcin A. & Povarenkov A. 2003. Short-bill woodcocks in Russia. Woodcock & Snipe Specialist Group Newsletter 29: 13.

Malchevski A.S. & Pukinski Yu.B. 1983. The birds of Leningrad Region and adjacent territories. Vol. 1. Leningrad Univ. Press, 480p. (In Russian).

Povarenkov A. 2004. The first short-bill woodcock bagged on roding in Russia. Woodcock & Snipe Specialist Group Newsletter 30: 18.

The European Woodcock (*Scolopax rusticola*) in Germany – interpretation of bag statistics against the background of hunting modalities

JÖRG E. TILLMANN, Institute of Wildlife Research, Veterinary University Hannover *E-mail:* Joerg.E.Tillmann@web.de

Detailed information on the distribution, population density and population trends of the European Woodcock (Scolopax rusticola) in Germany as in other countries within its range are rare and temporally and spatially restricted to efforts of individual persons or small research units. This fact is greatly due to the cryptic lifestyle of the Woodcock in the forest as it reveals its presence only during the roding season. In addition. more voluntarv ornithological effort traditionally focuses on open landscapes and waterbodies than on forest ecosystems. Thus, Germany lacks a systematic large scale and continuous monitoring of the European Woodcock.

In contrast to France, Italy or Greece, Woodcock hunting in Germany never had such a high status and culture. Nevertheless, many romantic descriptions exist in hunting literature concerning experiences while hunting the woodcock in spring during its roding flights. Hunters' interest and hence knowledge about woodcock distribution and status existed as long as the exclusive spring hunt was permitted as one of the first hunting activities in spring. However, this knowledge has never been used systematically since the spring hunt was banned in all German federal states in 1977 for population ecological reasons. Until 1977 the hunting season ran from 16 October until 15 April. Since 1977 the hunting season for the Woodcock is in autumn and winter. In 11 of the 16 federal states the current hunting season runs from 16 October to 15 January: in Lower Saxonv and Mecklenburg-Western Pomerania from 16 October to 31 of December; in Saxony, Hesse

and Berlin the Woodcock has no hunting season.

As tenants or owners of hunting districts are required to acquaint the local hunting agency with the hunting bag these data are useful in interpreting the situation of the Woodcock in Germany. However, as with all hunting bag statistics these data are to be interpreted with care especially if they are to be used as indicators for population trends. This is especially the case with bag statistics on the Woodcock. Compared with other game species such as for example the Hare (Lepus *europaeus*), the Grey Partridge (*Perdix perdix*) or the Pheasant (Phasianus cholchicus) that are faithful to a habitat and managed (including harvest) in a somewhat consistent manner, bag statistics on the Woodcock as a migrating bird are much more variable and gradual population changes are difficult to identify when looking solely at the German bag statistics. Nowadays woodcocks in Germany are typically taken as "by-catch" to the Hare and the Pheasant on traditional drive hunts which focus on the main small game species (ca. 10-40 hunters) that are usually conducted once or twice a year per district. Correspondingly hunting the likelihood that woodcocks are present on these discreet hunting occasions is strongly related to the migration characteristics of the particular year. The Woodcock is very opportunistic in its migration behaviour and reacts directly depending on weather conditions and food availability. As seen in Figure 1 on the level of federal states this variability in Woodcock presence is indicated by the annual bag statistics with a high probability.



Figure 1: Number of woodcocks bagged on the level of federal states in hunting season [15/10/2006 until 15/01/2007 (according to DJV data)].

For this reason actual population trends are to a high degree obscured and therefore Woodcock bag statistics can only be interpreted with high caution. In addition, the woodcocks bagged in Germany stem from various northern and north-eastern populations with supposedly different environmental regimes resulting in in population differences ecological parameters. It is presumed that only to a small degree are woodcocks from the local German population among the woodcocks taken in Germany. This hypothesis is supported by the fact that most woodcocks are bagged in the federal states that overlap with the main migration routes (Figure 2). In Mecklenburg-West Pomerania the hunting bag is very low since small game hunting only plays a minor role as is the case in all federal states in eastern Germany.

As described above, woodcocks are usually taken in classical small game hunting districts, i.e. agricultural landscapes with a low percentage in forest cover and therefore lacking breeding habitats. This is further evidence that the woodcocks that are shot are woodcocks on their winter migration. In breeding habitats the Woodcock bag is negligible as hunting only focuses on big game in the forested areas.



Figure 2: Woodcock hunting bags in the hunting season 2006/2007 on the spatial level of Federal states (the number above corresponds to the number of the Federal state). Looking at the bag statistics in Figure 3, it can be seen that until the ban of the spring hunt in Germany the number of woodcocks bagged was around 20,000 / year. As a result of the ban the number dropped rapidly and ranged between 4,000 and 11,000 / year.

Since 1997 the numbers have gradually risen again, reaching levels almost as high as when the spring hunt was open in addition to the autumn and winter hunting season. It is hypothesised that this rise is rather due to the change in the winter characteristics than to a population increase though the latter cannot be ruled out; in forestry a shift from monocultures, especially from pure spruce plantations with all its economic and ecological risks, to mixed deciduous forests is observed and a medium to long term improvement in habitat quality in a high percentage of German forests can be expected.

Recent winters have been rather mild and longer periods with temperatures below freezing point and with snow appear to occur later compared with the years before the nineties. Thus, during the hunting season resting conditions in Germany are still comfortable for the Woodcock regarding temperatures and availability of earthworms. According to Ferrand (pers. comm.) in France during the mild winter 2006/2007 the core area of the winter range was shifted 300 to 400 km further to the north-east than in "usual" years. These findings are very consistent with the current trend in hunting bag statistics in Germany and underline the opportunistic migration behaviour of woodcocks in the first year. Apparently global warming has had an impact on the migration ecology of the Woodcock. directly affecting hunting modalities in the countries within the range of the species. These recent trends underscore the necessity of an international exchange of population data and the necessity of this forum. For the future it is desirable that data on Woodcock populations be gathered in a somewhat consistent and continuous manner on an international level



Figure 3: Annual total woodcock bag in Germany from 1959 till 2006 (according to DJV data).

Roding Woodcock (*Scolopax rusticola*) census in the "Vormsi Island Woodcock Sanctuary"

LORIS GALLI, SILVIO SPANÒ, Dipartimento per lo studio del Territorio e delle sue Risorse,

Università degli Studi di Genova. Corso Europa 26, I-16132 Genova, Italy.

E-mails: loris.galli@dipteris.unige.it-spano@dipteris.unige.it

TARVO VALKER, Riikliku Looduskaitsekeskuse,Hiiu-Lääne regioon, seire ja teadustöö spetsialist-Saunja küla, 91001 Oru vald, Läanemaa -Estonia.

E-mail: tarvo.valker@lk.ee

The *Club della Beccaccia*, the Italian partner of FANBPO (the European Federation of National Woodcock Clubs), created in 2005 the so called Woodcock Sanctuary (Panzacchi, 2005; Spanò, 2006) on Vormsi Island (Estonia). Currently a specific non-profit organization (*Comitato per il Santuario della Beccaccia Isola di Vormsi ONLUS*) is responsible for the management and financial support of the research activities in the Sanctuary and for the relationships with Vormsi's landowners and hunters.

The interest of such an island in the Baltic Sea lies mainly in its role as a stop-over area for post-breeding migrating woodcocks, but it is known that some of these birds breed in Vormsi as well. A first unpublished census was made by Jaanus Elts (end 1990s – beginning 2000s) who estimated the presence of nearly 20 sites in the island where roding males could be seen. During the 2006 and 2007 breeding seasons one of us (T. Valker) made a census of the roding woodcocks in Vormsi by selecting some suitable observation points (open areas, grasslands and clearings) along the roads and pathways (Figure 1; Galli, 2006 & 2007). On 4th, 11th and 14th June 2006, observations were carried out in 46 sites and roding activity was found in 18 of them (one or more males). On 15th and 16th June 2007, observations were carried out in 31sites and the presence of at least one roding woodcock was recorded in 16 of them. In 3 other sites a non-roding Woodcock was observed along the road. From these results, we think that the Woodcock breeding population in Vormsi can be roughly estimated at 15-20 woodcocks. A more precise estimation of the number of roding males could be given by the use of vocal individualisation as shown by Ferrand (1987) and Hoodless et al. (2007).

References

Ferrand Y. 1987. Reconnaissance acoustique individuelle de la bécasse des bois (Scolopax rusticola) à la croule. Gibier Faune Sauvage 4: 241-254.

Hoodless A., Inglis J.G., Doucet J.P. & N.J. Aebischer. 2007. Vocal individuality in the roding calls of Woodcock *Scolopax rusticola* and their use to validate a survey method. Ibis 2007, DOI: 10.1111/j.1474-919x.2007.00743.x

Galli L. 2006. Monitoraggio delle beccacce nidificanti a Vormsi. La Regina del Bosco, 57: 14.

Galli L. 2007. Il anno di monitoraggio delle beccacce nidificanti a Vormsi. La Regina del Bosco, 59: 21.

Panzacchi M. (Ed.). 2005. Il santuario della Beccaccia nell'isola di Vormsi (Estonia). The Woodcock Sanctuary, Vormsi Island (Estonia). C.d.B. – Grafiche Amadeo, Imperia, Italy, 20 pp.

Spanò S. 2006. Estonie, Île de Vormsi. Un sanctuaire Baltique pour la bécasse. Bécasse passion, 56: 15-17.





Figure 1: Roding woodcocks census at Vormsi Island, Estonia (springs 2006 and 2007). Black dots = monitoring points; numbers = number of roding males; $\frac{1}{2}$ = not roding woodcocks seen along the roads and the pathways.

2006-2007 French Woodcock report

FRANÇOIS GOSSMANN, CLAUDINE BASTAT, MICHEL GUENEZAN, Office National de la Chasse et de la Faune Sauvage, Research Department – Migratory Birds Unit, 53 rue Russeil, F-44 000 Nantes *E-mail*: rezobecasse@oncfs.gouv.fr

YVES FERRAND, Office National de la Chasse et de la Faune Sauvage, Research Department – Migratory Birds Unit, BP 20, F -78612 Le Perray-en-Yvelines Cedex *E-mail*: yves.ferrand@oncfs.gouv.fr

The 2006/07 season was very exceptional in terms of weather conditions. Autumn was particularly mild in France (mean temperature about 3°C above average). Consequently, migration was delayed and limited, all the because more these meteorological characteristics were similar in the whole of Europe. Woodcocks were observed in Russia, close to Moscow, in mid-December. In Hungary, some birds wintered, which is extremely rare. Small flocks of woodcocks were observed at the end of January along the coast in the south-west of Norway. In Italy, Greece, Turkey, Spain and Tunisia, Woodcock hunters complained of the lack of woodcocks. Then, a part of woodcocks were not "pushed" to the migratory "terminus" in November-December. Winter was globally mild and a short cold period at the end of January was not sufficient to change the distribution of birds in the wintering area.

2006-2007 ringing season in numbers						
N. départements:	88					
N. ringing sites:	1,489					
N. ringers:	355					
N. nocturnal trips (hours):	2,873 (6,448)					
N. contacts:	19,763					
N. ringed woodcocks:	5,102					
Success rate:	27,5 %					
N. direct retraps:	138					
N. indirect retraps:	187					
N. direct recoveries:	274					
N. indirect recoveries:	428					
Annual direct recoverv rate:	5 %					

Ringing results

Quantitative ringing results

In total, 5,102 woodcocks were ringed in France during the 2006-07 wintering season (Figure 1). This is the best result in the last 24 years ! Such a result is mainly due to good results registered in the east of France in relation to a high abundance of woodcocks, a high success rate and an increase in numbers of ringing trips. As usual, the highest number of ringed birds was noted in November (1,455 ; 28.5% of total), then a constant decrease was registered the following months (Figure 2).

Proportion of juveniles

The proportion of juveniles among ringed birds is 56%. This is one of the lowest registered in the last 15 years. (51% in 2002/03, 55% in 2003/04). Remember that the use of the proportion of juveniles to estimate breeding success is not easy (Gossmann *et al.* 2006*).

Monitoring of abundance during the migratory and wintering period

Two indices allow to monitor Woodcock migratory and wintering numbers in France : the mean number of contacts/hour (IAN) registered during ringing trips and a hunting index [ICA : number of seen woodcocks / standardised hunting trip (duration = 3.5 hours)] collected by the *Club national des bécassiers*.

*Gossmann F., Bastat C., Guénézan M. & Y. Ferrand. 2007. 2005-2006 French Woodcock report. WSSG Newsletter 32: 43-47.



Figure 1: Inter-annual fluctuations of ringing results.



Figure 2: Monthly fluctuations of captures during the 2006-07 season.

In 2006-07, IAN was estimated from 20,000 contacts noted during 6,448 hours and ICA from a sample of slightly more than 1,200 hunters and 36,000 hunting trips. For this season, IAN amounts to 3.15 and ICA to 1.39 (Figure 3). These values are lower than those of the 2 last seasons, however they are slightly higher than average for the last 11 seasons.

The trends of IAN and ICA for the 1996/97 - 2006/07 period show a significant increase for IAN (*p*-value < 0.001; non-parametric Spearman test) but stability for ICA (*p*-value = 0.163).

The IAN monthly fluctuations show an increase from October to December due to the arrival of woodcocks (Figure 4). As in the past, a small drop is noted in January. The highest value of IAN is registered in February.

In October and December 2006, the distribution of woodcocks was very particular. High numbers of birds were observed in the eastern part of France (Alsace-Lorraine, Champagne-Ardennes, Burgundy, *Franche-Comté*) and in Normandy and *Poitou-Charentes*. In these regions, the mean IAN was 4.4. In the north and central part of France and in Brittany, IAN was equal to 2.8 in average. In all the other regions, the value was below 2 and, in the south of France, the lack of woodcocks was evident.

From December to March, the distribution of woodcocks did not change much. Therefore, France was divided in 2 parts each side of a Bordeaux-Lyon line. Woodcocks were rather abundant in the northern part and rare in the southern one. This clearly shows that a major part of birds stopped their migratory trips to winter further north than usual.



Figure 3: Annual fluctuations of the number of contacts/h during ringing trips (IAN: nocturnal index of abundance) and hunting trips (ICA: hunting index of abundance; Source: Club national des bécassiers).





Figure 4: Monthly fluctuations of IAN from 2000-01 to 2006-07.



Fluctuations by 10 day-periods of final IAN, Internet IAN and proportion of field

Figure 5:

work time analysed in the course of the season in relation to final field work time.



Figure 6: Fluctuations by 10 day-periods of the final proportion of juveniles (ageratio), Internet age-ratio and proportion of captures analysed in the course of the season in relation to final number of caught woodcocks.

Again in the 2006/07 season, Woodcock migratory and wintering numbers were monitored in the course of the season. Data were collected every 10 days by electronic mail. 94% of *départments* sent at least one data file by internet. In total, 1,020 files were received, i.e. an increase of 33% compared with the last season. 77% of the final Woodcock contacts and of the final field work time were analysed in the course of the season. Moreover, data were transferred very quickly: 82% in less than 10 days.

The results show that the estimates obtained by internet were very close to the final values due to an increase in participation of ringers to this survey. The difference amounts to 0.05 (3.10 for internet IAN ; 3.15 for final IAN). The evolution by 10 day-period is also very similar (Figure 5). The differences registered for each 10 day-period were comprised between -0.6 and +0.5. The proportion of field work time analysed for each 10 day-period was 61-90% of the total field work time. Finally, the proportion of juveniles estimated from internet data was the same as the final one: 56%. The differences registered for each 10 day-period

were comprised between -5 and +4 points (Figure 6).

During the 2006/07 hunting season, 3 reports were published to inform administration, hunters and ringers on the Woodcock situation. This monitoring tool now seems to be very efficient in providing information "in real time" on the Woodcock numbers migrating and wintering in France. In case of a lack of birds or very low breeding success, we should be able to alert authorities early to take exceptional conservation measures.

In conclusion, the 2006/07 season was characterised by:

- a shortened migration owing to an exceptionally mild autumn-winter,
- a low breeding success in Central Russia,
- a probable good winter survival rate due to weather conditions and a lower hunting pressure ; the woodcocks stayed in higher numbers in regions where mainly big game is hunted.





Figure 7: Inter-annual variations of the proportion of positive sites and high abundance sites/positive sites for the 7 available 10 year-periods.

Roding results

In 2007, roding censuses took place in 57 *départements* and 854 listening points were visited.

National occupation rate

This rate corresponds to the % of listening points at which at least one roding male was observed (= positive site). In 2007, the value was 25.4 %. This is the highest value registered since 2000.

The low abundance sites $(1 \le n. \text{ contacts} < 5)$ represent 16.3 % and high abundance sites (n.contacts \ge 5) 9.1 %.

Breeding population trend

The population trend of the French breeding Woodcock population has been analysed every year for the last 10-year period. In total, 49 *départements* censused roding woodcocks without interruption from 1998 to 2007. No trend was detected in the proportion of positive sites (*p*-value = 0.094; Cochran-Armitage test) but an increase (*p*-value = 0.004; Cochran-Armitage test) was noted in the trend of the

proportion of high abundance sites in positive sites.

Since 2006, we propose to analyse and to pool the data by 10 year- sequences in order to get information for a longer period. Figure 7 shows the variations of the 2 indices (positive sites and high abundance sites) for the last 7 10 year-periods and the table 1 gives the *p*-values of tests for every index.

Previous results are confirmed: after a significant decrease the proportion of positive

sites tends to stabilise (*p*-values increase) and, in contrast, the proportion of high abundance sites tends to increase significantly (*p*-values decrease). The general pattern therefore remains the same : a reduced and by now stabilised breeding area and, at the same time, a concentration of birds in this area. This can now be interpreted as a probable increase in Woodcock breeding numbers in France during the 1992-2007 period.



Acknowledgments

This report is the result of an important field work carried out by members of the ONCFS/FNC Woodcock network. We thank all of them : professionals of ONCFS, *Fédérations départementales des chasseurs* and volunteers. We also thank the *Club national des bécassiers* for allowing us to use the data collected by Club members.

period	1992-2001	1993-2002	1994-2003	1995-2004	1996-2005	1997-2006	1998-2007
<i>p</i> -value (positive sites)	0.009	0.015	0.026	0.079	0.71	0.58	0.094
<i>p</i> -value (high abundance sites)	0.55	0.57	0.52	0.116	0.033	0.010	0.004

Table 1: *p*-values of Cochran-Armitage tests for % of positive sites and for % high abundance sites / positive sites for the 7 available 10 year-periods.

First observation of an American Woodcock in France and in the Western Palearctic

YVES FERRAND, Office National de la Chasse et de la Faune Sauvage, Research Department -Migratory Birds Unit, BP 20, F -78612 Le Perray-en-Yvelines Cedex

E-mail: yves.ferrand@oncfs.gouv.fr

FRANÇOIS GOSSMANN, Office National de la Chasse et de la Faune Sauvage, Research Department - Migratory Birds Unit, 53 rue Russeil, F-44 000 Nantes

E-mail: rezobecasse@oncfs.gouv.fr

YVON GUILLAUD-ROLLIN, Office National de la Chasse et de la Faune Sauvage - Service départemental de la Dordogne. 10, chemin de la Mouthe F - 24100 Lembras

FRÉDÉRIC JIGUET, CRBPO - National Museum of Natural History-UMR 5173, 55 rue Buffon, F -75005 Paris

E-mail: fjiguet@mnhn.fr

An American Woodcock (Scolopax minor) was shot by M. Thomas Reversade on 28 October 2006 at Sorges-en-Périgord, in Dordogne. Three birds were together. The low weight of this Woodcock (150 g), the rubbish colour of its ventral feathers and a whistle when it flushed (characteristic of this species, made by external primaries) attracted the attention of this hunter who warned the ONCFS/FNC Woodcock network.

An investigation made on 3 November 2006 by the ONCFS départemental Service confirmed this observation and collected information about it.

As a migratory bird, the American Woodcock is able to disperse over large distances in North America (Patten et al. 1999) and October is a period of intense migratory activity for this species. The report written down by ONCFS certifies that this bird was freshly shot (soft precludes its possible tendons,...) which transport from North America in relation with

References

Fraguglione D. 1983. La Bécasse des bois. Ed. de l'Orée. 399 p.

Patten M.A., McCaskie G. & J. Morlan. 1999. First record of the American Woodcock for California, with a summary of its status in Western North America. Western Birds 30: 156-166.

The American Woodcock shot in France in October 2006.

a foreign hunting trip. Stomach content analysis, research on pollen in air sacs and feather isotope analysis (deuterium)c could provide additional information.

This observation is the first one for this species in France and in the Western Palearctic. Identification has been validated by the National Homologation Committee and the French Ornithological Commission has listed this species in category A on the Birds of France List, considering the arrival of this species in our country as natural.

If the presence of American Woodcock had never been registered till now on this side of the Atlantic Ocean, the presence of of European Woodcock (Scolopax rusticola) in North America has already been mentioned in the literature. Six or seven observations are known between Virginia and Newfoundland (Fraguglione, 1983). All occurred at the end of the ninetieth century.



Photo : J. Brosset

Evaluation of the 2006/07 Woodcock hunting season in France

JEAN-PAUL BOIDOT, Club national des bécassiers, Le Moulin du Buis, Beg Aël, 29940 La Forêt-Fouesnant, France - *E-mail:* jpboidotcnb@wanadoo.fr JEAN-FRANÇOIS CAU, JEAN-MICHEL GAU & NOËL LEFEUVRE, Club national des bécassiers.

During 13 years, members of the *Club national des bécassiers* (CNB; a French Woodcock Hunter Association) have collected information on the Woodcock hunting bags following the same protocol. The following data are gathered every year: information on hunting trips (date, place, numbers of seen and shot woodcocks), weight and sex from a sample of shot woodcocks and, finally, age from a wing collection.

In 2006/07, 1,134 CNB members participated in the wing collection. In total, 8,998 wings were analysed (from 9,042 wings received), 8,279 birds were weighted and 1,933 were sexed. The data were collected in the major part of the Woodcock wintering area in France (Figure 1).

Hunting index of abundance (ICA)

A hunting index of abundance (ICA) has been defined as the number of different woodcocks seen during a hunting trip, the standardised duration of which was 3.5 hours (Cau & Boidot, 2005).

In 2006/07, ICA was estimated from the hunting trips of 1,162 Woodcock hunters. Its national annual value is 1.39 [36,304 trips, 127,064 hours and 50,521 woodcocks seen (12,348 shot)]. This value is above the average (1.29) for the 1993/94-2005/06 period (Figure 2).

The variations of the ICA monthly values are shown in Figure 3. The 2006/07 ICA monthly values from October to December are in the average of those obtained in the last 10 years.

More precise information can be obtained with ICA 10-day period values (Figure 4). This shows that autumn migration was not really significant before the beginning of November. In November and December ICAs did not vary much and no new arrival of birds could be noted. This could be explained by an incomplete migration of a part of woodcocks

due to a very mild winter. Indeed, ICAs were higher than usual in the north-eastern part of France . A drop of ICAs was registered in the first two decades of January followed by an increase at the end of this month and then a decrease in February. This pattern is usual but was more marked in 2006/07.

Another index can also be estimated : the number of woodcocks shot during a standardised hunting trip or ICP. In 2006/07, ICP reached 0.34. This can be summarised as follows: in 2006/07 an "average" Woodcock hunter made 31 hunting trips, flushed 43 woodcocks and shot 11.

As in the previous years, the 2006/07 Woodcock hunting bags were mainly made in November (37%) and December (34%). In January, the bag taken represented 15% of the total, 6% in October and 8% in February.





Figure 1: Distribution of the number of Woodcock wings collected in every French département during the 2006/07 survey.



Ratio juvenile/adult

For 2006/07, the proportion of juveniles in the French Woodcock hunting bags is estimated at 63% (n = 8,998). This value is the same as in 2001/02 and one of the lowest registered during the previous years. Only one value was lower in 2002/03 (58%). This could be due to a geographical change in the wing collection. Usually, the regions located along the Channel-Atlantic coasts represent 90% of the sample. In 2006/07, the central part of France provided more wings than usual owing to the abundance of birds in relation to climatic conditions. Moreover, from year to year, the wing collection tends to be more homogeneous geographically speaking.

As in the previous years, the proportion of juveniles was at its maximum in November and December and then decreased until February (Figure 4).

In 2006/07, the proportion of juveniles that had moulted completely was 15.5% (878/5651) and the proportion of adults that had finished their post-nuptial moult was 44% (1468/3347).

Ratio male/female

In 2006/07, the proportion of Woodcock males in the French hunting bags was 39% (782/2011). This value remained very stable from one season to another (39% in 2005/06).

Variations in weight

In 2006/07, the mean weight of a shot woodcock was 314.4 g (316 g for females, 310 g for males). Adult females were the heaviest, 321 g in average. The mean weights of juvenile females and adult males were very close, 313 g and 314 g respectively. The mean weight of juvenile males reached 308 g..

Mean weights were relatively stable during the 2006/07 season for all sex and age classes (Figures 5 & 6). This is probably due to mild weather conditions which allowed the birds to easily find food at the migratory stopovers and at wintering sites as well.



Figure 5: Intra-annual variations in weight in French hunting bag, in 2005/06. Results are expressed for the whole data set and according to sex..

Figure 6: Intra-annual variations in weight in French hunting bags, in 2005/06, according to age.

Conclusion

According to the ICA values, the 2005/06 season can be considered as average.

Weather conditions in autumn-winter 2006/07 were characterised by very mild temperatures which have never been registered since meteorological data are collected. This led to an unusual distribution of birds. The centre of the wintering area was probably stabilised further in the north and east of Europe than usual. Moreover, woodcocks stayed longer in mountain regions owing to the lack of snow and some of them wintered.

All these results are confirmed by the members of the FANBPO (Federation of National Associations of Woodcock Hunters in the Western Palearctic).

2006-2007 French Snipes report

GILLES LERAY, Office National de la Chasse et de la Faune Sauvage, Research Department – Migratory Birds Unit, 53 rue Russeil, F-44 000 Nantes

E-mail: g.leray@oncfs.gouv.fr

PATRICE FEVRIER, Club international des chasseurs de bécassines, 5 avenue des Chasseurs, F-75017 Paris

Web site: http://www.cicb-club.com

YVES FERRAND, Office National de la Chasse et de la Faune Sauvage, Research Department – Migratory Birds Unit, BP 20, F -78612 Le Perray-en-Yvelines Cedex *E-mail*: yves.ferrand@oncfs.gouv.fr

Ringing results

The French Snipes ONCFS/FNC network gathers 114 snipe ringers spread over 44 French *département*.

In total, 1,192 snipes were ringed in 2006 by the network: 1,103 common snipes (*Gallinago gallinago*), 88 jack snipes (*Lymnocryptes minimus*) and 1 great snipe (*Gallinago media*). Therefore, our objective of 1,000 ringed snipes per year has been reached. Now this has to be stabilised or increased. Indeed, the main result we expect is an estimation of survival rates and this requires many retraps and/or recoveries and then...many ringed birds.

Plumage collection

In addition to ringing, an analysis of Common Snipe and Jack Snipe plumage (wing and/or tail feathers) collected during the 2006/07 season was carried out. This allows us to improve our knowledge on the fluctuations of the proportion of juveniles during the hunting season and to get information on the phenology of migration. In total, the plumage of 3,817 Common Snipe and 894 Jack Snipes were gathered by the CICB (International Club of Snipes Hunters) members. This large sample clearly shows the high willingness of snipe hunters to take part in this study.

Common Snipe

Geographical distribution of analysed plumage

The geographical distribution of Common Snipe plumage collected in 2006/07 clearly shows two distinct focuses: north of France and Central massif (Figure 1).

Many authors agree to consider that two Snipe flyways migratory cross France: а Fennoscandian one which concerns the Channel-Atlantic regions, and a continental one which concerns the north-eastern part, the Rhone valley and the Central massif (Rouxel, 2000; Svazas & Paulauskas, 2006). Therefore, we analysed the data after dividing the total sample in two parts which correspond to the two flyways (Figure 1). The sizes of each sample are close (1,799 plumage for the

WI/IUCN-WSSG Newsletter n°33

Fennoscandian flyway, 2,018 plumage for the continental flyway) which validates this approach.

Temporal distribution of analysed plumage

Under the assumption that the number of collected plumage (*ncp*) is positively correlated with real numbers during the same periods, the distribution of *ncp* in the course of the season can reflect the phenology of migration and the situation during wintering. Globally, the main migratory wave took place between mid-September and mid-November with a marked peak in the second half of September (Figure 2). For the Fennoscandian flyway, the maximum number of plumage was

collected between mid-September and the end of October and then drastically dropped after mid-November (Figure 3). In contrast, the number of collected plumage along the continental flyway was always high till the end of November with a second peak in the first half of this month (Figure 3).

This result tends to show that common snipes could have been staying inland a longer time, maybe in relation to abnormally mild weather conditions in autumn 2006. However, precipitations also have a great importance and their impact can be very localised. The distribution of birds greatly depends on dryness of marshes or, on the contrary, on flooding owing to heavy rains.



Figure 1: Geographical distribution of numbers of Common Snipes whose plumage was collected in 2006/07 and limit between the two sub-samples corresponding to a distinct migratory flyway.



Figure 2: Temporal distribution (per 15 day-period) of collected plumage and of the proportion of juveniles for the whole Common Snipe sample.





Figure 3:

Temporal distribution (per 15 day-period) of collected plumage and of the proportion of juveniles for Common Snipe in each flyway. Proportion of juveniles

Examination of wing plumage allows to determine age (juvenile vs adult) of a large proportion of common snipes.

For the whole collected plumage, the proportion of juveniles amounts to 73.7% (ageratio = 2.80). If we do not take August in account (as recommended by Devort, 1997), the proportion of juveniles is 71.9% (age-ratio = 2.56). These values are in the average of those estimated since the 1980's (74.6% for all data; 72.5% for data without August; Figure 4).

In detail, juveniles represent 79.2% (1,396/1,763) of birds in the Fennoscandian

flyway and 68.8% (1,352/1,965) in the continental flyway. The difference is statistically significant for the whole data set ? and for data without August [Fisher exact test (p<0.0001)].

As in every season, the proportion of juveniles follows a progressive decrease trend during the season (Figure 2). However, this trend is more pronounced for the Fennoscandian flyway than for the continental flyway for which the values do not change much (Figure 3).

As shown by Devort (1997), interpretation of the proportion of juveniles in hunting bags is far from easy. Several factors can play a role (hunting pressure, weather conditions, annual productivity) and are difficult to separate.



Figure 4: Interannual variations of the proportion of juveniles among Common Snipe plumage collected in the 1986/87 -2006/07 period for all data and for a sub-sample without August data (No collection in 1999/00 - 2003/04 period).

Of course, the first idea is to consider the proportion of juveniles as an indicator of the annual breeding success. However, interpretation should not be based on the absolute value of the proportion of juveniles. Indeed, this would lead to consider, for instance, that a proportion of 70% means 70 young for 15 females (sex-ratio = 1) and corresponds to a mean production of 4.7 voung/female, which is extremely unlikely. As pointed out by Devort (1997), after Caughley (1974), it is rather the relative variations of the proportion of juveniles from one season to a another that we must take into account. From this point of view, the 2006/07 value in France does not differ much from those of the last

WI/IUCN-WSSG Newsletter n°33

seasons. But we agree with Devort (1997) to consider that the proportion of juveniles in Danish hunting bags is probably more reliable for estimating the annual breeding success, particularly for the Fennoscandian flyway. In 2006/07, this value was estimated at 56.1% (age-ratio = 1.3; T.K. Christensen, pers. com.). This is the lowest estimate registered since 1983, which probably means that the breeding success was low in spring-summer 2006. Of course, this low proportion can also be due to a prolonged stay of juveniles in the north of the wintering area owing verv to mild temperatures. But we think that a lower than usual productivity is the more plausible hypothesis. The difference between Danish and

31

French hunting bags rather seems to be linked to the quality of available habitats.

The difference between the two flyways is more difficult to interpret. We think that three factors can play a role: a lower breeding success for the continental flyway, a longer and earlier hunting season in the Channel-Atlantic regions (opening at the beginning of August) which increases the proportion of juveniles in hunting bags and/or a higher hunting pressure for hunting territories located on the Fennoscandian flyway. A difference in hunting pressure does not seem to be involved all the more since the proportion of juveniles was very close for the two flyways in the last season (FNC/CICB, 2006). On the other hand, the impact of different weather conditions during the breeding period could explain this result owing to the large breeding area of the species. In the same way, bias linked to an early hunting season probably played a role. Another hypothesis could be a prolonged stay of adults inland.

The high proportion of juveniles till mid-September is well known and expected. Overall, the juvenile/adult ratio varied in the course of the season, with or without August data [Khi² test (p<0.0001)]. Adult arrival was noticeable in October, that of juveniles in November and again that of adults in the end of December-beginning of January. This general pattern was the same for the two flyways but more pronounced for the Fennoscandian one [Khi² test (p<0.0001 for the Fennoscandian flyway; p = 0.0003 for the continental flyway]].

Proportion of males/females

Sex can be reliably defined for 95% of adult common snipes by observation of tail feathers (Devort 1989; Rouxel, 2000). The proportion of males was very close for both flyways: 40% for the Fennoscandian flyway, 38% for the continental flyway [no significant difference; Fisher exact test (p=0.561)]. The imbalance in the number of males and females in the hunting bags is well known (Devort, 1997), but no convincing explanation can be given.



Figure 5: Geographical distribution of numbers of Jack Snipes whose plumage was collected in 2006/07 and limit between the two subsamples.

Jack Snipe

Geographical distribution of analysed plumage

The geographical distribution of Jack Snipe plumage collected in 2006/07 is relatively homogeneous. In spite of a lack of knowledge on migratory flyways for this species (Rouxel, 2000), we defined two sub-samples in collected Jack Snipe plumage (Figure 5), as for Common Snipe. However, we will call them "coastal flyway" and "inland flyway" in so far as the origin of birds that use these "flyways" is not precisely known.

Temporal distribution of analysed plumages

Under the same assumptions as for Common Snipe data analysis, the phenology of migration for the two "flyways" was very similar: a relatively fast increase of numbers at the beginning of the season with a peak in the second part of October and then a constant decrease till the end of January (Figure 6 & 7).

Proportion of juveniles

A method of age determination which has been validated (publication in progress) allows to correctly classify about 90% of birds (adult vs juvenile).

For all collected plumage, the proportion of juveniles amounted to 78.3%. This value is in the average of those estimated since the end of 1980's (Figure 8). The proportion of juveniles was 86% for the "coastal flyway" and 71% for the "inland flyway". The difference is highly significant [Fisher exact test (p < 0.0001)].

In contrast, the temporal distribution of the proportion of juveniles appeared to be relatively stable in the course of the season for the whole data [Khi² test (p = 0.08); Figure 6)] and for each "flyway" as well [Khi² test (p = 0.13 for "inland flyway"; p = 0.61 for "coastal flyway"); Figure 7]. Indeed, the increase trend from mid-December is not reliable due to the small amount of data.

As for Common Snipe, the proportion of juveniles in the "inland flyway" was lower than in the "coastal flyway". An explanation is not easy to find but we can again suppose that the breeding success was not similar in both "flyways".











Figure 8: Interannual variations of the proportion of juveniles in Jack Snipe plumage collected during the 1993/94 -2006/07 period (No collection in 2002/03 and 2003/04).

Monitoring of hunting bags

The monitoring of hunting bags can be considered as an indicator of the fluctuations in numbers. This lies on the assumption that hunting bags are positively correlated with numbers level. This assumption is not always verified. Research (for example Christensen, 2005) has shown that the correlation could be affected by external factors such as, of course, a decrease of specialised hunters for different reasons.

If analysis is limited to a sample of hunting territories (reference territories) where it is possible to consider that hunting pressure (number of hunters, number of hunting days) did not vary much, interpretation of results is less problematic. The only uncertainty is the inter-annual variation in these territories in terms of carrying potentialities (mainly water level).

During the 2000/01 – 2006/07 period, CICB collected data in 28 sites. These sites are mainly situated in the north-west of France (Figure 9). Details of hunting bags are shown in Table 1. The annual mean total hunting bags in the 28 sites amounts to 5,000 common snipes and slightly more than 1,200 jack snipes.



Figure 9 : Localisation of 28 reference sites for the monitoring of hunting bags during the 2000/01 - 2006/07 period.

Season	Common Snipe	Jack Snipe	Total
2000/01	4 391	849	5 240
2001/02	4 196	1 497	5 693
2002/03	4 707	1 166	5 873
2003/04	5 590	1 528	7 118
2004/05	6 118	1 293	7 411
2005/06	5 705	1 289	6 994
2006/07	4 211	969	5 180
Mean and total	4988,3	1 227,3	66 599

Table 1:Detail of hunting bags per season for 28 reference sites.

On the basis of the above assumption, the migrating and wintering numbers of Common Snipe show a regular increase from 2001/02 to 2004/05 and then a regular decrease till 2006/07 (Figure 10). The numbers registered in the last season are among the lowest in the last 7 seasons. They are similar to those of 2001/02. However, no significant trend is observed for the whole considered period (Page test; p = 0.093).

In the same way, Jack Snipe numbers appear to be stable for all the 28 reference sites for the 2000/01 - 2006/07 period [(Page test ; p = 0.427); Figure 10].

The Common Snipe/Jack Snipe ratio is remarkably constant (Figure 11). In average, Common Snipe represents 81% of Snipe hunting bags (73.7% - 85.3%). This value is close to that estimated from a national hunting bag inquiry in 1998/99: 84.7% (Tesson & Leray, 2000). The reasons for this stability are unknown. Indeed, we can consider that the annual breeding success of each species has an effect on this proportion. As far as we know, the breeding success greatly depends on weather conditions in spring-summer. The Common Snipe breeding area is larger than that of Jack Snipe in Europe. Moreover, Common Snipe lives in various habitats whereas Jack Snipe is now localised almost exclusively in tundra. In so far as weather conditions are not homogeneous on the whole breeding area of these two species (several millions of km²), there is no reason for having a similar breeding success. Except if the reference hunting territories are, every year, overcrowded for each species in terms of carrying capacities (which is questionable), this result is completely unexplained.

In summary, monitoring of hunting bags carried out since 2000/01 does not show a particular trend in migrating and wintering numbers of Common Snipe and Jack Snipe on the reference sites.



Figure 10: Average of Common Snipe and Jack Snipe hunting bags for a reference site for the 2000/01 - 2006/07 period.

Figure 11: Proportion of Common Snipe in total Snipe hunting bags (Common Snipe + Jack Snipe) collected on 28 reference sites from 1997/98 to 2006/07.



Acknowledgments

This report is the result of an important field work carried out by members of CICB and by the ONCFS/FNC Snipes network. We thank all of them : volunteers, *Fédérations départementales des chasseurs* and professionals of ONCFS.

References

Christensen T.K. 2005. Factors affecting the bag size of the common eider *Somateria mollissima* in Denmark, 1980-2000. Wildlife Biology 11(2) : 89-99.

Devort M. 1989. Towards a method to age and sex Common Snipe (*Gallinago gallinago*) by external criterions. IWRB-WSRG. Newsletter 15: 23-36.

Devort M. 1997. La Bécassine des marais. Eléments pour un plan d'action. CICB & OMPO, Paris & Confluences, Bordeaux, France ; 103 p.

Caughley G. 1974. Interpretation of age-ratios. J. Wildl. Manag. 38(3), 557-562

FNC/CICB (2006). Suivi de l'âge des populations de bécassines des marais (*Gallinago gallinago*) et de bécassines sourdes (*Lymnocryptes minimus*) faisant escale ou hivernant en France. Saison 2005-2006. Rapport technique, 14 p. **Rouxel R. 2000.** Les bécassines du paléarctique occidental. Publ. OMPO. Ed. Eveil Nature, Saint-Yriex-sur-Charente, France. 304 p.

Svazas S. & A. Paulauskas 2006. Identification of Common Snipe *Gallinago gallinago* flyways in the Western Palearctic by analysis of ringing recoveries and genetic studies. *In* Boere G.C., Galbraith C.A. & Stroud D.A. (eds). 2006. Waterbirds around the world. The Stationery Office, Edinburgh, U.K., p 522-523.

Tesson J.L. & G. Leray (2000). Enquête nationale sur les tableaux de chasse à tir. Saison 1998-1999. La bécassine des marais et la bécassine sourde. Faune Sauvage. Cahiers techniques n° 251, août/septembre 2000 : 160-167.

Northern Forest Woodcock Initiative

www.timberdoodle.org

The Issue

American woodcock (Scolopax minor) populations have steadily decreased over the last quarter century at a rate of two- to threepercent a year. Wildlife researchers attribute the decline to the loss of young forest and shrubland areas in the eastern and central United States due to human development and changing forestry management practices. Woodcock need diverse habitats to survive, including clearings for roosting and courtship, dense alder thickets for foraging for earthworms, and early successional forests for nesting and brooding. The U.S. Fish and Wildlife Service, Partners in Flight and the North American Bird Conservation Initiative have ranked the woodcock as a highest conservation priority within the United States. Additionally, it is identified as a species of the greatest conservation need in the wildlife action plans for six New England states.

The Partnership

The Wildlife Management Institute has assembled a coalition among 32 public and private conservation entities to halt the decline of American woodcock populations. The coalition's objectives include implementing the most effective habitat management practices on public and private lands, monitoring woodcock populations, and providing extensive outreach to landowners on woodcock

Cooperators

The following agencies and organizations collectively provide biological and technical expertise, outreach support and funding for the initiative.

U.S. Fish and Wildlife Service U.S. Geological Survey Natural Resource Conservation Service Doris Duke Charitable Foundation Northeast Association of Fish and Wildlife Agencies management practices. The coalition has set the several strategies as a management approach:

- create "best management practices" for diverse woodcock habitats;
- implement and test these practices on selected public and private lands;
- monitor the species response to the management practices in these demonstration areas;
- provide information and technical assistance to landowners interested in managing their lands for woodcock.

The Northern Forest Woodcock Initiative

The coalition's first project implements the management strategies within the woodcock's breeding range in Maine, New Hampshire, Vermont, Massachusetts and New York. To date, the Northern Forest Woodcock Initiative accomplished the following:

- developed American Woodcock;
- Habitat Best Management Practices;
- implemented habitat management on 40 demonstration areas;
- monitored woodcock populations on 33 properties through 82 population surveys, 2 telemetry research projects and 4 banding studies;
- provided technical assistance and funding to public land managers and private landowners in 6 states.

Wildlife Conservation Society Ruffed Grouse Society Plum Creek, Inc. Wildlife Management Institute

For further information

Scot Williamson Vice President Wildlife Management Institute 802/748 6717 wmisw@together.net A conservation coalition is working to halt the decline of the American woodcock. The initiative assists landowners in managing their lands for woodcock.

Recent Woodcock and Snipe publications

HOODLESS A.N. & HIRONS G.J.M. 2007. Habitat selection and foraging behaviour of breeding Eurasian Woodcock *Scolopax rusticola*: a comparison between contrasting landscapes. Ibis 149 (Suppl. 2.): 234-249.

HOODLESS A.N., INGLIS J.G., DOUCET J.P. & N.J. AEBISCHER. 2007. Vocal individuality in the roding calls of Woodcock *Scolopax rusticola* and their use to validate a survey method. Ibis, DOI: 10.1111/j.1474-919x.2007.00743.x

KACZMAREK K., MINIAS P., WLODARCZYK R., JANISZEWSKI T. & A. KLESZCZ. 2007. A new insight into the ageing of Common Snipe *Gallinago gallinago* – the value of contrast within the wing coverts of adults. Ringing & Migration 23: 223-227.

MACHADO A.L. FERRAND Y., GOSSMANN F., SILVEIRA A.M. & GONÇALVES D. 2007. Application of a roding survey method to ,the sedentary Eurasian Woodcock *Scolopax rusticola* population in Pico Island, Azores. Eur. J. Wildl. Res., DOI: 10.1007/s10344-007-0131-1

PINCHUK P. & KARLIONOVA N. 2006. Use of playback calls for catching migrating Common Snipe *Gallinagao gallinago* in autumn. Wader Study Group Bulletin 110: 64-65.

SCHMITZ M. 2007. Die Schirmfedern als wichtiges Alterskennzeichen der Bekassine *Gallinago gallinago* – Beschreibung zusätzlicher Merkmale. Vogelwelt 128: 39-42.

SELAS V. 2006. Patterns in grouse and Woodcock *Scolopax rusticola* hunting yields from central Norway 1901-24 do not support the alternative prey hypothesis for grouse cycles. Ibis 148: 678-686.

SIKORA A. & DUBIEC A. 2007. Sex identification of Jack Snipe *Lymnocryptes minimus* by discriminant analysis of morphometric measurements. Ardea 95(1): 125-133.

SVAZAS S. & PAULAUSKAS A. 2006. Identification of Common Snipe *Gallinago gallinago* flyways in the Western Paleartic by analysis of ringing recoveries and genetic studies. *In* Boere G.C., Galbraith C.A. & Stroud D.A. (eds). 2006. Waterbirds around the world. The Stationery Office, Edinburgh, UK. 522-523

WŁODARCZYK R., JANISZEWSKI T., KACZMAREK K., MINIAS P., & KLESZCZ A. 2006. Sexing Common Snipe (*Gallinago gallinago*) in the field. – is there any simple method? Ring 28(1): 45-50.

WŁODARCZYK R., KACZMAREK K. & BARGIEL R. 2005. Fifteen years of the Common Snipe (*Gallinago gallinago*) study at the Jeziorsko reservoir with some notes about weight and moult. Ring 27(1): 107-112.



OLIVIER G.N. 2007. La Bécassine sourde. Lymnocryptes minimus. Ed. OMPO/CICB, Paris, France. 208 p. First monograph on Jack Snipe, this book reviews our knowledge about one of the most difficult species to study. (In French)

Reviews, bibliographies, translations from Russian into English of literature, published on the Woodcock and all Snipe species; inhabited the territory of the former Soviet Union: Dr JEVGENI SHERGALIN, Sopruse pst. 175-58, Tallinn 13413 Estonia. Tel: (3725) 090684; Fax (3726) 599351. *E.mail*: <u>zoolit@hotmail.com</u> For information on birds in Russia, join : BirdsinRussia@yahoogroups.com