

1 Winter Bird Census

Zoological Museum, Finnish Museum of Natural History
 Winter bird census / Zoological Museum
 P. Rautatiekatu 13
 SF-00100 Helsinki

1. BACKGROUND AND AIMS. Winter bird censuses were started in Finland in the winter of 1956/57. Nowadays there are usually about 500 routes per census. In the beginning birds were counted only at the turn of December–January (mid-winter census) but since 1967, also in February–March (late winter census) and, since 1975, in the beginning of November (early winter census).

The aim of the winter bird censuses is to study

(1) distribution, numbers and habitats of wintering birds,

(2) their population changes during the winter, between successive years and in the long term, and

(3) the factors responsible for fluctuations in annual occurrences, winter mortality and long term population changes.

With the winter bird censuses it is possible to get a reliable picture of the general distribution of birds throughout the country and in different habitats in early, mid- and late winter. Because of species-specific differences in detectability, this method does not reveal the absolute abundances of species.

2. EQUIPMENT AND TIME NEEDED. The observer should be able to recognize all winter birds and their calls. A notebook, pencil and binoculars are needed, and perhaps also a compass in roadless areas and skis if there is a lot of snow. The route is marked on an accurate map, which is stored in the map archive of the Museum. The census cannot last longer than the length daylight permits in mid-winter. This means an approximately 8–12 km long route in southern Finland depending on the landscape and the number of birds, and a 5–10 km one in northern Finland. The route can also be shorter.

3. CHOOSING A CENSUS ROUTE. Each observer may plan the route freely, either across homogenous landscape or different

kinds of habitats. One should try to include garbage dumps, feeding sites, open water, weed fields and other sites favoured by wintering birds. It is easier to classify the birds into different habitats if the route does not cross very mosaic-like terrain or follow the edge of two habitats (e.g. forest/field) for a long time.

The route should be planned carefully in advance, according to knowledge of the landscape and with the help of a map. The route should be completable before dark regardless of snow or ice conditions. The more representative the habitats are in regard to the general habitat composition in the area, the better. When planning a new route, one should consult other ornithologists and the map archive of the Museum to make sure that it does not extensively overlap existing routes. The local ornithological societies should take care of the censuses within their areas so that they cover reasonably well at least the most important areas. New routes are especially needed in eastern and northern Finland.

4. CENSUS PERIODS. Each of the three census periods last two weeks: early winter 1–14 November, mid-winter from 25 December to 7 January and late winter from 21 February to 6 March. If the first day of the period is a Sunday, the whole period is moved back one day and starts already on the Saturday (i.e.: every period includes two weekends). If there is bad weather during the last days of the period, it is better to postpone the census for a few days beyond the period limit than not to count it at all.

5. TIME OF DAY. It is recommended to start censusing at dawn. In mid-winter the whole of daylight is usually needed; in early and late winter the count ends before dusk because of the longer day. At each route the census time should be kept about the same in all three periods.

6. **WEATHER.** The birds should be counted in good weather, since strong wind, poor visibility due to rain or fog, or cold weather lowers the detectability of birds. This is not always possible, however; the weather may get worse during the count, for instance. If the weather is bad for most of the day (code 4 in weather alternatives, Form 1A) one should give up counting and try another day.

7. **FIELD WORK.** Birds may be counted alone or in a group of 2–5 persons. In a group it is easier to observe birds and estimate the size of flocks (as long as observers do not interfere with each other!). The group may also spread to form a chain, or walk part of the way along separate routes. These are added to the habitats and total length of the route on the form. The practice should be the same from year to year. When counting birds walk slowly, stop and listen, and write down notes every once in a while. All birds (either seen or heard) are counted irrespective of how far away they are, local birds as well as those flying by. Depending on the amount of snow one can either walk or ski. In the archipelago a boat may be used.

The proportion of each habitat along the route should be estimated in advance using a map, and the estimate should be checked at problematic points during the count. The length of the habitat, which means the actual distance walked through a certain habitat, is measured with an accuracy of 100 metres. In rural settlements the diameter of a courtyard is taken to be 100 m. At dumping grounds etc., the route usually winds so much that it is better to mark the diameter of the dump as the length of the route. When the route runs along a border of two habitats, the length is halved between them. If a vantage point is taken from a standard spot to another habitat, the lookout distance is estimated (100, 200, 300, 400 or 500 m; birds may be observed and identified also from further off) and counted into the respective habitat. Stretches of water, however, are not added to the habitat class "other" (f).

Reserve a separate column for each habitat in your field notebook to mark each species. The statistics are easy to make with the six letter codes as well. Thus a list "Great Tit c3 + c1 + e2 + c5" means that 3 + 1 + 5 Great

Tits were seen in rural settlement (c) and 2 were found in forest (e).

A more detailed description of the habitats is given in the instructions (Form 1C). Place areas difficult to classify in the habitat "other" (f). Clearly non-local birds are included in this category also (e.g. a high-flying Raven). Soaring birds or individuals flying only short distances are marked under the habitat where they were first noticed (e.g. a flock of Yellow Buntings moving from one place to another). If the flock stays at the border of two habitats (e.g. part of the Black Grouse flock is on the field while the other part stays in the edge trees of the forest), the distribution is marked as it is at the moment of observation. Birds attracted by food to dumping grounds or feeding sites are marked under these habitats even if they are staying just outside them at the time. A general instruction in such cases is to use common sense; it is important that the routine is kept the same in every census.

Be careful when identifying birds. Only those crossbills you are able to identify to species are recorded as Common, Parrot and Two-barred Crossbills, otherwise they are recorded as *Loxia* sp. Undefined notes such as "a small passerine" or "a waterfowl specimen" are of no use. Age distribution of Whooper Swans is of special interest, because it indicates their breeding success in the previous summer. If one records a rarity which should be reported to the local or national rarities committee, make accurate notes about the bird, fill in the respective forms and send them to the committee.

8. **INTERPRETING OBSERVATIONS.** If it is impossible to determine the exact size of a flock, the number should be estimated. From a mixed flock of tits, Goldcrests and Treecreepers, the observer has usually time to estimate the approximate size of the flock and to identify part of the birds. In a case like this, the numbers of each species should be estimated on the basis of the available information. The same problem is faced at feeding sites, where it is often impossible to count the exact numbers of different species. The number of individuals may also be estimated by calls: usually it is easy to hear if the bird is alone (write 1) or if there is more than one bird (estimate the minimum number). It is im-

portant that each observer always follows the same routine.

9. FILLING IN THE FORMS? The instructions for filling in Winter Bird Census Form 1A–B are in Form 1C. Observations outside the proper census may be reported on Form 1D.

10. REPEATING THE COUNT. On each route, the winter bird count should be made in the same way every period and every year. It is also important that the routes are counted regularly, as neglect may distort the population indices calculated from the results. In order to maintain comparability it is recommended that the observers, or at least part of them, remain the same in successive censuses. If the observer is unable to make the count, he/she should get someone else to do it. It is also recommended that each local society should name a person, who in an autumn meeting of the society checks that all standard routes will be repeated. At the same time there would be a chance to discuss how to locate possible new routes.

The habitats of a route may change, especially because of human activities. However, routes should not be changed – what better way to follow the effects of environmental changes on bird populations?

Two questions are asked on Form 1B for each habitat: the length of the route belonging to the habitat, and if it was the same habitat sample as last time. The code of change may be one of the following alternatives:

0 = the length of the habitat remained the same,

1 = the habitat or a part of it was counted for the first time (used when the route is new or when an old route is extended) or the route was shortened (a part of the old route was not counted),

2 = the length of a single habitat was changed (the census was done as earlier, but the length of the habitat changed e.g. because of building or forestry).

The codes 0–2 can be summarized as follows: 0 = no changes in the length of the habitat, 1 = the changes were caused by the observer, and 2 = the changes were caused by outside factors.

In the following example a new route is started in winter 1990/91 with 3.1 km of fields.

The length and change codes of the field habitat get the following values (this example does not include other habitats):

In early winter 1990/91 the route is new, and the change code is 1. In mid- and late winter periods the count is repeated – the code is 0. Before the following winter 1991/92 200 m of the field is taken for building. The length of the field habitat is thus 2.9 km and the change code is 2 (remember to add this 0.2 km to rural settlement). In mid-winter the counting procedure and habitat length are the same – 2.9 km and change code = 0. But in late winter the weather changes quickly for the worse, and the count has to be stopped without a recount possibility. Only 1.5 km of the field is counted. The change code must be marked as = 1. In 1992/93 the count is skipped in early winter. In mid-winter the usual 2.9 km of field is counted, but the code = 1 tells that the length of the habitat is different from the last census done (late winter 1991/92).

11. OBSERVATIONS OUTSIDE THE COUNT. Since the winter of 1984/85 the Museum has collected all the observations (including those outside the proper count) of certain scarce winter birds. A prerequisite is that the observation activity in your area is about the same from year to year. With Form 1D you may report observations made outside the proper census during the two weeks' census period. Usually there are so little data on these species in the winter bird censuses that their population changes and frequency of wintering in Finland are hard to monitor. We hope that the amount of material will increase due to these extra observations. Note! Individuals observed repeatedly during the respective period are reported only once (largest number of individuals).

Return the Winter Bird Census Forms to the Museum within two weeks of your day of count!

SELECTED REFERENCES

- Hildén, O. 1982: Winter ecology and partial migration of the Goldcrest *Regulus regulus* in Finland. – *Ornis Fennica* 59:99–122.
Hildén, O. 1987: Finnish winter bird censuses:

- long-term trends in 1956-1984. – *Acta Oecologica/ Oecol. Gen.* 8:157–168.
- Hildén, O. 1988: Thirty years of Finnish winter bird censuses. – *Sitta* 2:21–57.
- Hildén, O. 1989: The effects of severe winters on the bird fauna of Finland. – *Memoranda Soc. Fauna Flora Fennica* 65:59–66.
- Hildén, O., Koskimies, P., Väisänen, R.A. & Yrjölä, R. 1988: Report of the Finnish winter bird censuses in 1986/87 (in Finnish with English summary). – *Lintumies* 23:7–18.
- Root, T. 1988: Atlas of wintering North American birds. An analysis of Christmas Bird Count data. – The University of Chicago Press, Chicago.
- Väisänen, R.A. & Koskimies, P. 1989: Winter birds in Finland in 1988/89, their long-term trends and densities in different habitats (in Finnish with English summary). – *Lintumies* 24:190–203.

WINTER BIRD CENSUS FORM Winter bird censuses/Zoological Museum **Return within two weeks of your day of count!**
 Version VI/1990 cross if the route is new P.Rautatiekatu 13 SF-00100 Helsinki

1A ROUTE NUMBER **WINTER** COUNT (circle one code): DAY MONTH YEAR OBSERVER NUMBER
 19 **90 /91** 1 Early winter 2 Mid-winter 3 Late winter **2 1 9 1** **1 2 3 4**

THE LAST COUNT WAS (circle one code): NEXT COUNTS (circle codes): Name: _____
 WINTER 19 **90 /91** ① Early winter ② Mid-winter ③ Late winter ① Early winter ② Mid-winter ③ Late winter
 Addr.: _____
 Tel: _____

NATIONAL GRID 10 x 10 km MUNICIPALITY TIME OF DAY WAY OF MOVING (circle one code):
 S - N W - E (6 letter code) (accuracy 1 hr) ① Walking 3 Other, what:
6 7 0 **3 5** **V I H T I** **7 - 1 3** ② Skiing

PLACE-NAME NUMBER OF OBSERVERS TEMPERATURE (accuracy 1°C)
V I H T I C E N T E R **2** **- 1 2**

WIND (circle one code): VISIBILITY (circle one code): CLOUDS AND RAIN (circle one code):
 1 Calm or weak ② Weak or moderate 3 Moderate or brisk (occasionally hindered observing) 4 Brisk or hard (clearly hindered observing)
 ① Good (birds could be observed from far away) 2 Good or moderate (individuals far away difficult to see) 3 Moderate or bad (occasional problems in observing) 4 Bad (observing nearly hindered)
 ① Mostly clear 2 Varying cloudiness 3 Mostly cloudy 4 Occasional rain or snow hindered observing

4 SNOW COVER: 1 = No snow; 2 = Snow in some places; 3 = Less than 5 cm; 4 = 5 - 10 cm; 5 = 11 - 20 cm; 6 = 21 - 50 cm; 7 = 51 - 100 cm; 8 = More than 1 m.

2 WATER: along the route 1 = Sea shore; 2 = Lake shore; 3 = River bank; 4 = Combination of former; 5 = No water.

3 ICE COVER: along the route 1 = Waters were open; 2 = Only shores/bays covered by ice; 3 = Some open water; 4 = All the waters covered by ice.

4 ROWAN-BERRIES: Amount of berries in the beginning of autumn Alternatives: 0 No data 4 Moderately
2 Amount of berries during the census period 1 No berries 5 Abundantly
 2 Very few 6 Very abundantly
 3 Little

Additional species Name	3+3 letter code	Habitat and number of individuals	Additional species Name	3+3 letter code	Habitat and number of individuals	Additional species Name	3+3 letter code	Habitat and number of individuals
Buzzard	BUTBUT	F 1						
Robin	ERIRUBE	E 2						

a = Dumping ground or fur farm, b = Urban settlement, c = Rural settlement, d = Arable land, e = Forest, f = Other habitat, g = Clear-cut area or stand of saplings (trees below 5 m), h = Reed-bed or shore scrub
 What is included in Other habitats (f): **PEATLAND MAINLY**

Q: CLEAR-CUT AREA

ROUTE NO. 1B 128		DUMF. URBAN RURAL ARABLE FOREST OTHER SUM NO. SETT. SETT. LAND HABITATS	DATE OF COUNT 2.1.91	DUMF. URBAN RURAL ARABLE FOREST OTHER SUM NO. SETT. SETT. LAND HABITATS
Habitat km	g 0.3 b c 4.1 d 1.9 e 5.3 f 0.7	12.3		
Changes of route (0, 1 or 2)	a b c d e f			
No of feeding sites	a b c 2 d e f	2		
No of feeders	a b c 4 d e f	4		
1 Mute Swan CYGOLO	a b c d e f			
2 Whooper Swan* CYGCGY	a b c d e f 5	5	33 Fieldfare TURPIL	a b c 30 d 17 f 47
3 - - (old) CYGCGY	a b c d e f		34 Redwing TURILI	a b c d e f
4 - - (young) CYGCGY	a b c d e f		35 Goldcrest REGREG	a b c d e 34 f 34
5 Mallard ANAPLA	a b c 5 d e f	5	36 Long-tailed Tit AEGCAU	a b c d e f
6 Long-tailed Duck CLAHYE	a b c d e f		37 Willow Tit PARMON	g 5 b c 10 d 15 f 30
7 Goldeneye BUCCLA	a b c d e f		38 Siberian Tit PARCIN	a b c d e f
8 Rd-b. Merganser MERSER	a b c d e f		39 Crested Tit PARCRI	a b c d e 2 f 2
9 Goosander MERMER	a b c d e f		40 Coal Tit PARATE	a b c d e 4 f 4
10 Goshawk ACCGEN	a b c d e f		41 Blue Tit PARCYA	a b c 19 d 5 f 24
11 Sparrowhawk ACCNIS	a b c d e f		42 Great Tit PARMAJ	a b c 85 d 23 f 108
12 Hazel Grouse BONBON	a b c d e f		43 Treecreeper CERFAM	a b c 2 d 2 f 4
13 Willow Grouse LAGLAG	a b c d e f		44 Grt. Grey Shrike LANEXC	a b c d e f
14 Black Grouse TETRIX	a b c d e f		45 Jay GARGLA	a b c 3 d 1 f 4
15 Capercaillie TETURO	a b c d e f		46 Siberian Jay PERINF	a b c d e f
16 Partridge PERPER	a b c d e f		47 Magpie PICPIC	a b c 23 d e f 23
17 Pheasant PHACOL	a b c 3 d e f	3	48 Nutcracker NUCCAR	a b c d e f
18 Black-hd. Gull LARRID	a b c d e f		49 Jackdaw CORMON	a b c d e f
19 Common Gull LARCAN	a b c 1 d 1 e f	2	50 Hooded Crow CORNIX	a b c 64 d 19 e f 83
20 Herring Gull LARARG	a b c d e f 1	1	51 Raven CORRAX	a b c d e f
21 Great B-B. Gull LARMAR	a b c d e f		52 Starling STUVUL	a b c d e f 5 5
22 Feral Pigeon COLLIV	a b c d e f		53 House Sparrow PASDOM	a b c 33 d e f 33
23 Hawk Owl SURULU	a b c d e f		54 Tree Sparrow PARMON	a b c d e f
24 Pygmy Owl GLAPAS	a b c d e f		55 Chaffinch FRICOE	a b c 8 d 3 e f 2 13
25 Grey-h. Woodp. PICCAN	a b c d e 1 f 1	1	56 Brambling FRIMON	a b c d e f
26 Black Woodpcr. DRYMAR	a b c d e f		57 Greenfinch CARCHL	a b c 6 d e f 6
27 Grt. sp. Woodp. DENMAJ	a b c 6 d 4 f 10	10	58 Goldfinch CARCAR	a b c d e f
28 Lsr. sp. Woodp. DENMIN	a b c d e f		59 Siskin CARSPI	a b c d e f
29 Three-t. Woodp. PICTRI	a b c d e f		60 Linnet CARGAN	a b c d e f
30 Waxwing BOMGAR	a b c d e f		61 Redpoll CARMEA	g 4 b c 31 d e f 35
31 Dipper CINCIN	a b c d e f		62 Crossbill LOXCUR	a b c d e f 11 11
32 Blackbird TURMER	a b c d e 1 f 1	1	63 Parrot Crossbill LOXPYT	a b c d e f
			64 Crossbill sp. LOXSP.	a b c d e f
			65 Pine Grospeak PINENU	a b c d e f
			66 Bullfinch PYRPHY	a b c 28 d 10 f 38
			67 Yellowhammer EMBCIT	a b c 20 d 20 e 3 f 43
			68 Reed Bunting EMBSCH	a b c d e f 2 2

Circle the ordinal number of all the species found in the count and calculate the total number of individuals in column sum.
* In the topmost row for the Whooper Swan mark the total of all birds (both those determined by age and those without).

1C INSTRUCTIONS FOR FILLING IN THE WINTER BIRD CENSUS FORMS

The forms should be filled in with clear hand-writing, in pencil and with BLOCK LETTERS. ALL NUMBERS are written so that they end at the right margin (e.g. time, temperature). ALPHABETIC DATA are started from the left margin (e.g. municipality, name of place).

On the FRONT PAGE OF WINTER BIRD CENSUS FORM (1 A) write the data concerning the route and the census.

NUMBER FOR A NEW ROUTE is given at the Museum, the number of an old route is written by the observer. New observers get a personal OBSERVER NUMBER from the Museum. The NEXT COUNTS means the counts the observer is planning to make at the same route (the Museum sends new forms according to this data). The NATIONAL GRID means the 10x10 km square within which the route mainly runs. The MUNICIPALITY is shortened according to Appendix 2 in the Manual (usually the first six letters of the name). If the route runs within more than one municipality, write the one where most of the route is. The PLACE NAME may consist of 15 letters only. The TIME OF DAY is reported with an accuracy of one hour; e.g. a count done 9.20-14.40 is marked 9-15.

AVERAGE WEATHER during the count is reported. The temperature that should be checked in the beginning and at the end of the count, and reported as the average of these with an accuracy of one degree. The average WIND, VISIBILITY and CLOUDS AND RAIN are reported by circling one of the four alternatives given. SNOW COVER, information on WATER and the ICE COVER are reported by writing in the box the code which best describes the situation during the count. The amount of ROWAN-BERRIES is reported with a scale of 1-6 both in the beginning of autumn (this remains the same in all the counts within one winter) and during the respective count when the birds have already eaten part of the crop.

The LENGTH OF DIFFERENT HABITATS along the route is reported with an accuracy of 100 meters on the BACK PAGE of the form (1B; e.g. a 0.2 (km), b 6.0 (km), etc.). The six MAIN HABITATS are:

- DUMPING GROUND OR FUR FARM (ask for permanent permission to make winter bird counts from the owner, and ask how to move about in the area, in order to cause minimum disturbance).
- URBAN SETTLEMENT (buildings in densely populated areas, yards, open water, harbour, etc.).
- RURAL SETTLEMENT (scattered buildings, courtyards, gardens etc. ; the diameter of the courtyard of one single house is taken to be 100 m).
- ARABLE LAND (fields and pastures outside the courtyards).
- FOREST (forests outside courtyards).
- OTHER (all habitats which do not fall into the former categories); also overflying birds.

ADDITIONAL HABITATS. Each main habitat a-e (excluding habitat f) may be placed with either of the two additional habitats:

- CLEAR-CUT AREA OR STAND OF SAPLINGS (trees below 5 m).
- REED-BED OR SHORE SCRUB.

When the additional habitats are used the replaced main habitat is included in alternative "other" (f). Change the title of the replaced habitat on page 1B. Change also the coding letter on each row where information about the changed habitat is written (first four rows and the rows of the species observed in this particular habitat).

DIAMETER AS LENGTH OF HABITAT. If you circle an area within habitat (e.g. a dumping ground), use the diameter as the length of that habitat.

EDGE HABITATS. When the route runs along the edge of two habitats, e.g. on the edge of a forest or a woody shore, mark half of the length in each habitat.

LOOKOUT AREAS. If you look out over an open area (e.g. a dumping ground or a field) from other habitat on the route, include the length of the observed area (100, 200, 300, 400 or 500 m) in the respective habitat of the lookout area.

CHANGES OF ROUTE. All the changes in every habitat from the last count are reported separately as follows: 0 = the length of the habitat remained unchanged; 1 = a part of the habitat was not counted or the length increased because the route was extended to cover new areas of that habitat; 2 = the length of the habitat changed because of habitat changes along the route (e.g. forestry or building). Take a look at the more specific instructions in chapter 10! Write 0 in column "TOTAL" if the route was counted similarly to the last time, or write 1 if the length of the route changed.

FEEDING SITE means the presence of abundant or varied feeding for winter birds. A FEEDER is a simple feeding point, such as a grain automate, a piece of tallow or a sheaf. Only the feeders which are easy to see from the usual route are included.

The LIST OF SPECIES includes the 66 most common winter birds in Finland; the OTHERS are reported on Form 1 A in the space reserved for additional species (if there is not enough room, continue the list in "remarks"). The 3+3 letter codes of species are listed in Appendix 1 of the Manual. Classify all the observations of each species according to the habitat where the observation was made. Remember also to report the habitats of additional species; e.g. EREALP d 1 means that one Shore Lark was found on arable land. All overflying birds are included in the column "other". For the birds on the edges of two habitats see Sect. 7 of the instructions for winter bird censuses.

Adult (white) and young (grey) Whooper Swans are reported separately when properly identified. In the topmost row write the total amount of all observed Whooper Swans. One may also report the young and the old Mute Swans separately in the space for additional species on Form 1 A.

Observations outside the winter bird census are reported with Form 1D (voluntary; check the instructions, Sect. 11). The observations are separated according to different habitats as in Forms 1A - 1B. It is not necessary to return Form 1C - D if there is no data on it.

1D OBSERVATIONS OUTSIDE THE WINTER BIRD COUNT FROM THE TWO WEEK'S PERIOD OF CENSUS					
NATIONAL GRID 10x10 km		WINTER		PERIOD (circle one code):	
S - N	W - E			1 Early winter (1-14 Nov)	OBSERVER NUMBER
6,7,0	3,5	19	90/91	2 Mid-winter (25 Dec - 7 Jan)	1,2,3,4
MUNICIPALITY (6 letter code)		Observations made outside the proper winter bird count in the 10x10 km square and its eight neighbour squares during the census period (MUNICIPALITY= the main municipality where observations were made).			
VIHTI					
RARE WINTER BIRDS			OCCASIONALLY WINTERING SPECIES		
	Habitat and no. of individuals	Total	(not reported in early winter)	Habitat and no. of individuals	Total
71 White-tailed Sea Eagle	HALALB		91 Great Crested Grebe	PODCRI	
72 Goshawk	ACCGEN	c1	92 Wigeon	ANAPEN	
73 Sparrowhawk	ACCNIS		93 Teal	ANACRE	
74 Golden Eagle	AQUCHR		94 Pintail	ANAACU	
75 Partridge	PERPER		95 Hen Harrier	CIRCYA	
76 Collared Dove	STRDEC		96 Buzzard	BUTBUT	
77 Hawk Owl	SURULU		97 Rough-legged Buzzard	BUTLAG	
78 Pygmy Owl	GLAPAS	e1	98 Kestrel	FALTIN	
79 Ural Owl	STRURA		99 Merlin	FALCOL	
80 Great Grey Owl	STRNEB		100 Stock Dove	COLOEN	
81 Grey-headed Woodpecker	PICCAN	e2	101 Wood Pigeon	COLPAL	
82 White-backed Woodpecker	DENLEU		102 Long-eared Owl	ASiotu	
83 Lesser Spotted Woodpecker	DENMIN	h1	103 Kingfisher	ALCATT	
84 Three-toed Woodpecker	PICTRI		104 Skylark	ALAARV	
85 Long-tailed Tit	AEGCAU		105 Shore Lark	EREALP	
86 Siberian Tit*	PARCIN		106 Wren	TROTRO	
87 Nuthatch	SITEUR		107 Dunnock	PRUMOD	
88 Great Grey Shrike	LANEXC	f1	108 Robin	ERIRUB	
89 Goldfinch	CARCAR		109 Linnet	CARCAN	a2
90 Hawfinch	COCCOC	c12	110 Twite	CARRIS	

Remarks:

Habitats: a = dumping ground, b = urban settlement, c = rural settlement, d = arable land, e = forest, f = other habitat, g = clear-cut area or stand of saplings, h = reed-bed or shore scrub.
 An example how to code observations: 90 Hawfinch COCCOC f1+c4+c3 8 (total).

If there is not enough room in the space reserved for a species, continue to the "remarks".