Newsletter 29

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This Newsletter is published with financial assistance of Office national de la chasse et de la faune sauvage
This Newsletter is supposed to serve as a contact organ to inform the members of the Woodcock and Snipe Specialist Group (WSSG), a research unit of Wetlands International (WI) and likewise of the IUCN-The World Conservation Union. Subjects of the WSSG are species of the genus Scolopax, Gallinago and Lymnocryptes that differ in several respects remarkably from all other wader species. For this reason a separate research unit was established.

CONTENTS

Editorial.................................................................3

Memorandum of Cooperation between WI & WSSG.........................4

Trend of the Woodcock hunting bag in Hungary and its effect on the population........6
SANDOR FARAGÓ

Body dimensions, sex and age relationship of the woodcock (Scolopax rusticola)
In Hungary in the 2002 hunting season........................................9
SANDOR FARAGÓ

Woodcock breeding season-2003 in Russia : a few birds, but good breeding success.....11
SERGEI FOKIN

Short-bill woodcocks in Russia.....................................................13
SERGEI FOKIN, ALEXANDER KORMILITCIN & ALEXANDER POVARENKOV

Some results of the study on Great Snipe migration in the southern part of Belarus.....13
EDWARD MONGIN

2002-2003 French Woodcock report.............................................17
FRANÇOIS GOSSMANN & YVES FERRAND

2001-2002 Western Switzerland Woodcock report............................22
FRANÇOIS ESTOPPEY

Phenological data of the Woodcock (Scolopax rusticola) in SW Finland...............26
LENNART SAARI

American woodcock status in Michigan, 2003..................................31
VALERIE R. TUOVILA, STEVEN B. CHADWICK & C. ALAN STEWART

An original woodcock observation.................................................36

Pintail/Swinhoe’s Snipe..........................................................37
JAMES P. SMITH

Bibliography.................................................................37
The year 2003 was an important one for the Woodcock & Snipe Specialist Group.

First, about 40 active members participated in the 6th Woodcock & Snipe Workshop which was held in Nantes (France) from 24 to 28 November 2003. Twelve countries were represented: Germany, The Netherlands, Denmark, United Kingdom, Switzerland, Italy, Portugal, Russia, Belarus, Kenya, Canada, France. On that subject, the great number of Russian biologists (5 people) and the first participation of Portuguese and Byelorussian colleagues should be noted.

In total, 24 communications were presented 15 of which for Woodcock only. Several topics were taken up: biology of reproduction, migration, behaviour, monitoring, survival rates, hunting bags. Original presentations of the Woodcock population on the Azores Islands, the African Snipe in Kenya and the Jack Snipe in Northern Ural led the participants to look at the problems on a large geographical scale.

This workshop took place in a both serious and convivial atmosphere. The WSSG members were able to better get to know each other and to strengthen good relationships which could lead to future projects. This, of course, was one of the important objectives of this meeting.

As for the Fifth one, the proceedings of this Sixth workshop should be published with the help of Wetlands International in a Global Series issue. Of course the publishing time will greatly depend on the time of reception of all the papers, the time to review then...the time spent by the WSSG-Coordinator to convince the publisher to urgently do its work!

Secondly, as announced in the last Newsletter, the memorandum of cooperation between WI and WSSG has now been signed. It is an important step for our group insofar as both parties are now clearly linked for different international actions. The detailed text of this memorandum can be read in this issue.

The Newsletter 29 gathers different papers, mainly on woodcocks. Their number is lower than in the previous issues because of an important effort of publication due to the 6th Workshop. In spite of that, you will find new information from different countries which prove the good degree of activity of the WSSG.

In order to publish a Newsletter as up-to-date and attractive as possible, I encourage you to send me any information you consider important for all the members.

Thank you for your help all over the year and a very good success with your scientific work.

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Coordinator

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MEMORANDUM OF COOPERATION Between WETLANDS INTERNATIONAL
And
WOODCOCK AND SNIPE SPECIALIST GROUP
In relation to

SCIENTIFIC AND TECHNICAL SUPPORT TOWARDS THE ENHANCEMENT OF MONITORING,
CONSERVATION AND MANAGEMENT OF WOODCOCK AND SNIPE POPULATIONS

Wetlands International (WI) and the Woodcock and Snipe Specialist Group (W&S SG) agree to co-operate through joint activities that contribute towards the achievement of objectives contained in the Wetlands International 2002-2005 Strategy as adopted by its board of directors, and other relevant joint arrangements between WI and third parties.

This Memorandum of Co-operation describes the intentions of each party within the period 2003 to 2005 inclusive. However, both parties will use their best endeavours to achieve the objectives of this agreement.

This memorandum also recognises that Wetlands International and the Species Survival Commission of IUCN – the World Conservation Union have a joint interest in the work of the Specialist Group.

Both parties have AGREED as follows:

Article 1: GENERAL COOPERATION AND FOCAL POINTS

1.1 Both Parties will collaborate in the promotion of knowledge management, conservation and monitoring of Woodcock and Snipe populations by enhancing their existing communication and cooperation, and that with other relevant organisations (particularly IUCN/SSC, Ramsar, WWF International and BirdLife International)

1.2 Both Parties will seek opportunities to develop and support joint initiatives, programs, projects, and publications of mutual interest, and will develop such opportunities through an agreed forward workplan, which will identify activities and resources required on an annual basis.

1.3 The focal points for general issues regarding this co-operation will be the International Science Coordinator for WI and the Specialist Group Co-ordinator for W&S SG.

1.4 Through single surveys, task forces and ‘gap filling censuses’, both Parties will seek to promote general ecological knowledge of Woodcock and Snipe numbers and distribution particularly in areas where such knowledge is currently unavailable.

1.5 Both Parties will collaborate with IUCN/SSC and BirdLife International in evaluating the Conservation status of Woodcock and Snipe, providing information and technical advice.

Article 2: CONTRIBUTION FROM WETLANDS INTERNATIONAL

The activities below will be carried out to the best ability of WI within the resources available.

2.1 WI will provide and maintain dedicated Internet Web space to the W&S SG, or will include a link to an external web site maintained by the W&S SG.

2.2 WI offers to maintain membership lists or a member database on behalf of the W&S SG.

2.3 On an annual basis, WI will provide space in the Wetlands Newsletter for the use of the W&S SG, and will distribute printed enclosures upon request.

2.4 WI will make available discretionary grants towards the scientific and technical work of the W&S SG, against the agreed workplan of the W&S SG.
2.5 WI will invite the W&S SG Coordinator to its meetings, and will endeavour to contribute towards the costs of attendance, while on early notice, WI at its own cost, will attend meeting of the W&S
SG.

2.6 WI will encourage and assist the W&S SG to publish proceedings of scientific and technical meetings, action plans and other species conservation products in the WI global Publication series.

2.7 WI will provide technical and administrative support upon request by the W&S SG Co-ordinator, particularly to assist with membership info administration, W&S SG regional network development and agreed cost coverage on postage and stationery incurred by the W&S SG Co-ordinator.

2.8 WI will provide small grants to the W&S SG, on the condition that, a workplan of the W&S SG is submitted by the SG Co-ordinator to WI, for the forthcoming year.

**Article 3: CONTRIBUTION FROM THE SG**
The activities below will be carried out to the best ability of W&S SG within the resources available

**FORWARD PLANNING**
3.1 The W&S SG will develop a three-year outline work programme, identifying which objectives of the WI 2002-2005 Strategy are being addressed.

3.2 The W&S SG will propose on an annual basis, a forward workplan, to elaborate the three year outline plan, and submit this to WI by 31 August of the year before the work is due to performed.

**SCIENTIFIC AND TECHNICAL PRODUCTS AND CAPACITY BUILDING**
3.3 The W&S SG will make available to WI request, species information for inclusion in WI publications and for compilation of report to third parties.

3.4 The W&S SG will develop and maintain an information system concerning its target species

3.5 The W&S SG will participate in the Waterbird Population Estimates, and in the BirdLife Red Book assessment.

**COMMUNICATIONS AND NETWORKING**
3.6 The W&S SG will make available to WI, a members list of the group updated annually.

**FINANCE AND OTHER RESOURCES**
3.7 The W&S SG will function primarily through voluntary means and will maintain its membership, organise and hold meetings and engage in scientific activity independently of WI.

**PUBLICATION AND REPORTING**

3.9 The W&S SG will report its activities on a yearly basis, to WI International by end February of each year and, provide articles, edited report proceedings of workshops and symposia summary for WI publications.

**Article 4: THE AGREEMENT STATUS**

4.1 This agreement will be effective from the date signed by both Parties and will remain in force until 31 December 2004 unless terminated by either party in writing.

4.2 Any amendment to this agreement will only be made on the basis of a written agreement signed by both Parties.

4.3 The focal points will aim to assess the implementation of this agreement every year.

*Signed on 27 May 2003 by Dr D. Taylor (WI) and Dr Y. Ferrand (WSSG)*

WI-WSSG Newsletter n°29  December 2003
**Trend of the Woodcock hunting bag in Hungary and its effect on the population**

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**History and quantities**

At the end of the XIXth century and in the first half of the XXth century, woodcock was shot in both spring and autumn (between August 15 and April 15), in spring during roding and driving and in the autumn during driving without a daily bag limit. Today the woodcock can be shot in Hungary only between 1 March and 10 April during roding, and the daily bag limit for one hunter is 4 individuals. This strong limitation ensures that the shooting of woodcock be in line with the principles of wise use.

While in the interwar period (1920-1940, the annual woodcock bag of Hungary – under the spring and autumn hunting regulations – was 13,000-14,000 individuals, between 1970 and 1990 – for hunting permitted only during the spring roding – this decreased to 1,500-2,000 individuals (Faragó, 1985). The difference between the two periods can be explained by the assumed decrease in the stock, the change of hunting season, the autumn hunting ban and driving, and the introduction of a daily bag limit. Under the unchanged regulation and hunting pressure, we observe a significant increase in the woodcock bag of recent years (Figure 1.). In 2001, it reached a peak number with 9,538 individuals (Table 1).

**Breeding and the bag**

Does woodcock hunting in spring endanger the Hungarian nesting population? Hungary is located in the Southern periphery of the woodcock’s breeding area. Estimations put the number of nesting population at 40-100 individuals (Magyar et al., 1998). Since the hunting season ends on 10 April, there is very little chance that nesting birds will be part of the bag. In the investigated sample, it was only in very few cases that we found more developed eggs in the oviducts of females. Therefore, it is safe to conclude that spring hunting does not endanger the Hungarian nesting population.

Tucker & Heath (1994) estimated the European wintering stock of woodcock at 2.2 million individuals, adding that the stock massively decreases. This, of course, is a false data because more birds are shot in the European countries. Rose & Scott (1997) estimated the stock size at 16 million individuals and they considered its dynamics stable. Later (BirdLife International/European Bird Census Council, 2000) an estimation of 3-22 million was given, the most recent survey (Delany and Scott, 2002) gave more than 15 million individuals for the stock of European woodcock.

How large is the share of Hungarian hunting in the European woodcock bag? We have no fresh data about the European woodcock bag. According to estimations, 4-6 million individuals are shot annually in Europe (including the European part of Russia).

The annual woodcock bag of Hungary is insignificant in comparison with the European value of many millions, and its extent means no threat to the species and the region.

**Spring shooting vs. autumn shooting**

Based on the average share of females in the bag, which is 55-60% in the wintering areas, 40% for the autumn hunting and 10-24% for the spring hunting, we may conclude that the female mortality caused by Hungarian spring woodcock hunting is not at all comparable to the Western European losses.
Table 1: Bag dynamics of the Woodcock in Hungary in the last 15 years.
The lower mortality of females in spring undoubtedly supports a population increase more than any other form of use in any other time. In the annual Hungarian woodcock bag – which is around 8,000 individuals – this means an average of 2,000 females. In case of autumn hunting – assuming that the bag size is the same – the loss would be of a minimum of 3,200 females. Therefore the maintenance of the spring hunt is more advantageous from a population dynamics point of view, not to mention that under the existing size, timing and unchanging hunting pressure, the Woodcock bag increased in Hungary, which without doubt can be related to the overall increase of the population. That can only be explained in one way: the Hungarian spring Woodcock shooting under the existing legal regulations -e.g. a success of wise use- does not have any negative effect on the population dynamics of the Woodcock population moving through Hungary, therefore it can and it should be maintained. At the same time in Hungary – as opposed to Western Europe - it is impossible to introduce autumn hunting because of big game (red deer and fallow deer) hunting.

**Arguments to maintain spring woodcock shooting in Hungary**

1. Because it is part of the century-long hunting traditions.
2. Because the present hunting practice is regulated by daily and personal bag limits as well as the duration of the hunting season.
3. Because, as compared to the autumn-winter hunting seasons, in the spring bag there is a significantly lower proportion of females.
4. Because the woodcock bag of Hungary is insignificant in comparison with the European bag value.
5. Because the European woodcock stock is stable and increases at some places, which can be proved by the increasing proportion of young birds in the bag.

References


**Note of the Coordinator.** In the coming years, Hungary will become part of the European Union. Because of that, this country will have to apply the European laws and especially the Directive on Migratory Birds (n°79/409). This Directive states that hunting is prohibited during the pre-nuptial migration. This aims to protect the migratory bird populations at the very beginning of their breeding season in the framework of a European management of these species. We understand that the Hungarian hunters strongly wish to keep their tradition and agree that the Hungarian annual woodcock hunting bag is very low compared to European autumn hunting bag. But we also consider that a common effort is needed to keep the migratory birds, the Woodcock and the other species as well, in a good status of conservation. If the Woodcock spring hunting should be maintained in Hungary, we think that this could only be allowed under strict regulations like daily bag limits regularly reviewed in relation to the Woodcock status of conservation in Europe and the prohibition of tourist Woodcock spring hunting.
Woodcock hunting in spring is a great tradition in Hungary, and it is safe to say that this is true for whole Central Europe. The advanced state of Hungary’s joining the European Union, nevertheless, jeopardised the century-long tradition of spring woodcock hunting since the EU Bird Directives ban hunting in spring when the migrating birds retreat to their breeding areas. It is possible to ask for an exemption (derogation) from this rule after joining the European Union. Austria and Sweden, for example, used this opportunity.

Certainly, the request has to have a solid academic justification. That is why we have started the examination of the Hungarian woodcock bag ten years ago, as the Hungarian Woodcock Bag Monitoring. We have been interested in finding answers to the following questions:

(1) Annually characteristics of the body dimensions of the woodcock.

(2) The condition of the woodcock in Hungary after the wintering period?

(3) Effects of the hunting pressure on the sex and age groups of the populations moving through Hungary.

Material and methods

I intend to make an evaluation in the hunting season 2002, using the data of 170 individuals. The investigated individuals come from the whole of country, so they represent the body dimensions of Hungarian woodcocks and the sex and age relationships.

Since in Hungary the hunting season of woodcock is in the beginning of the sexually active period, it is easier to determine the sex by autopsy. In this period, because of moulting, it is also easier to determine the age. Here I only refer to the methods suggested by Clausager (1973) and Kalchreuter (1979).

Results

The body dimensions of Woodcock (n=170) shot and measured in Hungary in 2000 according to sex and age are follows:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Male (Adult)</th>
<th>Male (Juvenile)</th>
<th>Female (Adult)</th>
<th>Female (Juvenile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body length</td>
<td>335.9 ± 3.4 (283-367) mm</td>
<td>340.7 ± 6.7 (281-375) mm</td>
<td>390.2 ± 6.6 (327-353) mm</td>
<td>380.2 ± 5.5 (327-353) mm</td>
</tr>
<tr>
<td>Wing length</td>
<td>202.2 ± 5.3 (163-287) mm</td>
<td>210.8 ± 11.7 (158-294) mm</td>
<td>204.8 ± 16.5 (160-283) mm</td>
<td>204.8 ± 26.5 (160-283) mm</td>
</tr>
<tr>
<td>Tail length</td>
<td>86.6 ± 1.6 (69-97) mm</td>
<td>83.3 ± 1.9 (69-97) mm</td>
<td>82.4 ± 5.1 (60-96) mm</td>
<td>82.4 ± 5.1 (60-96) mm</td>
</tr>
<tr>
<td>Bill length</td>
<td>73.1 ± 0.7 (65-81) mm</td>
<td>73.1 ± 1.7 (60-81) mm</td>
<td>74.1 ± 3.9 (55-83) mm</td>
<td>74.1 ± 3.9 (55-83) mm</td>
</tr>
<tr>
<td>Tarsus length</td>
<td>38.9 ± 0.8 (32.0-50.0) mm</td>
<td>38.9 ± 0.8 (32.0-50.0) mm</td>
<td>39.8 ± 2.6 (30.0-47.0) mm</td>
<td>39.8 ± 2.6 (30.0-47.0) mm</td>
</tr>
</tbody>
</table>

Females made up 27.6%, the young made up 40.0% of the Woodcock numbers examined in Hungary in 2002.
Comparison with earlier Hungarian dates

The body dimensions of woodcock (according to age and sex) measured in Hungary (n=921) between 1983-1999 are follows (Faragó et al., 2000):

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Adult ♂♂ (n=364)</th>
<th>Juv. ♂♂ (n=235)</th>
<th>Adult ♀♀ (n=120)</th>
<th>Juv. ♀♀ (n=78)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body length</td>
<td>341.4 ± 1.8 (290-460) mm</td>
<td>334.9 ± 1.3 (280-400) mm</td>
<td>342.2 ± 1.3 (310-390) mm</td>
<td>339.1 ± 1.6 (290-369) mm</td>
</tr>
<tr>
<td>Wing length</td>
<td>203.0 ± 1.0 (150-290) mm</td>
<td>200.1 ± 1.4 (150-292) mm</td>
<td>202.2 ± 3.0 (164-270) mm</td>
<td>199.2 ± 1.8 (160-275) mm</td>
</tr>
<tr>
<td>Tail length</td>
<td>87.4 ± 0.8 (60-107) mm</td>
<td>85.5 ± 0.5 (60-107) mm</td>
<td>88.5 ± 1.2 (70-105) mm</td>
<td>86.1 ± 0.9 (55-110) mm</td>
</tr>
<tr>
<td>Bill length</td>
<td>72.9 ± 0.4 (60-88) mm</td>
<td>71.4 ± 0.3 (59-81) mm</td>
<td>73.7 ± 0.8 (62-87) mm</td>
<td>733 ± 0.8 (63-82) mm</td>
</tr>
<tr>
<td>Tarsus length</td>
<td>317.8 ± 3.2 (223-415) g</td>
<td>306.9 ± 3.4 (210-500) g</td>
<td>322.4 ± 6.2 (240-500) g</td>
<td>313.2 ± 7.1 (230-390) g</td>
</tr>
<tr>
<td>Body mass</td>
<td>317.8 ± 3.2 (223-415) g</td>
<td>306.9 ± 3.4 (210-500) g</td>
<td>322.4 ± 6.2 (240-500) g</td>
<td>313.2 ± 7.1 (230-390) g</td>
</tr>
</tbody>
</table>

The proportion of females varied between 14.9-40.0% in the hunting bags in the period 1990-2002. During the 8-year period between 1995 and 2002, which could be characterized by a greater number of individuals, the proportions were between 14.9-31.0%, the average was 22.5% (Fig. 1).

The proportion of young in the period 1990-2002 varied between 15.4-51.4% annually (on average 41.7%). In the eight-year period of 1995-2002 which could be characterized by a larger number of individuals, the proportions were 33.3-51.4% with an average value of 43.4%(Fig.2).

References


Woodcock breeding season-2003 in Russia: a few birds, but good breeding success

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Every year in Russia there are specific weather and meteorological conditions. The Russian populations of woodcock (Scolopax rusticola) were influenced by these. In 2003 only a few woodcocks arrived in spring although the conditions of this breeding season and during autumn migration were rather good for birds.

Central Russia

Spring-2003 came to Russia 2 weeks later than usually. First roding in Central Russia was observed around 14-15 April near Moscow, Ivanovo and Vladimir. That is 10 days later than usual. First part of April was cool, but became warm just after woodcock arrival. The second part of April was warm and dry during 15 April to 24 April. Cold spell was at night from 24 to 25 April. The weather was cold, with little snow and frozen nights (-8, -10° C) during 5 days in many districts. This cold spell was strong in Kostroma, Yaroslavl, Tver, Penza, Smolensk and some other regions. It was maybe not dangerous for the birds, because this period was short. But we have bad information from our Penza’ correspondent. He reported that woodcocks were found dead and weakened by hunters in this weather. In spite of this the roding was good and excellent at this period in some places. For example, 17 contacts were observed in the Vladimir region near Drovnovo (25 April), 20 contacts in the Tver region near Udomlia (28 April), 25 contacts in the Kostroma region near Sudislavl (30 April).

Generally, according to reports of our local correspondents, the number of roding birds was less than usually, but a few more than in spring-2002. In some places roding was excellent (north-west of the Moscow region, north-east of Kostroma region, north-west of the Tver region and in some others). It is difficult to explain this phenomenon.

We observed the wings of 59 woodcocks, bagged in different central regions of Russia in the spring hunting season. 45 of them were adults, and only 14 –yearlings (23.7 %). This may be the result of the bad breeding season 2002 and the two severe wintering seasons 2001-2002 and 2002-2003. On the other hand, the spring hunting seasons opened too early in most of the Russian regions, before mass migration. According our observation and control shooting during roding, most of the yearlings arrived after the hunting season (beginning of May).

In Central Russia May was warm and dry. June was cool and rainy. The first half of July was warm and wet with rains. The second part of July was hot and dry. So, this condition and “tropical” weather were very favourable for breeding of woodcock. Many insects and invertebrates were on the soil which is good to feed the birds. Warm and rainy weather began as of 5 August. Heavy rains with warm weather (20-22° C) led to the good feeding situation along the roads. Woodcocks began to visit theirs for night feeding. According our observation, juveniles flew in wet evenings from the forest to open habitats. Sometimes we observed 2-3 birds, flying together.

This autumn in Central Russia there were only a few woodcocks in autumn. According to our autumn observation and ringing data the number of birds was low in the forest at daytime as well as in open habitats at night. Among the 143 birds, ringed in Central Russia, the proportion of juveniles was 75.5%. So, this confirms that in Central Russia this year was rather good for breeding woodcock. Perhaps there was a deficit of adults in spring after the hard wintering season.

According to the hunt reports the number of birds were smaller than usually, but in some places they were rather numerous. Autumn conditions were also good for birds (warm and wet without cold spells).
North of Russia

In the North of European Russia the weather situation was not so good for woodcock like in Central regions, but better than in 2002. Special observations were made in 2 districts – Pinezhskyi (north of Arkhangelsk’ region) and Shenkurskyi (south of Arkhangelsk’ region). In the Pinezhsky district the observations were made in the northern taiga in the valley of rivers Kavr and Pokshenga (63° 44’ N; 43° 33’ E). A deep snow cover stayed in the forest until 3 May. First roding was noted in 7 May. After 12 May warm weather (18-20°C) began and during 2 weeks it was warm and dry until 27 May. Roding activity was excellent in this period (maximum 29 contacts per 2-hour evening observations from a listening point). Afterwards, as of 28 May, cool and rainy weather began. Sometimes wet snow fell down, but the soil surface was not covered by it (as in 2002). June was cool, rainy. Day temperatures were around 10°C. Only for a few days it was 12-14°C. In spite of these conditions, the number of woodcocks was greater than in 2002 and the roding activity was good for this region. We did 9 roding censuses at the constant long-standing point. We observed 162 (minimum 3, maximum 29) contacts (average: 18.0 per evening). This is a maximum among the last 11-year observations from this point. According to our observation, bad weather did not influence the roding activity of males. Generally, we noted some increase in woodcock numbers in 2003. This is very strange after the bad situation in spring-2002, when many birds died after the bitter cold spell in spring and the low number of birds that were roding last year. Maybe the breeding season 2002 was good for late broods and we can report on a quick restoration of our northern population of woodcocks. On the opposite, we can only observe an increase in roding activity.

In the Shenkursk district we have some information about the spring from our local correspondent. One of our team visited Shenkurs from 7 June to 7 July with one of our French colleagues. The weather condition in this district of the South Arkhangelsk region was good for woodcock in spring as in the summer of 2003, but the number of roding birds was less than usually. May and June were warm with little rain, without snow and cold spell. The weather was very stable. July was dry, but August rainy. So, at this place the weather condition was rather good for woodcock breeding. On the contrary, there was a small number of birds here during September.

Ural

According to the information of our local correspondent in the Perm region, this spring and summer was rather good for woodcock, warm, without cold spells in the breeding period, but not too wet (in comparison with 2002). This weather was good for broods of Tetrao urogallus, Lyrurus tetrix and Bonasia bonasia. There are many juveniles of these species. July, August and all autumn were too dry. So, woodcocks had some problems with feeding during this period in the Ural region.

One Russian team worked in the Perm region of the Ural for ringing during September. Only 22 birds were ringed. Among them only 1 woodcock was an adult and 95.5% of birds were juveniles ( 52.4% were early broods and 47.6% late broods). The region was dry and there was no rain before snow cover (second decade of October).

Generally, this season was rather good for woodcock in all European Russia, but time will be necessary for restoration of the numbers of this species in its breeding area.
Short-bill woodcocks in Russia

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In Russia short-bill woodcocks are very rare in hunting bags, except for 3-4 reports of hunters and the observation of A. S. Maltchevski & Yu. B. Pukinski (1983) in the St-Petersburg’ region. In autumn-2003, 3 short-bill woodcocks were ringed in Russia. Among 173 birds ringed in September-October 2 birds were typical “brévirostre” and had short bills, of less than 50mm (Ferrand & Gossmann, 1995) and a third one had a bill that was even shorter than most of birds. All birds were juveniles from late broods. Two “brévirostre” were ringed on 10 an 13 October in the Smolensk region, Velizhsky district near the village of Kraslevichi ( 55°31’N; 31°00’E) - bill lengths: 45 and 38 mm; weights: 305 and 250 resp.) - and a third one on 14 October in the Vladimir region, Petushinsky district near town Pokrov (55°54’N; 39°12’E) – bill length: 63 mm; weight: 375 g-. They are the first finds of short-bill birds recovered during autumn ringing in Central Russia.

Some results of the study on Great Snipe migration in the southern part of Belarus

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The first detailed research work on wader migration began in 1995. Monitoring studies of the summer and autumn passage of waders were carried out later starting in 1998.

The ringing of Snipes in Belarus only started in 1999 in the framework of the International Project Wader Wetland Inlands (WWI) targeted on the study of inland migration routes of waders and coordinated by J.J. Seeger. A considerable amount of data on migration dynamics, morphometry and recoveries was collected in 2000-2001. These surveys were part of the OMPO (Migratory Birds of Western Palearctic) regional program on Snipes (Mongin, 2002). Information collected during 2002-2003 was gathered in the frame of the Bird Monitoring Program of the Institute of Zoology, National Academy of Sciences of Belarus.

Methods

A detailed study of Great Snipe migration was carried out in the same plot on an area of about 1.2 km² in the Pripyat river floodplain meadows during 3 years (vicinities of Turov, 52°05’ N, 27°45’ E). The snipe counts were carried out along permanent routes and 2-5 counts were made during each pentad. Migratory birds were caught in walk-in traps set up in favourable food habitats. The traps were checked every three hours from dusk to dawn. Breeding birds were caught not far from the monitoring plot and in some other sites. In four years about 140 Great Snipes were caught at leks and feeding sites.

All captured Great Snipes were weighed, measured and aged (Prater et al., 1997). Fat reserves were scored according to a scale (0-4).
The status of fat reserves was determined visually in the featherless area under the wing.

Results

All collected data are connected with the post-nuptial migration of the Great Snipe. It is connected with the rather rapid rate of spring migration of the Great Snipe (Panchenko, 1985). Great Snipe migration was investigated mainly during three years in the same permanent plot located in the Pripyat River floodplain meadows. These sites are not only used during the breeding period, but also serve as important feeding areas during the pre-migration period. Probably, some part of the migrating Great Snipes from the Northeastern regions of Russia stops here to restore fat reserves.

According to the results of three-year investigations, there are three peaks of Great Snipe passage in the Pripyat River floodplain (Figure 1). The first wave was observed in the first half of July, the second wave fell on the 5-6 pentads of July and the last peak was observed in early August. Few migrating Great Snipes were observed henceforth till the beginning of September. Probably during July-August we would observe the start of migration mainly for the birds of local populations. This assumption was confirmed by several recoveries of ringed local Great Snipes. A juvenile male ringed on the 15th of July 2000 during migration was captured next year at the lek situated at a distance of 1 km from the ringing site. A female captured on their nest on the 24th of May 2001 (the Pripyat River floodplain) was shot on the 26th of July 2001 in the same place.

\[\text{Figure 1: Migratory pattern and numbers of Great Snipe at census routes in floodplain meadows of the Pripyat River. Data grouped into five-day periods.}\]

Vladyshevsky (1966) who worked in the region of the Belovezhskaya pushcha (the Lesnaya River floodplain meadows) came to the same conclusion on the basis of his observations. In those localities where almost all Great Snipes (93%) were shot, the number of birds was not recovered, not only within the next few days, but neither within the next...
years. Vladyshevsky (1966) mentioned that usually the Great Snipes leave the floodplain meadows by the 20-25th of August. Probably, the waves of passage were formed due to the different moments of the beginning of migration for adult birds and juveniles, as well as to the movements of birds from different populations. This was confirmed by the changes in ratio of juveniles and adult birds during the passage. According to the catching results in 2000 (n=33), the ratio juv/ad was 5 (n=6) during the first half of July, 1.8 (n=17) during the second half of July and 2.5 (n=7) in the first half of August. The changes in body mass of migrating birds were cyclical. Body mass increased during their stay in stopover sites and decreased during active migration (long-distance migratory flight). The body mass increase was observed from July to mid-August both in juveniles and adults. Sharp weight loss was recorded in juvenile males during the second half of August. Probably, it was connected with the arrival and stop of birds from more eastern and northeasterly breeding grounds in capturing sites to restore their fat reserves. The same trend was revealed by an estimation of fat deposits in juveniles and adults (Figure 2). These data confirmed the opinion that the Pripyat River floodplain meadows are important staging areas for Great Snipes from Northeastern regions of Russia during migration.

There was no Great Snipe ringing scheme in Belarus before the start of the WWI and “Snipes” projects. According to the data of the Belarus Bird Ringing Centre there was only one straight recovery of Great Snipe (Figure 3). The bird ringed in 1961 in the Okski State Reserve, Russia, was captured on the 21st of August 1961 in Belarus. According to the map presented by Panchenko (1971) there was another recovery of a Great Snipe ringed in the same year and found close to the Belarus territory. According to the opinion of this author, the birds should get these areas moving in a “circular” way to their wintering grounds.
intensive-ringing scheme of Great Snipes, the first recovery of a bird ringed in Belarus was obtained. The juvenile female was ringed on 26 July near Turov (floodplain meadows of the Pripyat River) and shot by a French hunter in April 2003 in Gabon (Fig. 3). Thus this Great Snipe might have been a local bird or a bird moving along a “circular” way from its easterly breeding grounds. Distance between ringing and recovery places is about 6,000 km. The time and distance recoveries also confirm the opinion of different authors about the rapid spring migration of the Great Snipe (Panchenko, 1985; Cramp and Simmons, 1983).

Acknowledgements

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References


**2002-2003 French Woodcock report**

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**Ringing results**

**Quantitative results**

The numbers of ringed woodcock in France during the 2002-2003 wintering season decreased slightly compared to the previous season (Fig. 1). As the number of ringing trips and the number of contacts remained stable, the success rate was only 22%. The low number of ringed woodcocks in the Channel and along the Atlantic coasts was compensated by good results in the inside regions.

**Figure 1**: Inter-annual fluctuations of ringing results.

<table>
<thead>
<tr>
<th>N. départements</th>
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<tbody>
<tr>
<td>N. ringing sites</td>
<td>1 127</td>
</tr>
<tr>
<td>N. ringers</td>
<td>300</td>
</tr>
<tr>
<td>N. nocturnal trips</td>
<td>2 361</td>
</tr>
<tr>
<td>N. contacts</td>
<td>16 283</td>
</tr>
<tr>
<td>N. ringed woodcocks</td>
<td>3 417</td>
</tr>
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<td>Success rate</td>
<td>22%</td>
</tr>
<tr>
<td>N. direct retraps</td>
<td>84</td>
</tr>
<tr>
<td>N. indirect retraps</td>
<td>138</td>
</tr>
<tr>
<td>N. direct recoveries</td>
<td>149</td>
</tr>
<tr>
<td>N. indirect recoveries</td>
<td>331</td>
</tr>
<tr>
<td>Annual direct recovery rate</td>
<td>4.2%</td>
</tr>
<tr>
<td>Duration of ring wearing</td>
<td>26 days</td>
</tr>
<tr>
<td>(24 days for direct recoveries &lt;20 km; n=115)</td>
<td></td>
</tr>
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</table>
Qualitative results

The 2002-2003 woodcock wintering season was a very complex one because of 2 different phenomena: a low breeding success and a short cold spell in January. So, we propose to analyse the results in 3 parts.

Breeding success

The age-ratio of the ringed woodcocks (like for shot woodcocks) in year n principally depends on 2 factors: the production of young in year n and the hunting pressure close to the ringing sites during year n-1 (following the rule of the faithful to the same wintering site from year to year). Under the hypothesis that the hunting pressure did not greatly vary between two successive years, we may consider that the comparison of this value, in this period of time, mainly reflects a difference in breeding success.

In 2002-2003, the age-ratio of ringed woodcocks is 51.4%. It was 57.8% in 2001-2002. The relative age-ratio decrease is 11.1%. This decrease raises to 8% in the hunting bags (58% in 2002-2003, 63% in 2001-2002; CNB pers. com.) This decrease from one year to the next one is the highest registered in the previous 7 years.

At a regional level, the greatest divergence to the previous year average is noted in Brittany, Pays de la Loire, Poitou-Charentes and Aquitaine.

However, it should be noted that a significant age-ratio decrease (\(R^2=0.79\)) clearly appears since the middle of the 80’s (Fig. 2).

This constant decrease can of course be linked to a constant decrease in the breeding success but also to the extension of the ringer network to the eastern part of France where Woodcock hunting pressure is lower. So, if we separate the birds ringed in the Channel and Atlantic coasts region from those ringed inside the country, we observe a slower decrease for the first ones (\(R^2=0.59\)) and a relative stability with lower values for the second ones (\(R^2=0.25\)) (Fig.2). But, the “inside part” of the ringed woodcocks did not exist during the first 10 years of our data set. This part has increased since the middle of the 90’s and now represents about 50% of all ringed woodcocks in France (Fig. 2). This geographical evolution has probably contributed to curve the trend of the age-ratios downwards.

Figure 2: Inter-annual variations of ringed woodcock age-ratios in relation to the ringing region.
Another approach is to consider the percentage of woodcocks which achieved their secondaries' moult among the total of young birds, under the hypothesis that this kind of birds should be less numerous because of the difficulty they have to feed due to the dryness in North and Central Europe. At the scale of France, the 2002-2003 value does not clearly differ from the previous-year ones. These values are rather stable (between 55% and 65%).

Finally, we think that a lack of young woodcocks characterized the wintering season 2002-2003 well.

Abundance

The Woodcock autumn migration was one month delayed in 2002. The peak of observation was observed in December (Fig.3). Both ringing and hunting showed the same pattern (Club national des bécassiers, pers. com.). However, the value of the nocturnal index of abundance (IAN; Ferrand, 2003) does not follow this pattern. This index regularly increases as of October (very low value) to peak in January-February (very high values) then decreases till March. The IAN annual value also appears high (2.74) (Fig.4).

A regional analysis of the results lead us to consider that from November to mid-December the usual migration areas (Brittany, Pays de la Loire, Poitou-Charentes, Aquitaine) were avoided by the woodcocks. At the same time, high densities of woodcocks were observed in the Central and Eastern French regions (Ile de France, Centre, Limousin, Auvergne, Champagne-Ardenne, Alsace, Lorraine, Franche-Comté, Burgundy, Rhône-Alpes).

One explanation could be the heterogeneity of the climatic conditions in the breeding area. Indeed, if generally speaking the weather conditions in Russia were bad in spring-summer, they were acceptable in some regions like in the South of the Arkhangelsk region and in the Ural. So, in the French regions which mainly receive birds c from these Russian areas, the abundance was normal. Just as the densities of woodcocks wintering in the British Isles were rather high because of good weather conditions in Scandinavia where the main part of wintering woodcocks are coming from.

When the short cold spell appeared in January 2003, the woodcocks wintering in the Central and Eastern French regions moved to the coastal regions where their densities increased. But contrary to the previous cold spell, the woodcocks stayed in these safety regions and did not move again to their first wintering sites. This phenomenon looked like the ending of the autumn migration. Consequently, the densities in the Channel and Atlantic regions remained very high till February.

In Mediterranean regions, the densities stayed under the average especially in December.

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**Figure 3:** Monthly fluctuations of catching during the 2002-2003 season.

**Figure 4:** Annual fluctuations of the number of contacts/h during ringing trips (IAN: nocturnal index of abundance).
Impact of specific hunting regulations

Because of a dangerous biological situation (lack of young woodcocks certified as early as in December), specific woodcock hunting regulations entered in force in January. 75 French départements (80% of France surface) applied the recommendations of the French Woodcock network (ONCFS/Fédération départementale des chasseurs) by reducing the bag limits or closing hunting for several days or weeks. During the short cold spell, all woodcock hunting was closed in some additional départements. In total, all the French départements (except 5) took special measures. These special regulations probably led to reduce the woodcock hunting bag.

Three indices support this hypothesis:
- the direct recovery rate (4.2%) shows a strong decrease (41%) compared to the previous season, particularly in the Channel and Atlantic regions for the birds ringed in November, and in December as well (Fig. 5)
- the indirect recovery rate for the birds ringed in 2001-2002 is the lowest registered in the last seasons
- the hunting bag index (ICP) is estimated at 0.30 by the Club national des bécassiers. It is the lowest one registered in the last 10 years.

The impact of all these factors leads to a decrease in the hunting indices (ICP, hunting index of abundance) and an increase in the indices linked to the ringing operations (IAN).

![Figure 5: Variation of the direct recovery rate for woodcocks ringed in November(A) and in December(B), in France and in the Channel and Atlantic regions.](image)

Recoveries in foreign countries

In total, 19 recoveries of French rings have been registered in foreign countries in the course of the 2002-03 season. The detail is the following:
Direct recoveries: 3 in Russia, 3 in Hungary, 2 in Spain.
Indirect recoveries: 5 in Spain, 5 in Russia, 1 in Hungary.

Roding results

In 2003, the roding censuses took place respectively in 62 départements. In total, 976 listening points were visited.
National occupation rate

Remember that this rate corresponds to the % of listening points where at least one roding male is observed (= positive site). In 2003, the value is 0.22. This is the highest value registered over the last 4 years.
The occupation rates for the high and low abundance sites are 0.075 and 0.14 respectively. The 2003 value for the high abundance sites is one of the highest registered since the beginning of roding monitoring. The 2003 value for the low abundance sites is within the average.

Demographic trend

The demographic trend of the French breeding woodcock population has been analysed for a 10 year-period. In total, 47 départements censused roding woodcocks without
interruption from 1994 to 2003. The data are given in table 1.
Contrary to the last estimation (1993-2002), a \( \chi^2 \) test of tendency does not show any significant variation in the proportion of positive sites during the period 1994-2003 (\( \chi^2 = 2.02 \); \( p=0.155 \); fig. 5). A statistical stability is also noted for the proportion of the high abundance sites (\( \chi^2 = 0.30 \); \( p=0.58 \); fig. 5). On the other hand, the proportion of low abundance sites is always decreasing (\( \chi^2 = 4.60 \); \( p=0.03 \); fig. 6).

The 2003 value of the occupation rate is probably the cause of the recovery of the demographic trend. However, it seems that the pattern is always the same: the high abundance sites maintain their numbers but the marginal sites continue to disappear slowly. In our opinion, no convincing explanation can be proposed at the present time.

![Figure 6: Annual fluctuations of the proportion of positive sites, high abundance sites and low abundance sites.](image)

Reference

In Switzerland, a Woodcock monitoring started at the beginning of the 1980’s in the Jorat forest (cantons of Vaud) where three roding areas have been censused for more than 20 years. This monitoring was extended to the Western part of Switzerland from the beginning of 90’s. At the present time, three types of indices based on roding males are collected: from random listening points (index 1), from simultaneous censuses (index 2) and from a sample of Woodcock high-density sites (index 3).

**Results for index 1**

_Canton of Neuchâtel, Valais and Vaud (1993-2002)_

The general occupation rate (% of positive site; $T_g$) appears rather low in 2001 and close to the average in 2002 (0.29) (Fig. 1). The number of contacts ($N_b$) is also very low in 2001 but within the average (5.3) in 2002. These values are in line with the 4-year fluctuations found by Estoppey (2001a). The product $T_g\times N_b$ appears very low in 2001 but close to the 9 previous-yearly averages (1.56) in 2002.

_Canton of Vaud (1989-2002)_

The canton of Vaud results can be separately analysed for many reasons. On the one hand, its surface area is large, the forests are great and, consequently, the number of listening points is high. On the other hand, monitoring started 2 years earlier than in the other cantons, so the analysis can be made over 14 years. For this data set, 2 additional indices have been take into account: $T_f$ and $T_F$ which are respectively the % of listening points where the number of contacts is less or equal/more than 5 (Ferrand, 1989). $T_g$ is the sum of $T_F$ and $T_f$. $T_g$ increases regularly since 2000. In 2003, this index exceeds the average of the last 13 years (0.367). On the other hand, the number of contacts ($N_b$) is really low in 2000, 2001 and 2002, with a very slight increasing trend in 2002. If we look at $T_f$ and $T_F$, we can see that the $T_f$ peaks occurred one or two years after the $T_F$ peaks and one year before the peaks of the number of contacts. As we have already written (Estoppey, 2001a), that means that the “roding surface” first increases at the level of the low density areas, then the high density areas increase in surface and consequently the number of contacts also increases. This fact explains the correlation between the fluctuations of $T_g\times N_b$ and $T_f$. If the 4-year cycle registered from 1989 to 1998 is confirmed, a $T_g$ decrease and a number-of-contact increase should be observed in 2003.

**Results for index 2**

A method of simultaneous observations of roding males in whole forests or in a great part of them has been applied for many years in the cantons of Valais and Vaud. This method has also been applied in the Jorat forest (Estoppey, 1988), in the Jura and in the Pre-Alps. Mulhauser (2002a) precisely defined the method for the canton of Neuchâtel.

Every year 15 to 30 people participate in the census of 4 sites one in the Jura and three in the pre-Alps, in addition to the sites in the canton of Neuchâtel. For every 4 sites, the largest as possible Woodcock area is counted in relation to the number of participants and the distance needed between each listening points. So, an index of abundance can be calculated for a defined area, whereby the roding area variations (shown by Mulhauser, 2002a) are taken into account and also the
number of contacts and/or the surface of the different contact density areas. From one year to another, the listening points will probably not always be the same and thus the comparison could be problematic. This was the case in Draversa above Muraz VS where we made a simultaneous census in 1992, 1993 and 2002. In our opinion, it will a posteriori be necessary to:
- define a reference area for all the censuses,
- calculate the proportion of the 1-ha squares in every abundance category defined by Mulhauser (2002a),
- calculate the mean number of contacts in the reference area.

This method was applied for the data collected in Draversa (table 1). Two reference areas were defined. One of 152 ha which is the total of the squares prospected during the 3 series of observations (common area; Mulhauser, 2002a). Another one of 180 ha which gathers the listening points visited during the 3 series.

A mean number of contacts at the listening points have been calculated for these 2 reference areas, taking into account, or not, the sites with no woodcock. The first part of the table 1 shows that the males do not fly over the same forest areas every year. Some parts of the roding area are abandoned or occupied depending on the year. 1992 and 1993 look alike with a high number of mean-density squares. No high-density squares were noted in 1992 and 1993 but there were 10 in 2002. So, the roding activity was higher this last year.

**Figure 1**: Variations of the occupation rate (Tg), number of contacts (Nb) and their product from 1993 to 2002 in the cantons of Neuchâtel, Valais and Vaud (Western Switzerland).

**Figure 2**: Variations of Nb average, TF (x10), Tf (x10) and the product TgxNb from 1989 to 2002 in the canton of Vaud. (see text for abbreviations).
The number of contacts perfectly reflects this situation. Indeed, whatever the method of the number-of-contacts calculation, the values vary in the same proportions. If we take into account the listening points with no woodcock, the number of contacts is very similar in 1992 and 1993, then clearly increases in 2002. Without the points with no woodcock, a slight increase is noticed between 1992 and 1993 then more clearly in 2002. We think that the monitoring of only part of the roding area should be sufficient to get a significant index, especially when several roding areas are studied.

**Results for index 3**

In 2000 and 2001, five listening points with a high density of woodcocks were regularly visited in the Jura and the Pre-Alps. These points are located in different roding areas. They are visited by several observers at least one time in May or June. In 2002, the number of listening points increased to 13. The mean number of contacts calculated for the total of the listening points is a good abundance index. Moreover, observers are encouraged to go into the forest because they are almost sure to observe woodcocks!

The indices, calculated from 5 sites, raise to 11.7 in 2000, 10.5 in 2001 and again 11.7 in 2002. These values agree with the variations registered in whole Western Switzerland or only in the canton of Vaud.

**Conclusion**

In a recent paper (Estoppey, 2001a), we wrote that no significant reduction in numbers can be detected at the scale of Western Switzerland in spite of the disappearance of the Woodcock from the forests of the Moyen-Pays. As the listening points located in these forests are only a very small portion of our sampling set and as the Woodcock had already disappeared from the forests of the Moyen-Pays at the beginning of our monitoring, we concluded that the decrease could not be deducted from our study.

That does not mean that the species is not in danger. Its near complete disappearance from the Moyen-Pays during the years 1985-1998 (Estoppey, 2001a), its absence in 2002 from the Pre-Alps where it was yet well-represented in 1990 and, finally, the signs of decrease in the Jura in the large forests are important alarm signals. We think that an erosion of the numbers had already began in the middle of 80’s (Estoppey, 2001b) and this phenomenon has a high probability to continue.

The true reasons of this decrease are not known but we can suppose that the disturbance during the breeding season, the type of forest exploitation, the draining of the forests, the
construction of paths play a great role in this scarcity.

Mulhauser (2002b) showed that in the whole canton of Neuchâtel (803 km²) the Woodcock male population is less than 50 birds. That means that Woodcock populations in Western Switzerland are few in number.

In the coming years, we will try to estimate the number of males in others cantons.

In the framework of the management of the Woodcock populations, it would be important to examine the measures to take in order to maintain their present level and even to encourage this species to occupy again the plain forests which are not totally abandoned yet as we can observe in Jorat.

<table>
<thead>
<tr>
<th>Name of the listening point</th>
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<th>N 2002</th>
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<td>9.4</td>
<td>9</td>
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**Table 2**: Mean number of contacts registered at 13 listening points in the canton of Valais and Vaud. N is the number of observation evenings. Some listening points were not visited in 2000 and 2001 (second part of the table).

Acknowledgements

The author extends his thank to the Conservation de la Faune du canton de Vaud (St Sulpice), Pro Natura (Bâle) and the Sempach Swiss Ornithological Station for their financial help.

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Phenological data of the Woodcock *Scolopax rusticola* in SW Finland

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Introduction, materials and methods

The Woodcock *Scolopax rusticola* has been studied intensively on the Southwestern Finnish island of Aasla (60°17´N, 21°57´E) in the years 1975 – 2002, but more scattered data come from earlier years. In 1975 – 2002 field observations were made on at least 14 days every month. In this report I publish primary data on the Woodcock. Data on local woodcocks have previously been treated among others in a MSc thesis by Perttunen (1979), in a booklet by Saari (2000), and in this journal (Saari, 2002). Here I analyse the phenological data collected between 1966 and 2002, although the data prior to 1975 are not always representative.


The distribution of records in 1975-2002 is shown in pentads, i.e. by standard five-day periods. The highest daily totals for six approximately five-day periods in each month is also shown. Also the monthly totals in 1975-2002 are given as the highest daily woodcock number for each month.

Results

Arrival and departure

The date of first arrival at Aasla for 1966-2002 is shown in Table 1. The date for 1966 is probably unrepresentative. In 1967-2002 the median date of arrival was 30/31 March (range 12 March – 27 April) and 29/30 March (range 12 March-12 April) in the main study period of 1975-2002. In both data sets the date of first arrival has become earlier (rs = -0.433, p<0.05, n=36 for 1967 –2002; rs = -0.455, p<0.05, n=28 for 1975 –2002).

The departure dates are comparable for 1974-2002. In1969-1973 the field work stopped too early. The median departure date was 3 November, the range 11 October-11 January (Table 1). No annual trends could be discerned (rs = 0.038, n.s., n=29).

Phenology of roding

Start of roding in 1975-2002 was between 17 March and 2 May, median 4/5 April (Table 1). The start became earlier during these years (rs = - 0.469, p<0.05, n = 28). Inclusion of the scattered data for the years before 1975 changed the median to 9 April (n = 31).

The end of roding occurred in 1975-2002 between 16 June and 10 August, median 19/20 July (when including the data before 1975 20/21 July). There was no significant trend in the dates (rs = -0.084, n.s., n=28).

Annual distribution of records

Fig. 1 shows the annual distribution of Woodcock records. Here only the birds are shown that can exactly be dated. This material consists of 7606 contacts (6332 from roding). The first ones are recorded in mid-March and there is a steady increase up to mid-April, when most of the local population has probably arrived. Roeding is not intensive yet but nights are not spent in the field as much often as in the summer. A big leap upwards in the figures is seen from mid-May onwards when roeding becomes intensive. These figures may be higher than the previous ones, partly
also because studies of other night active birds increase around this time, including the night bird censuses. The level of contacts is fairly stable up to early July from whence a continuous decrease is recorded until early August. This is due to an overall decrease in roding activity. In August and September relatively few birds are seen, but a peak in numbers is recorded in October. From mid-November onwards only scattered Woodcocks are recorded. In January the Woodcock is very rare.

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Table 1: Arrival and departures dates, beginning and end of roding from 1966 to 2002 in SW Finland.

Figure 1: Number of woodcocks each pentad in 1975-2002.
Fig. 2 shows the highest daily totals in five-day periods. These are in close correspondence with the previous data. Maximally up to 10 birds have been recorded up to mid-April. From mid-April to mid-May the daily maxima are between 13 and 18. From mid-May to the end of July the maxima are above 20; in only three periods below 25. In some years the roding period may continue during the first ten-day period of August. After this the maxima are about the same until the first five-day period in November (range 2-6), after which it drops to one or two during the rest of the year. Scattered records are still made in January.

The monthly number of woodcocks recorded in 1975-2002 is shown in Table 2. In general the number of Woodcocks recorded in 1975-1984 is higher than later on, but this is very much due to a higher study effort of roding birds in the first ten-year period. However, the trend in the annual totals was only indicative (rs = -0.307, p<0.1, n = 28).

Table 2: Monthly total Woodcock numbers.
The highest daily totals for each month in 1975-2002 are shown in Table 3. Here the differences in study effort are somewhat levelled off since the number of nights out do not affect the maxima as much as the monthly totals. However, since 1985 the number of nights out in July have diminished much which is seen in numbers. In spite of that, the annual totals did not show any trend (rs = 0.005, n.s., n = 28). The numbers in March seem to have increased: the sum of the maxima was only four in 1975-1988, whereas it was 29 in 1989-2002.

And finally the ten highest daily totals for the Woodcock in 1975-2002 are shown in Table 4. The first ones arriving in March, are increasing their numbers but not the intensity of roding in April, the mean roding period in May-July, the end of roding in August, the peaking fall migration in October and scattered records in November-January.

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Table 4: Ten highest daily totals each month.
Discussion

The earlier arrival may be due to warmer springs in southern Finland recently, as there was a significant correlation between the mean March temperatures and the arrival dates at Aasla \([rs = 0.683, p<0.001, n 28; \text{table 5}; (\text{Saari, 2000})]\). The start of roding may likewise be correlated to spring temperatures. On the other hand the end of the roding period and the departure dates did not show any trends. The springs have become warmer in Southwestern Finland during the last 30 years, but not the autumns (Lehikoinen et al., 2003). The totals of Woodcocks recorded decreased during the study period (although only indicatively), whereas the numbers counted in the night bird censuses remained stable (Saari, 2002). This was due to a lesser study effort after 1985 because of fewer nights spent out in the field. The night census was standardised and thus more reliable.

The year of the Woodcock in Southwestern Finland can be described as follows. The arrival starts from mid-March onwards, on average at the end of March. First roding observations are made a few days after arrival. The number of birds recorded increases to mid-April and remains stable to mid-May. Roding activity increases considerably around mid-May, and ends, depending on the year, as of late June to early August. From early August onwards the numbers are low owing to the secretive behaviour of the species particularly during its moult. Fall migration starts in September, peaks in October and may be intensive in the first days of November. Later on Woodcocks are seen quite occasionally until early January.

References


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</table>

Table 5: Woodcock arrival date and mean March temperature in 1975-2002.

VALERIE R. TUOVILA, STEVEN B. CHADWICK & C. ALAN STEWART, Michigan Department of Natural Resources, Wildlife, P.O. Box 30444, Lansing, Michigan 48909-7944
Web site: www.michigan.gov/dnr

Ruffed grouse (Bonasa umbellus) and American woodcock (Scolopax minor) are popular forest game birds that are pursued by about 125,000 Michigan hunters annually. Hunters spend an average of 7 to 8 days hunting grouse and woodcock each year, adding up to almost a million days of recreation in Michigan annually (Frawley, 2002). Non-hunters also place a high value on grouse and woodcock. Many people enjoy listening to or watching drumming male grouse and the courtship displays of woodcock. Additionally, grouse and woodcock are important components of early successional forest habitat and indicators of healthy forest ecosystems.

Methods

The Michigan Department of Natural Resources (DNR) uses several surveys to monitor ruffed grouse and woodcock populations, including hunter cooperator and spring breeding surveys. Cooperator surveys are based on a group of hunters who record numbers of hours hunted and ruffed grouse and woodcock flushed each day. Data obtained from cooperating hunters are summarized as the number of grouse or woodcock flushed per hour of hunting. Flush rates reported by cooperators provide an early indicator of harvest, but the final estimates of hunting effort and harvest come from a mail survey of randomly selected hunters.

DNR personnel and volunteers conduct spring breeding surveys of ruffed grouse and woodcock using roadside routes. Each route has 10 listening stops that are consistent from year to year. The number of ruffed grouse drums or woodcock heard during a fixed interval is recorded at each stop. Because timing of breeding and habitat preferences differ for the two species, separate surveys are conducted. The woodcock breeding survey is coordinated by the United States Fish and Wildlife Service (USFWS) in cooperation with the DNR. Data for both surveys are summarized as the number of woodcock or grouse heard per survey route (Luukkanen et al. 1998). In addition, volunteer woodcock cooperators band over 1,000 woodcocks each spring to monitor recruitment and trends in survival (Krementz et al., 2003). The data are summarized as the number of woodcock chicks observed and banded per 100 hours of effort.

Review of recent hunting seasons

In 2002, the number of woodcock flushed per hour by cooperators was higher in Zone 1 and Zone 2 than in 2001, but lower in Zone 3. Woodcock flush rates were highest in Zone 2, followed by Zones 1 and 3, respectively (Fig. 1 and 2). Average flush rates peaked during October 1-15 and then declined during the October 16 – October 31 period in Zones 1, 2 and 3 (Table 1). Seasonal changes in woodcock flush rates most likely reflect southward fall migrations (Luukkanen et al. 1998) and pre-migratory concentration of woodcock. Preliminary research in Michigan revealed that the median migration date for radio-marked woodcock was October 22 in 2002 (Myatt & Krementz, 2003). The earliest departure date was September 20.

Approximately 51,000 hunters harvested about 154,000 woodcock while spending 323,000 days afield in 2001 (Frawley, 2002). This is lower than the record harvest of 390,000 woodcock in 1976. However, there were also more hunters (126,000) spending more days afield (908,000) in 1976 then in 2001 (Fig. 3). The number of woodcock harvested per hunter day is actually higher now then before the harvest peak in 1976 (Fig 4).
Figure 1: American woodcock flush rates reported by cooperating hunters, 1960-2020.

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Table 1: American woodcock flushes, by two weeks intervals, as reported by cooperating hunters in 2002.

Spring breeding surveys

Results of woodcock breeding surveys were based on preliminary analysis of data from 89 survey routes (Kelley, 2003). Significant changes in the woodcock index were not detected in Michigan. An average of 3.53 singing males were heard per route in Michigan. Although there was no change this year, the state has experienced a long-term decline of 1.7% per year since 1968. The central region index, consisting of information from Illinois, Indiana, Manitoba, Michigan, Minnesota, Ohio, Ontario and Wisconsin was also unchanged from 2002, with an average of 2.16 males heard per route. Woodcock banders in Michigan spent approximately 2,000 hours afield in 2003 and banded 948 chicks. The average brood size observed was 3.1, the same as 2002. In 2003, there were 60.2 chicks observed and 46 chicks banded per 100 hours of search time, compared to 68.4 observed and 51.4 banded in 2002.
Figure 2: Average American woodcock flushed per hour by cooperators in 2002.

Figure 3: Mail survey estimates of the number of American woodcock hunters, hunter days, and harvest in Michigan, 1960-2001 (estimates not available for 1984).
2003 Woodcock population status and hunting forecast

Woodcock hunters may expect a season similar to last year. The U.S. Fish and Wildlife Service mandated that the woodcock hunting season open no earlier than the Saturday closest to September 22. This year the opening date is September 20. Hunters may take 150,000 woodcock this fall. While good numbers of grouse and woodcock can be found in all parts of Michigan, the highest densities are located in the northern two-thirds of the state.

The long-term reduction in the woodcock population index based on the breeding bird survey raises questions and concerns about available habitat and the effects of hunting. The declining availability of quality habitat is believed to be a primary cause for the decline in the population (Dessecker and Purgslove 2000). In an attempt to halt the population decline, the USFWS has adjusted woodcock hunting season dates or reduced bag limits 4 times since 1968.

A 3 year research study in Michigan, Minnesota, and Wisconsin is being conducted to document survival, fall migration routes, timing, and habitat use of woodcock breeding in the western Great Lakes region (Myatt & Kremetz, 2003). Woodcock fall survival on both hunted and nonhunted (or lightly hunted) sites will be estimated for a three-year period (Doherty & Anderson, 2002). In Michigan, the study area in Dickinson County was closed to woodcock hunting beginning in 2002 and this area will remain closed through the 2004 hunting season. A map of this area can be found in the 2003-2004 Michigan Hunting and Trapping Guide.

![Figure 4: Mail survey estimates of woodcock harvest per hunter day in Michigan, 1958-2001 (estimates are not available for 1984).](image)

Acknowledgements

We thank all the cooperators who kept and provided grouse and woodcock hunting records and participated in banding woodcock. Steve Merchant and Adam Bump provided data for Minnesota and Wisconsin drumming counts. Many DNR employees and volunteers conducted spring breeding surveys and assisted in data entry. Mike Bailey, Brian Frawley, David Luukkonen, Sarah Mayhew, and Bill Moritz reviewed an earlier version of this report. Portions of this report were copied in whole or in part from previous status reports. Similar reports may be found at www.michigan.gov/dnr.
Litterature cited


On 1\textsuperscript{st} of May 2003, \textbf{two nests of woodcock 1 meter away from each other} were discovered in a spruce and beech forest in the Eastern part of France (Pontarlier - “département” of Doubs). On 17\textsuperscript{th} of May, a first nest hatches. On 18\textsuperscript{th} of May the ringers who are watching these nests come to ring the chicks. They find and band three of them. Of course, the females go off their nest during ringing. Twenty minutes after ringing, the broody female comes back to her nest. The cries of the chicks surprise her. She leaves her nest to join the chicks and to warm them. Then, she comes back to her nest encouraging the chicks by calling to follow her. She makes this game a second time and two chicks join her. A third one (not ringed) dies from the cold, 50 centimetres away. After a while, \textbf{the woodcock abandons her eggs and goes away with two chicks of her neighbour.} The mother of the chicks and the third ringed chick were never seen again. A woodcock accompanied by a chick was seen on 21\textsuperscript{st} of May 100 meters far from the nests. On 24\textsuperscript{th} of May, a dead ringed chick is found at the same place.

To our knowledge, nestings of two woodcocks so close to each other and the adoption of chicks by a female woodcock have never been observed before. Other interesting observations were made on that occasion:
- the two woodcocks left their nest twice a day: around midday and in the evening at roding time; the absence will last about 20 minutes for one bird and 40 for the other (max: 80 mn);
- the birds left their nest only on foot, on foot and then by taking wing, or directly by taking wing; they usually came back on foot;
- the female with the chicks looked for earthworms around her nest and presented these worms to the chicks.

All these observations were made from a hide by Stéphane Regazzoni (ONCFS) and Loïc Coat.
An early Pintail/Swinhoe’s Snipe was discovered at Kefar Ruppin in the Bet Shean Valley (Israel) on 2d of September 2003. This is about the sixth record for Israel, including the two definite Pintail Snipes in 1984 and 1998.

JAMES P. SMITH

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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: zoollit@hotmail.com
http://tele2.ee/birds/

We are very glad to present the book of our Russian colleagues about the Woodcock in Russia. This book is the result of 10-year research.

Val’d’shnep i okhota na nego (Woodcock and woodcock hunting) by S.YU. FOKIN & P.A. ZVEREV
Moscow, Publishing house “Veche”. 384 p. ISBN 5-9533-0101-4
Wholly in Russian
24 colour photos and 69 black-white figures and photos.
E.mail: veche@veche.ru
http://www.veche.ru
www.100top.ru


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