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Results of bird trapping and ringing by the Biological Station "Rybachy" on the Courish Spit in 2011

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In 2011, a grand total of 36,397 birds of 98 species were trapped and ringed by the Biological Station "Rybachy" in the framework of long- and short-term research projects. A total of 1,235 ringed birds of 51 species produced 2,021 recaptures. In 2011, 310 birds of 30 species ringed on the Courish Spit in previous years were retrapped. Between 15.03.2011 and 15.03.2012, 123 birds of 26 species ringed on the Courish Spit were reported as recovered more than 20 km from the ringing site. In 2011, 104 birds of 24 species ringed outside the Courish Spit were controlled. A review of research projects is given, along with main trapping techniques. A complete list of long-distance recoveries is provided.

Keywords: bird ringing, retraps, long-distance recoveries, research projects

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This annual report is the 14th one in the series of ringing reports published by the Biological Station "Rybachy" (Bolshakov et al. 1999; 2000; 2002a, b; 2003; 2004; 2005; 2008; 2009a, b, c; 2010; 2011) and consists of two parts. The first part contains a short review of research projects, description of trapping techniques used and main ringing results (Table 1), retraps and control captures (Table 2) during the current year. The second part contains a full list of birds ringed by the station and recovered outside the Courish Spit based on the data received from Russian Ringing Centre in Moscow. We also present the data on birds ringed outside the Courish Spit and controlled by us in the current year.

1. Current research projects using bird trapping and ringing

1.1 Long-term monitoring of the timing of spring and autumn migration, breeding, post-breeding and post-fledging dispersal, numbers of breeding and passage bird populations on the Courish Spit of the Baltic Sea (field site “Fringilla”)

This project has been under way without interruption since 1958 at the field site “Fringilla” (55°05′N, 20°44′E). Birds are trapped in specially designed, large permanent traps (the so-called “Rybachy-type” traps), ringed and measured. For a detailed description of the traps see Payevsky (2000). At present a unique data set is available that has made it possible to describe long-term trends in the timing of migration, breeding, post-fledging dispersal, and numbers of local and passage populations for nearly 40 passerines species from 1958 until 2011. These data have also allowed us to discover the main factors that affect the underlying trends (Chernetsov *et al.* 2006; Sinelschikova & Sokolov 2004; Sokolov 1999; 2008; Sokolov *et al.* 1998 a, b; 1999; 2000; 2001a, b; 2002a, b, 2003 a, b; 2004; 2008; 2012; Sokolov & Payevsky 1998; Sparks *et al.* 2005). Within the framework of this project two traps were operated at “Fringilla” in 2011: trap 4 (NE orientation of entrance) – from March 31 until September 28, trap 5 (SW orientation of entrance) – from April 01 until October 25. In the spring, summer and during a part of the autumn, the traps allowed us to control movement along the Courish Spit in both directions.

1.2. Long-term dynamics of numbers, energy condition, moult and biometrics of passerines in NE Europe (field site “Rybachy”)

A joint research programme of Max Planck Institute for Ornithology (Germany) and Biological Station “Rybachy” was launched in 1993 at the field site “Rybachy” on Rossitten Cape (55°09′N, 20°51′E). It is an area of heavy concentration of nocturnal passerine migrants at daytime stopovers, both in spring and in autumn. Trapping is done in mist nets, each 7 m long. Trapping, ringing and biometrics followed the guidelines of the MRI and ESF programmes (Berthold *et al.* 1991; Bairlein *et al.* 1995).

In 2011, 25 nets placed in 2 lines were open 24 hrs a day from March 27 until November 1 with a standard gap from June 11 until June 30.

1.3. Population structure, philopatry and dispersal of passerines on the Courish Spit

This project was launched in 1973. The data were largely obtained by trapping and ringing juveniles and adults in Rybachy-type traps (field site “Fringilla”) and mist nets (field site “Rybachy”). Additional mist nets were used near water pools at field site “Fringilla”) and the surrounding area. Pulli and adults were ringed at nests (incl. nest-boxes) at different sites on the Courish Spit. Adults were trapped at the nest (nest-box) using various techniques, incl. mist nets, walloper (butterfly-type net), semi-automatic traps, etc.

2. Results of bird ringing in 2011

Overall, 36,397 birds of 98 species were trapped and ringed by the Biological Station “Rybachy” in the framework research projects. A total of 21,845 birds of 77 species were trapped and ringed in Rybachy-type traps at the field site “Fringilla”, and 11,499 birds of 75 species were trapped and ringed in mist nets at the field site “Rybachy”. In 2011, 283 pulli of 12 species and 30 adults of 5 species were ringed at nests. Finally, 2,740 birds of 59 species were trapped and ringed by other methods in the framework of short-term research projects in 2011, including trapping by mist-nets near water pools in “Fringilla”. A more detailed account of ringing results is presented in Table 1.

Apart from the EURING code, scientific and English names of a species, the following information is given: (1) trapping figures at “Fringilla” field site by Rybachy-type traps; (2) trapping figures at “Rybachy” field site in a joint Russian-German research project; (3) the number of pulli and adults ringed at nests; (4) the number of birds trapped by other methods in different research projects (incl. a small number of birds captured and ringed incidentally); (5) overall ringing figures for 2011. Additionally, the grand ringing totals for 1956–2011 are presented for each species.

Numbers of retraps and controls at the place of ringing are presented in first three columns of Table 2. A total of 1,235 individuals of 51 species ringed in 2011 produced 2,021 retraps. In 2011, 310 birds of 30 species ringed on the Courish Spit in previous years were retrapped.

3. List of long-distance recoveries reported in 2011

The number of recoveries for each species is presented in Table 2 (columns 4 and 5). The lists include: birds ringed by the station on the Courish Spit and subsequently recovered more than 20km from the ringing site (section 3.1); controls of birds ringed outside the Russian part of the Courish Spit (section 3.2). In sections 3.1 and 3.2, we present all recoveries that were reported to the station between 15.03.2011 and 15.03.2012. The sequence of species follows EURING (1979).

3.1. Long-distance recoveries of birds ringed on the Courish Spit

For each species, EURING code, scientific and English name and number of recoveries (in parenthesis) are presented.

Explanation of line contents.

Every individual has data on two lines: on the upper one are ringing information (ring No, ringing date, sex, age [see below], ringing place with coordinates). If a bird was retrapped at the site of ringing, place and date of the last retrap are given in brackets. The sign “-” before the ring number showed that there is no series letter. In this and previous reports (Bolshakov et al. 1999; 2000; 2002a, b; 2003; 2004; 2005; 2008; 2009a, b, c; 2010) rings with series “C”, “E”, “M”, “O”, “P”, “R”, “S”, “FS”, “KS”, “MB”, “N”, “PB”, “RZ”, “VD”, “VK”, “VN”, “VS”, “VT”, “TA”, “XA”, “XB”, “XC”, “XD”, “XF”, “XG”, “XH”, “XK”, “XL”, “XN”, “XS”, “XT” and “XY” bear the inscription “Moskwa”, series “K”, “V” and “AX” bear the inscription “Russia, Petersburg”.

Table 1. Numbers of birds ringed by Biological station "Rybachy" in 2011.

EUR- ING code	Species	Rybachy- type traps (“Frin- gilla”)	Mist- nets (“Ryba- chy”)	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
00030	<i>Gavia arctica</i> Black-throated Diver	–	–	–	–	–	–	1
00090	<i>Podiceps cristatus</i> Great Crested Grebe	–	–	–	–	–	–	1
00720	<i>Phalacrocorax carbo</i> Cormorant	–	–	–	–	–	–	5
00950	<i>Botaurus stellaris</i> Bittern	–	–	–	–	–	–	2
00980	<i>Ixobrychus minutus</i> Little Bittern	–	–	–	–	–	–	1
01220	<i>Ardea cinerea</i> Grey Heron	–	–	–	–	–	–	375
01340	<i>Ciconia ciconia</i> White Stork	–	–	–	–	–	–	364
01840	<i>Anas crecca</i> Teal	–	–	–	–	–	–	3
01860	<i>Anas platyrhynchos</i> Mallard	–	–	–	–	–	–	3
01910	<i>Anas querquedula</i> Garganey	–	–	–	–	–	–	6
02150	<i>Melanitta fusca</i> Velvet Scoter	–	–	–	–	–	–	1
02310	<i>Pernis apivorus</i> Honey Buzzard	–	–	–	–	–	–	17
02380	<i>Milvus migrans</i> Black Kite	–	–	–	–	–	–	1
02600	<i>Circus aeruginosus</i> Marsh Harrier	–	–	–	–	–	–	4
02610	<i>Circus cyaneus</i> Hen Harrier	–	–	–	–	–	–	69
02620	<i>Circus macrourus</i> Pallid Harrier	–	–	–	–	–	–	1
02630	<i>Circus pygargus</i> Montagu's Harrier	–	–	–	–	–	–	5
02670	<i>Accipiter gentilis</i> Goshawk	–	–	–	–	–	–	47
02690	<i>Accipiter nisus</i> Sparrowhawk	72	4	–	–	–	76	7,308

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps ("Fringilla")	Mist- nets ("Rybachy")	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
02870	<i>Buteo buteo</i> Common Buzzard	–	–	–	–	–	–	23
02900	<i>Buteo lagopus</i> Rough-legged Buzzard	–	–	–	–	–	–	2
03040	<i>Falco tinnunculus</i> Kestrel	–	–	–	–	–	–	15
03070	<i>Falco vespertinus</i> Red-footed Falcon	–	–	–	–	–	–	4
03090	<i>Falco columbarius</i> Merlin	–	–	–	–	–	–	36
03100	<i>Falco subbuteo</i> Hobby	–	–	–	–	–	–	14
03200	<i>Falco peregrinus</i> Peregrine	–	–	–	–	–	–	1
03700	<i>Coturnix coturnix</i> Quail	–	–	–	–	–	–	2
04070	<i>Rallus aquaticus</i> Water Rail	–	–	–	–	–	–	21
04080	<i>Porzana porzana</i> Spotted Crane	–	–	–	–	–	–	9
04210	<i>Crex crex</i> Corncrake	–	–	–	–	–	–	15
04240	<i>Gallinula chloropus</i> Moorhen	–	–	–	–	–	–	4
04290	<i>Fulica atra</i> Coot	–	–	–	–	–	–	3
04690	<i>Charadrius dubius</i> Little Ringed Plover	–	–	–	–	–	–	2
04700	<i>Charadrius hiaticula</i> Ringed Plover	–	–	–	–	–	–	3
04930	<i>Vanellus vanellus</i> Lapwing	–	–	–	–	–	–	23
04960	<i>Calidris canutus</i> Knot	–	–	–	–	–	–	3
04970	<i>Calidris alba</i> Sanderling	–	–	–	–	–	–	6

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps (“Frin- gilla”)	Mist- nets (“Ryba- chy”)	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
05010	<i>Calidris minuta</i> Little Stint	–	–	–	–	–	–	1
05120	<i>Calidris alpina</i> Dunlin	–	–	–	–	–	–	7
05170	<i>Philomachus pugnax</i> Ruff	–	–	–	–	–	–	7
05180	<i>Lymnocyptes minima</i> Jack Snipe	–	–	–	–	–	–	17
05190	<i>Gallinago gallinago</i> Snipe	–	–	–	–	–	–	32
05290	<i>Scolopax rusticola</i> Woodcock	1	–	–	–	–	1	211
05410	<i>Numenius arquata</i> Curlew	–	–	–	–	–	–	1
05530	<i>Tringa ochropus</i> Green Sandpiper	–	–	–	–	3	3	20
05540	<i>Tringa glareola</i> Wood Sandpiper	–	–	–	–	–	–	18
05560	<i>Actitis hypoleucos</i> Common Sandpiper	–	1	–	–	–	1	41
05610	<i>Arenaria interpres</i> Turnstone	–	–	–	–	–	–	1
05820	<i>Larus ridibundus</i> Black-headed Gull	–	–	–	–	–	–	41
05900	<i>Larus canus</i> Common Gull	–	–	–	–	–	–	2
05910	<i>Larus fuscus</i> Lesser Black-backed Gull	–	–	–	–	–	–	3
06000	<i>Larus marinus</i> Great Black-backed Gull	–	–	–	–	–	–	1
061150	<i>Sterna hirundo</i> Common Tern	–	–	–	–	–	–	1
06340	<i>Uria aalge</i> Guillemot	–	–	–	–	–	–	1

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps (“Fringilla”)	Mist- nets (“Rybachy”)	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
06650	<i>Columba livia</i> Rock Dove	–	–	–	–	–	–	14
06680	<i>Columba oenas</i> Stock Dove	–	–	–	–	–	–	17
06700	<i>Columba palumbus</i> Woodpigeon	–	–	–	–	–	–	66
06840	<i>Streptopelia decaocto</i> Collared Dove	–	–	–	–	–	–	34
06870	<i>Streptopelia turtur</i> Turtle Dove	–	–	–	–	–	–	124
07240	<i>Cuculus canorus</i> Cuckoo	16	1	–	–	1	18	1,490
07350	<i>Tyto alba</i> Barn Owl	–	–	–	–	–	–	7
07500	<i>Surnia ulula</i> Hawk Owl	–	–	–	–	–	–	3
07570	<i>Athene noctua</i> Little Owl	–	–	–	–	–	–	1
07610	<i>Strix aluco</i> Tawny Owl	–	–	–	–	–	–	60
07670	<i>Asio otus</i> Long-eared Owl	7	–	–	–	–	7	3,364
07680	<i>Asio flammeus</i> Short-eared Owl	–	–	–	–	–	–	57
07700	<i>Aegolius funereus</i> Tengmalm’s Owl	–	2	–	–	–	2	339
07780	<i>Caprimulgus europaeus</i> Nightjar	1	–	–	–	–	1	423
07950	<i>Apus apus</i> Swift	5	–	–	–	–	5	661
08310	<i>Alcedo atthis</i> Kingfisher	–	4	–	–	–	4	216
08410	<i>Coracias garrulus</i> Roller	–	–	–	–	–	–	3

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps (“Frin- gilla”)	Mist- nets (“Ryba- chy”)	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
08460	<i>Upupa epops</i> Hoopoe	2	–	–	–	–	2	170
08480	<i>Jynx torquilla</i> Wryneck	1	1	–	–	1	3	1,181
08550	<i>Picus canus</i> Grey-headed Woodpecker	–	–	–	–	–	–	7
08560	<i>Picus viridis</i> Green Woodpecker	–	–	–	–	–	–	2
08630	<i>Dryocopus martius</i> Black Woodpecker	–	–	–	–	–	–	15
08760	<i>Dendrocopos major</i> Great Spotted Woodpecker	1	4	–	–	3	8	3,177
08830	<i>Dendrocopos medius</i> Middle Spotted Woodpecker	–	–	–	–	–	–	61
08840	<i>Dendrocopos leucotos</i> White-backed Woodpecker	–	–	–	–	–	–	4
08870	<i>Dendrocopos minor</i> Lesser Spotted Woodpecker	1	1	–	–	–	2	470
09740	<i>Lullula arborea</i> Woodlark	1	–	–	–	–	1	4,775
09760	<i>Alauda arvensis</i> Skylark	–	–	–	–	–	–	488
09780	<i>Eremophilla alpestris</i> Shore Lark	–	–	–	–	–	–	5
09810	<i>Riparia riparia</i> Sand Martin	18	–	–	–	–	18	5,106
09920	<i>Hirundo rustica</i> Swallow	114	3	37	–	14	168	11,652
10010	<i>Delichon urbica</i> House Martin	40	–	–	–	–	40	8,644

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps ("Fringilla")	Mist- nets ("Rybachy")	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
10020	<i>Anthus novaseelandiae</i> Richard's Pipit	–	–	–	–	–	–	3
10050	<i>Anthus campestris</i> Tawny Pipit	2	–	–	–	–	2	140
10090	<i>Anthus trivialis</i> Tree Pipit	6	–	–	–	12	18	6,099
10110	<i>Anthus pratensis</i> Meadow Pipit	8	–	–	–	–	8	11,040
10140	<i>Anthus spinoletta</i> Water Pipit	–	–	–	–	–	–	3
10142	<i>Anthus petrosus</i> Rock Pipit	–	–	–	–	–	–	1
10170	<i>Motacilla flava</i> Yellow Wagtail	9	17	–	–	–	26	2,887
10180	<i>Motacilla citreola</i> Citrine Wagtail	–	–	–	–	–	–	1
10190	<i>Motacilla cinerea</i> Grey Wagtail	–	–	–	–	–	–	11
10200	<i>Motacilla alba</i> Pied Wagtail	258	20	9	–	2	289	12,605
10480	<i>Bombycilla garrulus</i> Waxwing	–	–	–	–	–	–	1,325
10500	<i>Cinclus cinclus</i> Dipper	–	–	–	–	–	–	1
10660	<i>Troglodytes troglodytes</i> Wren	63	222	–	–	6	291	13,088
10840	<i>Prunella modularis</i> Dunnock	18	154	–	–	2	174	6,529
10990	<i>Erithacus rubecula</i> Robin	1,495	3,150	–	–	337	4,982	183,352
11030	<i>Luscinia luscinia</i> Thrush Nightingale	3	60	–	–	5	68	2,480
11060	<i>Luscinia svecica</i> Bluethroat	–	1	–	–	1	2	224

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps ("Frin- gilla")	Mist- nets ("Ryba- chy")	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
11130	<i>Tarsiger cyanurus</i> Red-flanked Bluetail	–	1	–	–	–	1	3
11210	<i>Phoenicurus ochruros</i> Black Redstart	26	3	–	–	–	29	1,560
11220	<i>Phoenicurus phoenicurus</i> Redstart	69	134	–	–	5	208	13,741
11370	<i>Saxicola rubetra</i> Whinchat	7	19	–	–	–	26	3,296
11390	<i>Saxicola torquata</i> Stonechat	–	–	–	–	–	–	3
11460	<i>Oenanthe oenanthe</i> Northern Wheatear	2	1	–	–	–	3	860
11860	<i>Turdus torquatus</i> Ring Ouzel	–	–	–	–	–	–	14
11870	<i>Turdus merula</i> Blackbird	317	317	–	–	3	637	14,077
11980	<i>Turdus pilaris</i> Fieldfare	6	1	–	–	–	7	2,538
12000	<i>Turdus philomelos</i> Song Thrush	311	255	–	–	5	571	28,472
12010	<i>Turdus iliacus</i> Redwing	14	12	–	–	–	26	6,245
12020	<i>Turdus viscivorus</i> Mistle Thrush	–	–	–	–	1	1	307
12360	<i>Locustella naevia</i> Grasshopper Warbler	9	14	–	–	3	26	752
12370	<i>Locustella fluviatilis</i> River Warbler	–	1	–	–	–	1	161
12380	<i>Locustella luscinioides</i> Savi's Warbler	–	–	–	–	–	–	88
12430	<i>Acrocephalus schoenobaenus</i> Sedge Warbler	2	261	–	–	6	269	10,454
12470	<i>Acrocephalus agricola</i> Paddyfield Warbler	–	–	–	–	–	–	5

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps ("Frin- gilla")	Mist- nets ("Ryba- chy")	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
12480	<i>Acrocephalus dumetorum</i> Blyth's Reed Warbler	–	3	–	–	3	6	104
12500	<i>Acrocephalus palustris</i> Marsh Warbler	–	191	–	–	10	201	6,292
12510	<i>Acrocephalus scirpaceus</i> Reed Warbler	3	632	21	7	8	671	21,262
12530	<i>Acrocephalus arundinaceus</i> Great Reed Warbler	–	91	4	–	–	95	3,243
12560	<i>Hippolais caligata</i> Booted Warbler	–	–	–	–	–	–	6
12590	<i>Hippolais icterina</i> Icterine Warbler	65	47	–	–	38	150	11,655
12650	<i>Sylvia cantillans</i> Subalpine Warbler	–	–	–	–	–	–	4
12670	<i>Sylvia melanocephala</i> Sardinian Warbler	–	–	–	–	–	–	1
12730	<i>Sylvia nisoria</i> Barred Warbler	4	3	–	–	2	9	3,982
12740	<i>Sylvia curruca</i> Lesser Whitethroat	80	83	–	–	9	172	19,409
12750	<i>Sylvia communis</i> Whitethroat	63	168	–	–	10	241	13,572
12760	<i>Sylvia borin</i> Garden Warbler	14	305	–	–	78	397	23,661
12770	<i>Sylvia atricapilla</i> Blackcap	90	871	–	–	152	1,113	26,016
12930	<i>Phylloscopus trochiloides</i> Greenish Warbler	–	1	–	–	–	1	109

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps ("Frin- gilla")	Mist- nets ("Ryba- chy")	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
12980	<i>Phylloscopus proregulus</i> Pallas's Warbler	–	–	–	–	–	–	27
13000	<i>Phylloscopus inornatus</i> Yellow-browed Warbler	–	2	–	–	1	3	115
13010	<i>Phylloscopus schwarzi</i> Radde's Warbler	–	–	–	–	–	–	3
13030	<i>Phylloscopus fuscatus</i> Dusky Warbler	–	–	–	–	–	–	2
13070	<i>Phylloscopus bonelli</i> Bonelli's Warbler	–	–	–	–	–	–	1
13080	<i>Phylloscopus sibilatrix</i> Wood Warbler	62	109	–	–	45	216	16,335
13110	<i>Phylloscopus collybita</i> Chiffchaff	86	220	–	–	5	311	12,203
13120	<i>Phylloscopus trochilus</i> Willow Warbler	731	340	6	–	85	1162	157,582
13140	<i>Regulus regulus</i> Goldcrest	464	417	–	–	3	884	374,997
13150	<i>Regulus ignicapillus</i> Firecrest	3	3	–	–	–	6	89
13350	<i>Muscicapa striata</i> Spotted Flycatcher	39	45	5	–	29	118	10,500
13430	<i>Ficedula parva</i> Red-breasted Flycatcher	4	4	–	–	8	16	1,216
13480	<i>Ficedula albicollis</i> Collared Flycatcher	–	1	–	–	–	1	26
13490	<i>Ficedula hypoleuca</i> Pied Flycatcher	56	230	129	20	58	493	29,094
13640	<i>Panurus biarmicus</i> Bearded Tit	–	2	–	–	–	2	500

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps (“Frin- gilla”)	Mist- nets (“Ryba- chy”)	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
14370	<i>Aegithalos caudatus</i> Long-tailed Tit	54	227	–	–	–	281	60,791
14400	<i>Parus palustris</i> Marsh Tit	5	8	–	–	5	18	2,273
14420	<i>Parus montanus</i> Willow Tit	13	–	–	–	6	19	2,305
14540	<i>Parus cristatus</i> Crested Tit	6	–	–	–	4	10	778
14610	<i>Parus ater</i> Coal Tit	193	–	17	–	5	215	56,034
14620	<i>Parus caeruleus</i> Blue Tit	1,193	334	–	–	28	1,555	94,437
14640	<i>Parus major</i> Great Tit	11,717	1,665	45	2	83	13,512	245,681
14790	<i>Sitta europaea</i> Nuthatch	–	1	–	–	1	2	381
14860	<i>Certhia familiaris</i> Treetreeper	4	50	6	1	1	62	8,838
14870	<i>Certhia brachydactyla</i> Short-toed Treetreeper	–	–	–	–	–	–	17
14900	<i>Remiz pendulinus</i> Penduline Tit	1	68	–	–	–	69	1,273
15080	<i>Oriolus oriolus</i> Golden Oriole	1	–	–	–	–	1	286
15150	<i>Lanius collurio</i> Red-backed Shrike	6	6	–	–	4	16	3,460
15200	<i>Lanius excubitor</i> Great Gray Shrike	–	1	–	–	–	1	114
15390	<i>Garrulus glandarius</i> Jay	15	1	–	–	–	16	6,421
15490	<i>Pica pica</i> Magpie	–	–	–	–	–	–	86
15570	<i>Nucifraga caryocatactes</i> Nutcracker	–	–	–	–	1	1	472

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps (“Fringilla”)	Mist- nets (“Rybachy”)	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
15600	<i>Coloeus monedula</i> Jackdaw	–	–	–	–	–	–	78
15630	<i>Corvus frugilegus</i> Rook	–	–	–	–	–	–	60
15672	<i>Corvus corone cornix</i> Hooded Crow	–	1	–	–	–	1	73
15720	<i>Corvus corax</i> Raven	–	–	–	–	–	–	4
15820	<i>Sturnus vulgaris</i> Starling	95	4	–	–	1	100	108,086
15910	<i>Passer domesticus</i> House Sparrow	–	–	–	–	53	53	1,075
15980	<i>Passer montanus</i> Tree Sparrow	1	4	–	–	4	9	346
16360	<i>Fringilla coelebs</i> Chaffinch	3,016	382	4	–	145	3,547	756,681
16380	<i>Fringilla montifringilla</i> Brambling	182	15	–	–	2	199	74,206
16400	<i>Serinus serinus</i> Serin	8	–	–	–	–	8	465
16490	<i>Carduelis chloris</i> Greenfinch	54	3	–	–	28	85	7,829
16530	<i>Carduelis carduelis</i> Goldfinch	15	6	–	–	–	21	3,115
16540	<i>Carduelis spinus</i> Siskin	484	103	–	–	1,255	1,842	223,902
16600	<i>Carduelis cannabina</i> Linnet	10	–	–	–	–	10	1,647
16620	<i>Carduelis flavirostris</i> Twite	–	–	–	–	–	–	32
16630	<i>Carduelis flammea</i> Redpoll	21	28	–	–	3	52	13,818
16640	<i>Carduelis hornemanni</i> Arctic Redpoll	–	–	–	–	–	–	18
16650	<i>Loxia leucoptera</i> Two-barred Crossbill	–	–	–	–	–	–	21

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps ("Fringilla")	Mist- nets ("Rybachy")	Nests		Other research projects and methods	Total ringed in 2011	Grand total 1956– 2011
				Nest- lings	Adults			
16660	<i>Loxia curvirostra</i> Crossbill	3	–	–	–	118	121	15,450
16680	<i>Loxia pytyopsittacus</i> Parrot Crossbill	–	–	–	–	1	1	18
16790	<i>Carpodacus erythrinus</i> Scarlet Rosefinch	19	26	–	–	11	56	7,096
16990	<i>Pinicola enucleator</i> Pine Grosbeak	–	–	–	–	–	–	1
17100	<i>Pyrrhula pyrrhula</i> Bullfinch	24	75	–	–	–	99	14,558
17170	<i>Coccothraustes coccothraustes</i> Hawfinch	11	2	–	–	13	26	1,787
18470	<i>Calcarius lapponicus</i> Lapland Bunting	–	–	–	–	–	–	3
18500	<i>Plectrophenax nivalis</i> Snow Bunting	–	–	–	–	–	–	1
18570	<i>Emberiza citrinella</i> Yellowhammer	24	1	–	–	14	39	4,775
18660	<i>Emberiza hortulana</i> Ortolan Bunting	–	–	–	–	–	–	516
18730	<i>Emberiza rustica</i> Rustic Bunting	–	–	–	–	–	–	10
18740	<i>Emberiza pusilla</i> Little Bunting	–	–	–	–	–	–	11
18770	<i>Emberiza schoeniclus</i> Reed Bunting	1	56	–	–	–	57	2,742
18810	<i>Emberiza melanocephala</i> Black-headed Bunting	–	–	–	–	–	–	1
18820	<i>Miliaria calandra</i> Corn Bunting	–	–	–	–	–	–	8
	Total birds	21,845	11,499	283	30	2,740	36,397	2,825,398
	Total species	77	75	12	5	59	98	200

Table 2. Retraps, controls, and recoveries of birds.

EURING code	Species	Retraps of birds ringed in 2011		Controls of birds ringed earlier than 2011	Recoveries of our birds outside the Courish Spit	Recoveries of birds ringed outside the Courish Spit
		birds	retraps			
00720	<i>Phalacrocorax carbo</i> Cormorant	–	–	–	–	2
02690	<i>Accipiter nisus</i> Sparrowhawk	–	–	–	3	3
05920	<i>Larus argentatus</i> Herring Gull	–	–	–	–	1
07670	<i>Asio otus</i> Long-eared Owl	–	–	–	1	–
08310	<i>Alcedo atthis</i> Kingfisher	1	1	–	–	–
08870	<i>Dendrocopos minor</i> Lesser Spotted Woodpecker	–	–	1	–	–
09920	<i>Hirundo rustica</i> Swallow	10	10	4	–	–
10050	<i>Anthus campestris</i> Tawny Pipit	1	1	–	–	–
10090	<i>Anthus trivialis</i> Tree Pipit	1	1	1	–	–
10200	<i>Motacilla alba</i> White Wagtail	15	20	14	–	2
10660	<i>Troglodytes troglodytes</i> Wren	34	41	–	1	–
10840	<i>Prunella modularis</i> Dunnock	13	20	–	–	1
10990	<i>Erithacus rubecula</i> Robin	199	308	3	10	1
11030	<i>Luscinia luscinia</i> Thrush Nightingale	15	37	6	–	1
11130	<i>Tarsiger cyanurus</i> Red-flanked Bluetail	1	1	–	–	–
11220	<i>Phoenicurus phoenicurus</i> Redstart	7	10	–	–	1
11870	<i>Turdus merula</i> Blackbird	18	22	4	4	2
12000	<i>Turdus philomelos</i> Song Thrush	5	5	–	5	–
12010	<i>Turdus iliacus</i> Redwing	1	1	–	1	–

Table 2. *Continued*

EURING code	Species	Retraps of birds ringed in 2011		Controls of birds ringed earlier than 2011	Recoveries of our birds outside the Courish Spit	Recoveries of birds ringed outside the Courish Spit
		birds	retraps			
12430	<i>Acrocephalus schoenobaenus</i> Sedge Warbler	27	34	–	1	2
12480	<i>Acrocephalus dumetorum</i> Blyth's Reed Warbler	–	–	–	1	–
12500	<i>Acrocephalus palustris</i> Marsh Warbler	20	25	9	1	–
12510	<i>Acrocephalus scirpaceus</i> Reed Warbler	130	214	35	7	4
12530	<i>Acrocephalus arundinaceus</i> Great Reed Warbler	32	99	25	1	1
12590	<i>Hippolais icterina</i> Icterine Warbler	10	15	5	–	–
12740	<i>Sylvia curruca</i> Lesser Whitethroat	10	22	8	–	1
12750	<i>Sylvia communis</i> Whitethroat	9	13	3	–	1
12760	<i>Sylvia borin</i> Garden Warbler	15	19	6	1	–
12770	<i>Sylvia atricapilla</i> Blackcap	117	170	19	4	–
13080	<i>Phylloscopus sibilatrix</i> Wood Warbler	2	2	–	–	–
13110	<i>Phylloscopus collybita</i> Chiffchaff	17	25	–	–	1
13120	<i>Phylloscopus trochilus</i> Willow Warbler	187	406	69	–	2
13140	<i>Regulus regulus</i> Goldcrest	30	37	–	1	–
13350	<i>Muscicapa striata</i> Spotted Flycatcher	3	3	–	–	–
13490	<i>Ficedula hypoleuca</i> Pied Flycatcher	8	10	1	1	1
13640	<i>Panurus biarmicus</i> Bearded Tit	2	3	–	–	–
14370	<i>Aegithalos caudatus</i> Long-tailed Tit	7	11	–	4	2
14400	<i>Parus palustris</i> Marsh Tit	4	12	3	–	–

Table 2. *Continued*

EURING code	Species	Retraps of birds ringed in 2011		Controls of birds ringed earlier than 2011	Recoveries of our birds outside the Courish Spit	Recoveries of birds ringed outside the Courish Spit
		birds	retraps			
14420	<i>Parus montanus</i> Willow Tit	6	7	–	–	–
14540	<i>Parus cristatus</i> Crested Tit	3	3	1	–	–
14610	<i>Parus ater</i> Coal Tit	1	1	–	–	–
14620	<i>Parus caeruleus</i> Blue Tit	41	55	2	9	14
14640	<i>Parus major</i> Great Tit	118	177	3	40	55
14790	<i>Sitta europaea</i> Nuthatch	1	1	–	–	–
14860	<i>Certhia familiaris</i> Trecreeper	8	11	1	–	–
14900	<i>Remiz pendulinus</i> Penduline Tit	3	4	–	2	1
15390	<i>Garrulus glandarius</i> Jay	–	–	1	–	–
15820	<i>Sturnus vulgaris</i> Starling	–	–	1	7	1
15910	<i>Passer domesticus</i> House Sparrow	–	–	2	–	–
15980	<i>Passer montanus</i> Tree Sparrow	2	2	4	–	–
16360	<i>Fringilla coelebs</i> Chaffinch	49	98	56	5	–
16380	<i>Fringilla montifringilla</i> Brambling	1	1	–	–	–
16490	<i>Carduelis chloris</i> Greenfinch	2	4	19	1	–
16540	<i>Carduelis spinus</i> Siskin	29	34	–	10	1
16660	<i>Loxia curvirostra</i> Crossbill	3	5	–	–	–

Table 2. *Continued*

EURING code	Species	Retraps of birds ringed in 2011		Controls of birds ringed earlier than 2011	Recoveries of our birds outside the Courish Spit	Recoveries of birds ringed outside the Courish Spit
		birds	retraps			
16790	<i>Carpodacus erythrinus</i> Scarlet Rosefinch	4	4	2	–	–
17100	<i>Pyrrhula pyrrhula</i> Bullfinch	5	6	–	–	–
17170	<i>Coccothraustes coccothraustes</i> Hawfinch	1	2	–	1	–
18570	<i>Emberiza citrinella</i> Yellowhammer	3	3	2	–	–
18770	<i>Emberiza schoeniclus</i> Reed Bunting	4	5	–	1	3
	Total birds	1,235	2,021	310	123	104
	Total species	51	51	30	26	24

On the lower line, recovery information (recovery date; sex; age; place of recovery – country, province, nearest site; coordinates, printed in parenthesis if only very roughly estimated); circumstances of recovery (see below); time elapsed between ringing and recovery dates in days; distance in km and direction in degrees (North – 0°, East – 90°). Distance was estimated according to the orthodrome, the great circle route and direction was estimated according to the loxodrome. If a bird was retrapped several times at the place of ringing, the latest retrap was used for calculating the time elapsed. If a ring was added, ringing scheme and new ring no. are given.

Codes:

SEX – M – male; F – female; I – unknown.

AGE:

0 – age unknown, i.e. not recorded.

1 – pullus: nestling or chick, unable to fly freely, still able to be caught by hand.

2 – full-grown: able to fly freely but age otherwise unknown.

3 – first-year: full-grown bird hatched in the breeding season of this calendar year.

4 – after first year: full-grown bird hatched before this calendar year, year of birth otherwise unknown.

5 – second year: a bird born last calendar year and now in its second calendar year.

6 – after second year: full-grown bird born before last calendar year, year of birth otherwise unknown.

Circumstances of recovery:

x – found dead

(x) – found sick or wounded, later died

xA – found dead long ago, remnants only: skeleton, leg with ring

xE – hit overhead wires or electrocuted

xG – collided with window, glasshouse, etc.

xN – found dead in fish nets

+ – shot

(+) – killed by man

+K – killed by cat

+M – killed by other mammal

+Ac – killed by raptor

+T – victim of traffic

V – controlled: trapped and released with the same ring

() – caught alive and released with another ring or ring removed

C? – caught, further fate unknown

r – ring only found

! – ring read

rAc – ring found in a raptor pellet

/?/ – manner of recovery unknown

& – ring added

(15.03.1999) – finding date is not known exactly, date when recovery letter was sent is given.

In cases when the exact date is not known:

00.03.1998 – exact date (day) of recovery is not known

beg.03.1998 – bird found in the beginning of the month

mid.03.1998 – bird found in the middle of the month

end.03.1998 – bird found in the end of the month

In such cases time elapsed is recorded as 00.

In total, between 15.03.2011 and 15.03.2012, we received from the Russian Ringing Centre in Moscow information on 123 recoveries of birds of 26 species, ringed on the Courish Spit (see Table 3.1, the list of long-distance recoveries of birds ringed on the Courish Spit).

3.2. Controls of birds ringed outside the Courish Spit

In 2011 the station controlled a total of 104 birds of 26 species ringed outside the Courish Spit. The line structure is the same: after the ring number, we give the ringing scheme (see Table 3.2, controls of birds ringed outside the Courish Spit). For 13 birds of 6 species ringed outside the Courish Spit and controlled by the Biological Station “Rybachy” in 2011, ringing information is still not available from the Russian Ringing Centre (see Table 3.3, data with ringing information not yet available).

4. Participants

The following members of the Biological Station, students, colleagues and amateur bird ringers participated in bird trapping and ringing in 2011 (listed by alphabetical order):

N. Chernetsov, E.Datnova, V. Grinkevich, D. Kishkinev, D. Leoke, M. Markovets, A. Mukhin, M. Paranicheva, L.Roberts, A. Shapoval, N. Shapoval, L. Sokolov, N. Sosedova, E. Tronikova, A. Tsvey, V. Yefremov.

Table 3.1 Long-distance recoveries of birds, ringed on the Courish Spit

02690. <i>Accipiter nisus</i>, Sparrowhawk (3)									
M 758633	14.10.2010	F 3	Russia, Fringilla		55.05N, 20.44E				
	15.03.2011	F 5	Germany, Brandenburg, Falkenthal, Oberhavel		52.54N, 13.18E	(x)	152 days, 543 km, 243°		
PB 138548									
	28.07.2011	M 3	Russia, Fringilla		55.05N, 20.44E	V	123 days, 1161 km, 222°		
	28.11.2011	M 2	Austria, Vorarlberg, Zwischenwasser-Batschuns		47.16N, 9.40E				
PB 141800									
	28.09.2005	M 4	Russia, Fringilla		55.05N, 20.44E				
	18.04.2009	M 6	Germany, Brandenburg, Waltersdorf, Heideblick		51.49N, 13.39E	xG	1298 days, 593 km, 232°		
07670. <i>Asio otus</i>, Long-eared Owl (1)									
C 503364									
	21.10.2006	M 4	Russia, Fringilla		55.05N, 20.44E				
	24.05.2010	I 2	Germany, Braunschweig, Osterode, Steinbruch Dorste		51.43N, 10.11E	r	00 days, 793 km, 243°		
10660. <i>Troglodytes troglodytes</i>, Wren (1)									
VN 34482									
	12.10.2011	I 3	Russia, Rybachy		55.09N, 20.51E				
	31.10.2011		Switzerland, Zürich, Seegraben		47.21N, 8.46E	+K	19 days, 1207 km, 224°		
10990. <i>Erithacus rubecula</i>, Robin (10)									
XG 04132									
	10.10.2009	I 3	Russia, Rybachy		55.09N, 20.51E				
	03.04.2011	I 4	Germany, Mecklenburg-Vorpommern, Greifswalder Oie		54.15N, 13.55E	V	540 days, 456 km, 257°		
XG 15760									
	10.04.2010	I 5	Russia, Fringilla		55.05N, 20.44E				
	18.10.2011	I 2	Italy, Lombardia, Bergamo, Oltre il Colle		45.52N, 9.46E	V	556 days, 1284 km, 217°		
XG 76236									
	04.05.2010	I 5	Russia, Rybachy		55.09N, 20.51E				
	08.05.2010	I 5	Poland, Koszalin, Bukowo-Kopan		54.28N, 16.25E	V	4 days, 294 km, 255°		
XH 09157									
	21.09.2010	I 3	Russia, Rybachy		55.09N, 20.51E				
	09.10.2010	I 3	Italy, Livorno-Pisa, Livorno, Porto Mediceo		43.33N, 10.19E	x	18 days, 1497 km, 210°		

XH 23881	16.04.2011 27.04.2011	I I	6 4	Russia, Fringilla Sweden, Öland, Ottenby	55.05N, 20.44E 56.12N, 16.24E	V	11 days, 299 km, 295°	
XH 27365	13.04.2011 04.02.2012	I I	5 4	Russia, Rybachy Portugal, Vale de Gavioes, Portalegre	55.09N, 20.51E 39.22N, 7.55W	x	297 days, 2789 km, 231°	
XH 29098	05.05.2011 21.10.2011	I I	5 4	Russia, Rybachy Sweden, Blekinge, Torhamn	55.09N, 20.51E 56.05N, 15.51E	V	169 days, 330 km, 288°	
XH 36322	12.09.2011 27.11.2011	I I	3 2	Russia, Rybachy Portugal, Algarve, Faro, Boliqeime, Loule	55.09N, 20.51E 37.09N, 8.08W	x	76 days, 2996 km, 228°	
XN 12093	19.04.2006 14.10.2006	I I	5 4	Russia, Rybachy Belgium, West-Vlaanderen, Ingooigem	55.09N, 20.51E 50.49N, 3.20E	V	178 days, 1261 km, 248°	
XY 49958	16.04.2007 20.03.2010	I I	5 2	Russia, Fringilla France, Alpes-Maritimes, Saint-Paul	55.05N, 20.44E 43.42N, 7.07E	+K	1069 days, 1603 km, 218°	
11870. <i>Turdus merula</i>, Blackbird (4)								
P 977609	28.03.2008 05.11.2011	M M	5 4	Russia, Rybachy Netherlands, Bloemendaal, Parnassiaweg	55.09N, 20.51E 52.25N, 4.34E	V	1317 days, 1111 km, 254°	
PB 246612	28.03.2011 13.05.2011	F F	6 4	Russia, Rybachy Finland, Mikkeli, Hirvensalmi, Metjotanniemi	55.09N, 20.51E 61.41N, 26.57E	xG	46 days, 808 km, 26°	
PB 246734	02.04.2011 13.04.2011	M M	6 4	Russia, Rybachy Finland, Kuopio, Lapinlahti, Paloiskyla, Rajamäki	55.09N, 20.51E 63.31N, 27.44E	xG	11 days, 1008 km, 23°	
TA 34912	25.10.2008 12.11.2010	M I	3 2	Russia, Fringilla France, Rhone-Alpes, Drome, Chatillon-Saint-Jean	55.05N, 20.44E 45.05N, 5.08E	+	748 days, 1572 km, 225°	
12000. <i>Turdus philomelos</i>, Song Thrush (5)								
TA 18143	04.10.2003 18.12.2009	I I	3 2	Russia, Rybachy France, Bouches-du-Rhone, Marseille	55.09N, 20.51E 43.18N, 5.22E	+	2267 days, 1731 km, 220°	
TA 31452	27.09.2007 15.12.2007	I I	3 2	Russia, Rybachy France, Bouches-du-Rhone, Aix-en-Provence	55.09N, 20.51E 43.32N, 5.26E	+T	79 days, 1706 km, 221°	

TA 49022	27.03.2010	I	5	Russia, Rybachy	55.09N, 20.51E				
	24.10.2011	I	2	France, Lot-et-Garonne, Samazan	44.26N, 0.07E	x	576 days, 1905 km, 231°		
TA 49537	19.09.2011	I	3	Russia, Rybachy	55.09N, 20.51E				
	15.10.2011	I	2	France, Hautes-Pyrenees, Lubret-Saint-Luc	43.18N, 0.18E	+	26 days, 1989 km, 228°		
TA 56297	07.10.2009	I	3	Russia, Fringilla	55.05N, 20.44E				
	09.02.2010	I	4	France, Ardeche, Pradons	44.29N, 4.22E	x	125 days, 1663 km, 225°		
12010. <i>Turdus iliacus</i>, Redwing (1)									
TA 78366	07.04.2011	I	6	Russia, Fringilla	55.05N, 20.44E				
	15.12.2011	I	2	France, Manche, Picauville	49.23N, 1.24W	+T	252 days, 1634 km, 247°		
12430. <i>Acrocephalus schoenobaenus</i>, Sedge Warbler (1)									
XH 29549	12.05.2011	I	4	Russia, Rybachy	55.09N, 20.51E				
	23.07.2011	I	2	Estonia, Pärnumaa, Häädemeeste	58.05N, 24.29E	V	72 days, 394 km, 34°		
12480. <i>Acrocephalus dumetorum</i>, Blyth's Reed Warbler (1)									
XH 25325	31.05.2011	I	4	Russia, Fringilla	55.05N, 20.44E				
	28.06.2011	I	4	Denmark, Jylland, Skagen Gren, Sylviastien	57.44N, 10.39E	V	28 days, 686 km, 295°		
12500. <i>Acrocephalus palustris</i>, Marsh Warbler (1)									
XH 07417	10.08.2010	I	3	Russia, Rybachy	55.09N, 20.51E				
	01.09.2010	I	2	Belgium, Limburg, Nerem (Tongeren)	50.46N, 5.31E	V	22 days, 1136 km, 245°		
12510. <i>Acrocephalus scirpaceus</i>, Reed Warbler (7)									
V 017742	01.09.1999	I	3	Russia, Fringilla	55.05N, 20.44E				
	14.09.1999	I	3	Belgium, Antwerpen, Herselt	51.03N, 4.52E	V	13 days, 1150 km, 247°		
XG 02004	05.08.2009	I	3	Russia, Rybachy	55.09N, 20.51E				
	02.09.2009	I	3	Belgium, Limburg, Bokrijk	50.57N, 5.25E	V	28 days, 1131 km, 246°		
XG 03151	29.06.2010	I	1	Russia, Kaliningrad, Lesnoj	55.01N, 20.38E				
	15.08.2010	I	3	Belgium, Antwerpen, Oorderen	51.17N, 4.21E	+	47 days, 1162 km, 249°		
XG 79291	20.07.2010	M	4	Russia, Rybachy	55.09N, 20.51E				
	01.08.2010	I	4	France, Drome, Les Isles, Chateauf-neuf-sur-Isere	45.00N, 4.53E	V	12 days, 1602 km, 225°		

XH 07150	02.08.2010	I	3	Russia, Rybachy	55.09N, 20.51E	C?	17 days, 1813 km, 241°
	19.08.2010	I	3	France, Loire-Atlantique, Massereou, Frossay	47.15N, 1.56W		
XH 08049	28.08.2010	I	3	Russia, Rybachy	55.09N, 20.51E	V	6 days, 1158 km, 236°
	03.09.2010	I	3	Germany, Saarland, Lisdorf	49.18N, 6.46E		
XN 83687	31.05.2008	I	4	Russia, Rybachy	55.09N, 20.51E	V	827 days, 1337 km, 236°
	05.09.2010	I	4	France, Aube, Etang de la Horre, Lentilles	48.29N, 4.39E		
12530. <i>Acrocephalus arundinaceus</i>, Great Reed Warbler (1)							
KS 11826	25.07.2011	I	3	Russia, Rybachy	55.09N, 20.51E	V	46 days, 868 km, 185°
	09.09.2011	I	2	Hungary, Pest, Farnos	47.22N, 19.50E		
12760. <i>Sylvia borin</i>, Garden Warbler (1)							
XH 38649	31.08.2011	I	3	Russia, Rybachy	55.09N, 20.51E	V	7 days, 611 km, 204°
	07.09.2011	I	3	Czech Republic, Olomoucky, Jesenik	50.08N, 17.09E		
12770. <i>Sylvia atricapilla</i>, Blackcap (4)							
O 808380	10.05.1996	F	4	Russia, Rybachy	55.09N, 20.51E	x	359 days, 2452 km, 156°
	04.05.1997	I	4	Cyprus, Famagusta, Vrissoulles	35.05N, 33.53E		
XH 20608	14.10.2010	M	3	Russia, Rybachy	55.09N, 20.51E	V	202 days, 302 km, 293°
	04.05.2011	M	5	Sweden, Öland, Ottenby	56.12N, 16.24E		
XH 28921	03.05.2011	M	6	Russia, Rybachy	55.09N, 20.51E	xG	73 days, 715 km, 331°
	15.07.2011	M	2	Sweden, Dalarna, Leksand, Satra Sturakersvagen	60.48N, 15.03E		
XH 29185	06.05.2011	M	5	Russia, Rybachy	55.09N, 20.51E	V	5 days, 259 km, 319°
	11.05.2011	M	5	Sweden, Gotland, Sundre, Hoburgen	56.55N, 18.08E		
13140. <i>Regulus regulus</i>, Goldcrest (1)							
VD 55909	10.10.2005	F	3	Russia, Fringilla	55.05N, 20.44E	V	12 days, 1180 km, 248°
	22.10.2005	F	3	Belgium, Antwerpen, Willebroek	51.04N, 4.22E		
13490. <i>Ficedula hypoleuca</i>, Pied Flycatcher (1)							
VK 35430	16.06.2011	I	1	Russia, Kaliningrad, Courish Spit	55.08N, 20.47E	V	59 days, 147 km, 234°
	14.08.2011	I	3	Poland, Gdansk, Swibno	54.21N, 18.56E		

14370. <i>Aegithalos caudatus</i>, Long-tailed Tit (4)									
VK 68201	06.10.2010	I	2	Russia, Fringilla	55.05N, 20.44E				
	09.10.2010	I	2	Poland, Gdansk, Mierzeja Wislana-Siekierki	54.22N, 19.24E	V		3 days, 117 km, 227°	
VK 68554	07.10.2010	I	2	Russia, Fringilla	55.05N, 20.44E				
	20.10.2010	I	2	Poland, Gdansk, Mierzeja Wislana-Siekierki	54.22N, 19.24E	V		13 days, 117 km, 227°	
VN 11308	10.10.2010	I	2	Russia, Fringilla	55.05N, 20.44E				
	17.10.2010	I	2	Poland, Gdansk, Mierzeja Wislana-Siekierki	54.22N, 19.24E	V		7 days, 117 km, 227°	
VN 12581	15.10.2010	I	2	Russia, Fringilla	55.05N, 20.44E				
	18.10.2010	I	2	Poland, Gdansk, Mierzeja Wislana-Siekierki	54.22N, 19.24E	V		3 days, 117 km, 227°	
14620. <i>Parus caeruleus</i>, Blue Tit (9)									
XH 16088	08.10.2010	F	3	Russia, Fringilla	55.05N, 20.44E				
	01.01.2011– 31.01.2011	I	5	Germany, Niedersachsen, Hannover	52.23N, 9.43E	x		00 days, 784 km, 247°	
XH 20115	01.10.2010	M	4	Russia, Rybachy	55.09N, 20.51E				
	25.02.2012	F	5	Estonia, Pärnumaa, Muti	59.32N, 24.49E	V		512 days, 542 km, 26°	
XH 26221	29.03.2011	M	5	Russia, Rybachy	55.09N, 20.51E				
	07.10.2011	M	4	Latvia, Liepaja, Pape	56.10N, 21.01E	V		192 days, 113 km, 5°	
XH 46015	12.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E				
	30.01.2012	I	4	Germany, Brandenburg, Lychen, Uckermark	53.13N, 13.19E	V		110 days, 525 km, 247°	
XN 66559	13.09.2007	M	4	Russia, Fringilla	55.05N, 20.44E				
	02.03.2009	M	6	France, Eure, Valeuil, Conches-en-Ouche	48.57N, 0.56E	V		536 days, 1516 km, 243°	
XN 81975	20.04.2008	F	5	Russia, Rybachy	55.09N, 20.51E				
	13.11.2008	M	4	Belgium, West-Vlaanderen, Ingooigem	50.49N, 3.26E	V		207 days, 1261 km, 248°	
XP 03739	01.07.2008	I	3	Russia, Fringilla	55.05N, 20.44E				
	22.10.2009	I	3	Belgium, Oost-Vlaanderen, Sint Loureins	51.15N, 3.32E	V		478 days, 1222 km, 250°	
XP 03845	03.07.2008	I	3	Russia, Fringilla	55.05N, 20.44E				
	23.03.2010	M	6	Poland, Gdansk, Gdynia-Witominio	54.30N, 18.30E	V		628 days, 157 km, 246°	

XP 05607	23.09.2008	F 4	Russia, Fringilla	55.05N, 20.44E	V	34 days, 1187 km, 248°
	27.10.2008	F 3	Belgium, Oost-Vlaanderen, Sint Niklaas	51.10N, 4.10E		
14640. <i>Parus major</i>, Great Tit (40)						
XG 77785	18.07.2010	F 3	Russia, Fringilla	55.05N, 20.44E	V	283 days, 260 km, 322°
	27.04.2011	M 5	Sweden, Gotland, Sundre, Hobrogen	56.55N, 18.08E		
XH 16430	08.10.2010	F 3	Russia, Fringilla	55.05N, 20.44E	xA	158 days, 1033 km, 256°
	15.03.2011	I 4	Netherlands, Friesland, Stavoren	52.53N, 5.22E		
XH 16664	09.10.2010	M 3	Russia, Fringilla	55.05N, 20.44E	x	212 days, 544 km, 37°
	09.05.2011	I 4	Estonia, Lääne-Virumaa, Liggvalla	59.00N, 26.08E		
XH 17666	13.10.2010	F 3	Russia, Fringilla	55.05N, 20.44E	x	160 days, 161 km, 245°
	22.03.2011	I 4	Poland, Gdansk, Gdynia-Dabrova	54.28N, 18.28E		
XH 18537	19.10.2010	F 3	Russia, Fringilla	55.05N, 20.44E	V	9 days, 117 km, 227°
	28.10.2010	F 3	Poland, Gdansk, Mierzeja Wislana-Siekierki	54.22N, 19.24E		
XH 19674	26.10.2010	M 3	Russia, Fringilla	55.05N, 20.44E	V	4 days, 117 km, 227°
	30.10.2010	M 3	Poland, Gdansk, Mierzeja Wislana-Siekierki	54.22N, 19.24E		
XH 26380	31.03.2011	M 5	Russia, Rybachy	55.09N, 20.51E	V	193 days, 128 km, 227°
	10.10.2011	M 4	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 27133	10.04.2011	F 5	Russia, Rybachy	55.09N, 20.51E	V	191 days, 128 km, 227°
	18.10.2011	I 2	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 35626	30.09.2011	F 3	Russia, Fringilla	55.05N, 20.44E	V	14 days, 118 km, 227°
	14.10.2011	F 3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 42114	04.10.2011	F 3	Russia, Fringilla	55.05N, 20.44E	V	5 days, 118 km, 227°
	09.10.2011	F 4	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 43279	09.10.2011	F 3	Russia, Fringilla	55.05N, 20.44E	V	13 days, 118 km, 227°
	22.10.2011	F 3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 43850	10.10.2011	F 3	Russia, Fringilla	55.05N, 20.44E	xG	119 days, 740 km, 255°
	06.02.2012	I 2	Germany, Lüneburg, Moisburg	53.24N, 9.42E		
XH 44383	11.10.2011	M 3	Russia, Fringilla	55.05N, 20.44E	V	4 days, 118 km, 227°
	15.10.2011	M 3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		

XH 44498	11.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E	V	3 days, 118 km, 227°
	14.10.2011	F	4	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 44754	11.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	3 days, 118 km, 227°
	14.10.2011	F	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 45423	12.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	V	5 days, 118 km, 227°
	17.10.2011	M	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 45573	12.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	22 days, 763 km, 246°
	03.11.2011	F	2	Germany, Braunschweig, Lahstedt	52.15N, 10.10E		
XH 45726	12.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	V	15 days, 159 km, 242°
	27.10.2011	M	2	Poland, Gdansk, Gdansk-Oliwa	54.25N, 18.32E		
XH 45803	12.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	5 days, 118 km, 227°
	17.10.2011	F	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 46483	17.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	5 days, 118 km, 227°
	22.10.2011	F	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 46933	17.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	V	49 days, 189 km, 258°
	05.12.2011	F	3	Poland, Gdansk, Choczewo, Przebendowo	54.44N, 17.50E		
XH 48161	18.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	9 days, 331 km, 287°
	27.10.2011	F	4	Sweden, Blekinge, Utklippan	55.57N, 15.42E		
XH 48312	19.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	13 days, 119 km, 227°
	01.11.2011	F	3	Poland, Gdansk, Krynica Morska, Siekierki	54.21N, 19.23E		
XH 48528	19.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	5 days, 118 km, 227°
	24.10.2011	F	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 49511	19.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	8 days, 118 km, 227°
	27.10.2011	F	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 49551	19.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	8 days, 159 km, 242°
	27.10.2011	F	3	Poland, Gdansk, Gdansk-Oliwa	54.25N, 18.32E		
XH 70052	20.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	6 days, 118 km, 227°
	26.10.2011	F	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		

XH 70235	20.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	5 days, 118 km, 227°
	25.10.2011	F	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 70684	20.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	V	5 days, 118 km, 227°
	25.10.2011	M	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 70895	20.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	V	3 days, 118 km, 227°
	23.10.2011	M	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 70988	21.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E	V	3 days, 118 km, 227°
	24.10.2011	F	4	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 71294	21.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	V	7 days, 118 km, 227°
	28.10.2011	M	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 71315	21.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	4 days, 118 km, 227°
	25.10.2011	F	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 71625	21.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	x	101 days, 36 km, 236°
	30.01.2012	I	2	Russia, Kaliningrad, Zelenogradsk, Romanovo	54.54N, 20.16E		
XH 71633	21.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	V	8 days, 118 km, 227°
	29.10.2011	M	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 71975	22.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	V	7 days, 118 km, 227°
	29.10.2011	M	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 72525	22.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	7 days, 118 km, 227°
	29.10.2011	F	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 73034	23.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	V	6 days, 118 km, 227°
	29.10.2011	M	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XH 73110	23.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V	4 days, 118 km, 227°
	27.10.2011	F	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E		
XY 22917	29.09.2005	M	3	Russia, Fringilla	55.05N, 20.44E	V	106 days, 1165 km, 249°
	13.01.2006	M	5	Belgium, Antwerpen, Ekeren	51.17N, 4.25E		

14900. <i>Remiz pendulinus</i>, Penduline Tit (2)									
XG 01793	25.07.2009	F	2	Russia, Rybachy				55.09N, 20.51E	
	25.10.2009	M	2	Austria, Niederösterreich, Zeiselmauer				48.20N, 16.10E	V 92 days, 823 km, 203°
XH 37727	18.07.2011	I	3	Russia, Rybachy				55.09N, 20.51E	
	29.10.2011	M	3	France, Bouches-du-Rhone, Mas Thibert-Marrais du Vigueirat-Bois				43.32N, 4.45E	V 103 days, 1739 km, 222°
15820. <i>Sturnus vulgaris</i>, Starling (7)									
TA 17091	03.07.2003	F	3	Russia, Rybachy				55.09N, 20.51E	
	01.11.2003	I	2	Belgium, Oost-Vlaanderen, Sint-Matgriete				51.17N, 3.33E	(+) 121 days, 1228 km, 250°
TA 20394	29.07.2005	M	3	Russia, Fringilla				55.05N, 20.44E	
	25.10.2011	I	2	Denmark, Bornholm, Nexø, Balka Havn				55.02N, 15.06E	x 2279 days, 359 km, 269°
TA 30087	26.06.2006	F	3	Russia, Fringilla				55.05N, 20.44E	
	31.10.2006	I	2	Belgium, West-Vlaanderen, Leffinge				51.11N, 2.53E	+T 127 days, 1266 km, 250°
TA 30191	29.06.2006	M	3	Russia, Fringilla				55.05N, 20.44E	
	10.10.2009- 10.11.2009	I	2	Belgium, Oost-Vlaanderen, Mulsele				51.13N, 4.16E	+ 00 days, 1178 km, 249°
TA 47886	26.06.2009	F	3	Russia, Fringilla				55.05N, 20.44E	
	17.01.2010	I	4	France, Manche, Flottemanville-Hague				49.37N, 1.43W	+ 205 days, 1640 km, 248°
TA 61461	23.06.2010	F	3	Russia, Fringilla				55.05N, 20.44E	
	10.07.2011	I	2	Germany, Mecklenburg, Demmin, Stuterhof				53.54N, 13.01E	x 382 days, 515 km, 255°
TA 69589	08.08.2010	M	3	Russia, Fringilla				55.05N, 20.44E	
	05.03.2012	I	4	Great Britain, Somerset, Taunton				51.01N, 3.06W	x 575 days, 1655 km, 254°
16360. <i>Fringilla coelebs</i>, Chaffinch (5)									
XH 18906	22.10.2010	M	3	Russia, Fringilla				55.05N, 20.44E	
	10.04.2011	M	5	Finland, Turku-Pori, Kiikala, Vahahirvela				60.34N, 23.26E	xG 170 days, 630 km, 15°
XH 43580	10.10.2011	M	3	Russia, Fringilla				55.05N, 20.44E	
	06.02.2012	I	4	Germany, Lüneburg, Moisburg				53.24N, 9.42E	xG 119 days, 740 km, 255°

XN 10512	23.04.2006	F	5	Russia, Fringilla	55.05N, 20.44E			
	28.03.2011	I	4	Great Britain, Lancashire, Langho	53.47N, 2.27W	xG	1800 days, 1505 km, 264°	
XN 69705	30.09.2007	M	3	Russia, Fringilla	55.05N, 20.44E	x	1233 days, 1782 km, 237°	
	14.02.2011	M	4	France, Deux Sevres, Niort	46.19N, 0.28W			
XY 42922	06.10.2006	M	4	Russia, Fringilla	55.05N, 20.44E	V	754 days, 1130 km, 253°	
	29.10.2008	M	4	Netherlands, Zuid-Holland, Wassenaar	52.08N, 4.20E			
16490. <i>Carduelis chloris</i>, Greenfinch (1)								
N 00528	28.10.2010	F	4	Russia, Fringilla	55.05N, 20.44E	V	156 days, 278 km, 42°	
	02.04.2011	I	4	Latvia, Jurmala, Pumpuri	56.57N, 23.43E			
16540. <i>Carduelis spinus</i>, Siskin (10)								
XG 06456	22.09.2009	M	3	Russia, Fringilla	55.05N, 20.44E	x	615 days, 1004 km, 12°	
	30.05.2011	I	4	Finland, Stevi, Markkula	63.56N, 24.20E			
XG 77832	19.07.2010	F	3	Russia, Fringilla	55.05N, 20.44E	V	252 days, 1021 km, 253°	
	28.03.2011	M	5	Netherlands, Gelderland, Epe	52.22N, 5.54E			
XH 05663	13.08.2010	F	3	Russia, Fringilla	55.05N, 20.44E	V	244 days, 714 km, 24°	
	14.04.2011	F	5	Finland, Häme, Lahti, Kerinkallio	60.57N, 25.40E			
XH 12630	29.09.2010	F	4	Russia, Fringilla	55.05N, 20.44E	V	505 days, 1249 km, 229°	
	16.02.2012	F	6	France, Haut-Rhin-Belfort, Bourbach-le-Bas	47.46N, 7.03E			
XH 32393	03.08.2011	M	3	Russia, Fringilla	55.05N, 20.44E	V	31 days, 118 km, 227°	
	03.09.2011	M	3	Poland, Gdansk, Mierzeja Wislana	54.22N, 19.23E			
XP 67952	13.04.2009	M	6	Russia, Fringilla	55.05N, 20.44E	V	309 days, 1604 km, 228°	
	16.02.2010	M	6	France, Puy-de-Dom, Calmard, Saillant	45.27N, 3.55E			
XP 68107	14.04.2009	M	5	Russia, Fringilla	55.05N, 20.44E	V	669 days, 679 km, 217°	
	12.02.2011	M	6	Czech Republic, Borek, Melnik	50.13N, 14.39E			
XP 94950	06.05.2009	M	5	Russia, Fringilla	55.05N, 20.44E	x	300 days, 2012 km, 230°	
	02.03.2010	I	4	France, Landes, Amou	43.36N, 0.45W			
XP 95011	08.05.2009	M	5	Russia, Fringilla	55.05N, 20.44E	xG	634 days, 1083 km, 228°	
	01.02.2011	I	4	Germany, Südbaden, Gundholzen	48.34N, 9.00E			

XP 99989	13.09.2009	F	3	Russia, Fringilla				55.05N, 20.44E			
	05.09.2010	F	4	Finland, Häme, Jutttilä, Jokikulma				61.09N, 24.47E	V		357 days, 715 km, 19°
17170. <i>Coccothraustes coccothraustes</i>, Hawfinch (1)											
N 00148	26.05.2005	M	6	Russia, Fringilla				55.05N, 20.44E			
	09.12.2005	M	4	France, Isere, Meylan				45.13N, 5.47E	(x)		197 days, 1528 km, 224°
18770. <i>Emberiza schoeniclus</i>, Reed Bunting (1)											
XG 00264	26.04.2009	F	6	Russia, Rybachy				55.09N, 20.51E			
	20.02.2010	F	5	Italy, Imperia-Savona, Capo Lena, Albenga				44.03N, 8.14E	V		300 days, 1132 km, 216°
Table 3.2. Controls of birds, ringed outside the Courish Spit											
00720. <i>Phalacrocorax carbo</i>, Cormorant (1)											
S20194	Estonia,	12.06.2006	I	1	Estonia, Pärnumaa, Häädemeeste			58.05N, 24.29E			
Matsalu		15.09.2006	I	2	Russia, Kaliningrad, Courish Spit, 30 th km			55.08N, 20.48E	x		95 days, 398 km, 214°
02690. <i>Accipiter nisus</i>, Sparrowhawk (4)											
B135832	Finland,	06.09.2011	M	3	Finland, Uusimaa, Hanko, Tulliniemi			59.49N, 22.54E			
Helsinki		07.10.2011	M	3	Russia, Fringilla			55.05N, 20.44E	& PB 138583		31 days, 542 km, 194°
S285058	Finland,	24.06.2007	F	1	Finland, Turku ja Pori, Raisio			60.31N, 21.07E			
Helsinki		05.10.2008	F	4	Russia, Fringilla			55.05N, 20.44E	& M 758468		469 days, 604 km, 182°
S327486	Finland,	23.09.2011	F	3	Finland, Uusimaa, Hanko, Tulliniemi			59.49N, 22.54E			
Helsinki		18.10.2011	F	3	Russia, Fringilla			55.05N, 20.44E	& M 758676		25 days, 542 km, 194°
S327497	Finland,	25.09.2011	F	3	Finland, Uusimaa, Hanko, Tulliniemi			59.49N, 22.54E			
Helsinki		04.10.2011	F	3	Russia, Fringilla			55.05N, 20.44E	& M 758661		9 days, 542 km, 194°
05920. <i>Larus argentatus</i>, Herring Gull (2)											
L43197	Estonia,	02.07.2006	I	1	Estonia, Pärnumaa, Kerdilaid			58.20N, 23.46E			
Matsalu		02.08.2006	I	3	Russia, Rybachy			55.09N, 20.51E	x		31 days, 396 km, 207°

EN02811	15.06.2010	I	1	Lithuania, Kretinga	55.53N, 24.15E			
Lithuania, Kaunas	29.07.2011	I	2	Russia, Kaliningrad	54.41N, 20.31E	V	409 days, 141 km, 199°	
10200. Motacilla alba, White Wagtail (2)								
VU84918	03.07.2011	I	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E			
Lithuania, Kaunas	11.07.2011	I	3	Russia, Fringilla	55.05N, 20.44E	& XH 25887	8 days, 43 km, 226°	
1EP69404	28.08.2011	I	3	Sweden, Västernorrlands, Merlo, Timra	62.29N, 17.19E			
Stockholm	09.09.2011	I	3	Russia, Fringilla	55.05N, 20.44E	& XH 33683	12 days, 845 km, 167°	
10990. Eritacus rubecula, Robin (2)								
11522468	27.09.2009	I	3	Belgium, Oost-Vlaanderen, Bellem	51.05N, 3.30E			
Bruxelles	31.03.2010	I	5	Russia, Rybachy	55.09N, 20.51E	& XG 05471	185 days, 1242 km, 69°	
XP78799	19.09.2009	I	3	Russia, Karelia, Louchsky, Chernaya Reka	66.31N, 32.55E			
	01.04.2011	I	6	Russia, Fringilla	55.05N, 20.44E	V	559 days, 1432 km, 207°	
11030. Luscinia luscinia, Thrush Nightingale (1)								
9P06925	12.05.2008	I	5	Denmark, Sjaelland, Gedser, Falster	54.34N, 11.58E			
Copenhagen	20.05.2011	I	6	Russia, Rybachy	55.09N, 20.51E	& XH 29821	1103 days, 572 km, 83°	
11220. Phoenicurus phoenicurus, Redstart (1)								
5389473	31.08.2009	M	4	France, Drome, Gigors-et-Lozeron, Les Chaux	44.48N, 5.06E			
Paris	22.04.2011	M	5	Russia, Fringilla	55.05N, 20.44E	& XH 24283	599 days, 1598 km, 44°	
11870. Turdus merula, Blackbird (1)								
L350871	13.10.2010	F	3	Netherlands, Friesland, Vlieland	53.15N, 4.57E			
Netherlands, Arnhem	02.04.2011	F	5	Russia, Fringilla	55.05N, 20.44E	& TA 78252	171 days, 1047 km, 79°	
12430. Acrocephalus schoenobaenus, Sedge Warbler (2)								
VU04199	05.08.2009	I	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E			
Lithuania, Kaunas	01.06.2011	I	4	Russia, Rybachy	55.09N, 20.51E	& XH 37132	665 days, 32 km, 226°	
VU88513	14.07.2011	I	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E			
Lithuania, Kaunas	17.07.2011	I	3	Russia, Rybachy	55.09N, 20.51E	& XH 37692	3 days, 32 km, 226°	

12510. <i>Acrocephalus scirpaceus</i>, Reed Warbler (4)									
11631128	Belgium, Bruxelles	17.05.2010	I	4	Belgium, Luxembourg, Übersyren	49.38N, 6.17E			
		24.05.2010	I	4	Russia, Rybachy	55.09N, 20.51E	& XG 76785	7 days, 1162 km, 58°	
11722313	Belgium, Bruxelles	20.08.2010	I	4	Belgium, West-Vlaanderen, Ingooigem	50.49N, 3.26E			
		02.06.2011	I	4	Russia, Rybachy	55.09N, 20.51E	& XH 37212	286 days, 1161 km, 68°	
VA46136	Estonia, Matsalu	26.07.2010	I	3	Estonia, Pärnumaa, Haademeeeste	58.06N, 24.28E			
		11.08.2010	I	3	Russia, Rybachy	55.09N, 20.51E	& XH 07497	16 days, 395 km, 214°	
VT80669	Lithuania, Lithuania, Kaunas	26.08.2006	I	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E			
		06.06.2011	I	4	Russia, Rybachy	55.09N, 20.51E	& XH 37277	1745 days, 32 km, 226°	
12530. <i>Acrocephalus arundinaceus</i>, Great Reed Warbler (1)									
TV11218	Lithuania, Lithuania, Kaunas	06.06.2011	I	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E			
		10.06.2011	I	4	Russia, Rybachy	55.09N, 20.51E	& KS 11807	4 days, 32 km, 226°	
12740. <i>Sylvia curruca</i>, Lesser Whitethroat (1)									
CK93342	Sweden, Stockholm	19.05.2010	I	4	Sweden, Blekinge, Utklippan	55.57N, 15.42E			
		17.05.2011	I	6	Russia, Rybachy	55.09N, 20.51E	& XH 29716	363 days, 336 km, 105°	
12750. <i>Sylvia communis</i>, Whitethroat (2)									
1A53721	Italy, Bologna	21.05.2009	F	5	Italy, Frosinone-Latina, Dell'Areo-Ventotene	40.47N, 13.25E			
		31.05.2009	F	4	Russia, Fringilla	55.05N, 20.44E	& XP 95448	10 days, 1679 km, 19°	
VU88088	Lithuania, Lithuania, Kaunas	15.06.2011	I	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E			
		19.06.2011	M	4	Russia, Fringilla	55.05N, 20.44E	& XH 25608	4 days, 43 km, 226°	
13110. <i>Phylloscopus collybita</i>, Chiffchaff (1)									
2A4023	France, Paris	28.10.2010	I	4	France, Bouches-du Rhone, Arles, Mas Thibert-Marais du Vigueirat-Bois	43.22N, 4.45E			
		21.04.2011	I	4	Russia, Rybachy	55.09N, 20.51E	& VN 33362	175 days, 1754 km, 42°	

13120. <i>Phylloscopus trochilus</i>, Willow Warbler (1)									
XP73540	18.07.2010	I	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E				
Lithuania, Kaunas	03.05.2011	I	4	Russia, Rybachy	55.09N, 20.51E	& VN 33633	289 days, 32 km, 226°		
13140. <i>Regulus regulus</i>, Goldcrest (2)									
XB88019	16.10.2008	F	4	Estonia, Pärnumaa, Kihnu	58.09N, 24.00E				
Matsalu	26.10.2008	F	3	Russia, Rybachy	55.09N, 20.51E	& VK 19052	10 days, 385 km, 210°		
XB91959	25.09.2008	M	3	Estonia, Pärnumaa, Kabli	58.01N, 24.27E				
Matsalu	08.10.2008	M	3	Russia, Fringilla	55.05N, 20.44E	& VK 14087	13 days, 398 km, 215°		
13490. <i>Ficedula hypoleuca</i>, Pied Flycatcher (1)									
14133L	01.06.2010	F	6	Finland, Turku-Pori, Uusikaupunki	60.38N, 21.29E				
Helsinki	09.05.2011	F	6	Russia, Fringilla	55.05N, 20.44E	& VN 16686	342 days, 618 km, 184°		
13640. <i>Panurus biarmicus</i>, Bearded Tit (1)									
JA01945	07.09.2009	F	3	Latvia, Liepaja, Pape	56.10N, 21.01E				
Riga	15.04.2010	F	4	Russia, Rybachy	55.09N, 20.51E	& XG 75319	220 days, 113 km, 185°		
14370. <i>Aegithalos caudatus</i>, Long-tailed Tit (21)									
XC09294	25.10.2008	I	3	Estonia, Pärnumaa, Kabli	58.01N, 24.27E				
Matsalu	27.03.2009	I	4	Russia, Rybachy	55.09N, 20.51E	& VK 19994	153 days, 387 km, 215°		
XC25687	23.09.2010	I	2	Estonia, Pärnumaa, Kabli	58.01N, 24.27E				
Matsalu	01.10.2010	I	3	Russia, Rybachy	55.09N, 20.51E	& VK 67433	8 days, 387 km, 215°		
XC25690	23.09.2010	I	2	Estonia, Pärnumaa, Kabli	58.01N, 24.27E				
Matsalu	01.10.2010	I	3	Russia, Rybachy	55.09N, 20.51E	& VK 67430	8 days, 387 km, 215°		
XC25693	23.09.2010	I	2	Estonia, Pärnumaa, Kabli	58.01N, 24.27E				
Matsalu	01.10.2010	I	3	Russia, Rybachy	55.09N, 20.51E	& VK 67443	8 days, 387 km, 215°		
XC25695	23.09.2010	I	2	Estonia, Pärnumaa, Kabli	58.01N, 24.27E				
Matsalu	01.10.2010	I	3	Russia, Rybachy	55.09N, 20.51E	& VK 67435	8 days, 387 km, 215°		
XC27740	29.09.2010	I	2	Estonia, Pärnumaa, Kabli	58.01N, 24.27E				
Matsalu	13.10.2010	I	2	Russia, Fringilla	55.05N, 20.44E	& VN 12300	14 days, 398 km, 215°		

XC27741 Estonia, Matsalu	29.09.2010 13.10.2010	I I	2 2	Estonia, Pärnumaa, Kabli Russia, Fringilla	58.01N, 24.27E 55.05N, 20.44E	& VN 12299	14 days, 398 km, 215°
XC27744 Estonia, Matsalu	29.09.2010 13.10.2010	I I	2 2	Estonia, Pärnumaa, Kabli Russia, Fringilla	58.01N, 24.27E 55.05N, 20.44E	& VN 12296	14 days, 398 km, 215°
XC27745 Estonia, Matsalu	29.09.2010 13.10.2010	I I	2 2	Estonia, Pärnumaa, Kabli Russia, Fringilla	58.01N, 24.27E 55.05N, 20.44E	& VN 12286	14 days, 398 km, 215°
XC27746 Estonia, Matsalu	29.09.2010 13.10.2010	I I	2 2	Estonia, Pärnumaa, Kabli Russia, Fringilla	58.01N, 24.27E 55.05N, 20.44E	& VN 12297	14 days, 398 km, 215°
XC27747 Estonia, Matsalu	29.09.2010 13.10.2010	I I	2 2	Estonia, Pärnumaa, Kabli Russia, Fringilla	58.01N, 24.27E 55.05N, 20.44E	& VN 12301	14 days, 398 km, 215°
XC27907 Estonia, Matsalu	30.09.2010 10.10.2010	I I	2 2	Estonia, Pärnumaa, Kabli Russia, Fringilla	58.01N, 24.27E 55.05N, 20.44E	& VN 11287	10 days, 398 km, 215°
XC27948 Estonia, Matsalu	30.09.2010 10.10.2010	I I	2 2	Estonia, Pärnumaa, Kabli Russia, Fringilla	58.01N, 24.27E 55.05N, 20.44E	& VN 11401	10 days, 398 km, 215°
XC28830 Estonia, Matsalu	04.10.2010 26.10.2010	I I	2 2	Estonia, Pärnumaa, Kabli Russia, Fringilla	58.01N, 24.27E 55.05N, 20.44E	& VN 14449	22 days, 398 km, 215°
XC28954 Estonia, Matsalu	04.10.2010 27.10.2010	I I	2 3	Estonia, Pärnumaa, Kabli Russia, Rybachy	58.01N, 24.27E 55.09N, 20.51E	& VK 79409	23 days, 387 km, 215°
XC28955 Estonia, Matsalu	04.10.2010 27.10.2010	I I	2 3	Estonia, Pärnumaa, Kabli Russia, Rybachy	58.01N, 24.27E 55.09N, 20.51E	& VK 79411	23 days, 387 km, 215°
XC28958 Estonia, Matsalu	04.10.2010 27.10.2010	I I	2 3	Estonia, Pärnumaa, Kabli Russia, Rybachy	58.01N, 24.27E 55.09N, 20.51E	& VK 79405	23 days, 387 km, 215°
XC28960 Estonia, Matsalu	04.10.2010 27.10.2010	I I	2 3	Estonia, Pärnumaa, Kabli Russia, Rybachy	58.01N, 24.27E 55.09N, 20.51E	& VK 79408	23 days, 387 km, 215°
BS2259 Latvia, Riga	30.09.2010 05.10.2010	I I	2 2	Latvia, Liepaja, Pape Russia, Fringilla	56.09N, 21.01E 55.05N, 20.44E	& VK 43660	5 days, 120 km, 189°
LH75706 Poland, Gdansk	27.03.2011 01.04.2011	I I	4 4	Poland, Pomorskie, Kuznica Russia, Fringilla	54.44N, 18.34E 55.05N, 20.44E	& VN 16075	5 days, 144 km, 74°

LJ45932 Poland, Gdansk	01.11.2010 01.04.2011	I I	2 4	Poland, Koszalin, Darlowo, Kopan Russia, Rybachy	54.27N, 16.25E 55.09N, 20.51E	& VN 33058	151 days, 294 km, 75°
14620. <i>Parus caeruleus</i>, Blue Tit (17)							
VA37499 Estonia, Matsalu	05.09.2009 06.10.2009	I M	3 3	Estonia, Tartumaa, Rognu Russia, Fringilla	58.09N, 26.15E 55.05N, 20.44E	& XG 12753	31 days, 479 km, 225°
VA43917 Estonia, Matsalu	30.09.2009 15.10.2009	M M	3 4	Estonia, Pärnumaa, Kabli Russia, Fringilla	58.01N, 24.27E 55.05N, 20.44E	& XG 14218	15 days, 398 km, 215°
B1Y8323 Germany, Radolfzell	29.12.2007 22.09.2009	F M	3 4	Austria, Oberösterreich, Steyregg Russia, Fringilla	48.26N, 14.35E 55.05N, 20.44E	& XG 06434	633 days, 851 km, 30°
VL00875 Lithuania, Kaunas	28.09.2011 01.10.2011	F F	3 3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XH 35746	3 days, 43 km, 226°
VL01393 Lithuania, Kaunas	30.09.2011 04.10.2011	F F	3 3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XH 41582	4 days, 43 km, 226°
VL02321 Lithuania, Kaunas	29.09.2011 03.10.2011	M M	3 3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XH 41242	4 days, 43 km, 226°
VL03460 Lithuania, Kaunas	30.09.2011 05.10.2011	F M	3 3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XH 42227	5 days, 43 km, 226°
VL05277 Lithuania, Kaunas	03.10.2011 07.10.2011	F F	3 3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XH 42596	4 days, 43 km, 226°
VL18174 Lithuania, Kaunas	12.10.2011 18.10.2011	M M	3 3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XH 47838	6 days, 43 km, 226°
VL21139 Lithuania, Kaunas	16.10.2011 21.10.2011	M M	3 3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XH 71416	5 days, 43 km, 226°
VS11428 Lithuania, Kaunas	20.10.2011 22.10.2011	F F	3 3	Lithuania, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E	& XH 71790	2 days, 54 km, 207°
VU89730 Lithuania, Kaunas	20.09.2011 25.09.2011	F M	3 3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XH 31092	5 days, 43 km, 226°

VU91523	22.09.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 31089	3 days, 43 km, 226°
Lithuania, Kaunas	25.09.2011	F	3	Russia, Fringilla	55.05N, 20.44E	& XH 35756	6 days, 43 km, 226°
VU95372	25.09.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 35279	6 days, 43 km, 226°
Lithuania, Kaunas	01.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	& XH 3 1420	1 day, 43 km, 226°
VU96464	24.09.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 36892	4 days, 44 km, 202°
Lithuania, Kaunas	30.09.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VU96990	25.09.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E		
Lithuania, Kaunas	26.09.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VX79414	21.09.2011	M	3	Lithuania, Neringa, Juodkrante	55.31N, 21.07E		
Lithuania, Kaunas	25.09.2011	M	3	Russia, Rybachy	55.09N, 20.51E		
14640. <i>Parus major</i>, Great Tit (52)							
51V90474	24.10.2008	F	3	Belgium, Limburg, Tessenderlo	51.04N, 5.06E		
Bruxelles	03.04.2011	F	6	Russia, Rybachy	55.09N, 20.51E	& XH 26694	591 days, 1144 km, 67°
52V50331	10.01.2011	M	5	Belgium, West-Vlaanderen, Meulebeke	50.57N, 3.18E		
Bruxelles	09.04.2011	M	5	Russia, Rybachy	55.09N, 20.51E	& XH 27105	89 days, 1262 km, 68°
TJ64503	26.03.2011	F	5	Czech Republic, Kralovehradecky, Cernozice nad Labem	50.19N, 15.53E		
Republic, Prague	20.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E	& XH 70401	208 days, 622 km, 32°
TK65992	18.02.2011	F	5	Czech Republic, Plzensky, Tachov, Triskolupy	49.39N, 12.43E		
Republic, Prague	18.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E	& XH 48051	242 days, 812 km, 42°
AX48472	31.10.2010	F	3	Denmark, Jylland, Rahede, Ribe	55.16N, 8.41E		
Denmark, Copenhagen	29.03.2011	F	5	Russia, Rybachy	55.09N, 20.51E	& XH 26229	149 days, 771 km, 91°
VA21487	24.09.2007	F	3	Estonia, Pärnumaa, Kabli	58.01N, 24.27E		
Matsalu	01.10.2007	F	3	Russia, Fringilla	55.05N, 20.44E	& XN 69987	7 days, 398 km, 215°
VA25256	30.03.2010	F	4	Estonia, Pärnumaa, Kihnu	58.09N, 24.00E		
Matsalu	05.10.2010	F	4	Russia, Fringilla	55.05N, 20.44E	& XH 14100	189 days, 395 km, 210°

VA57305	Estonia, Matsalu	29.05.2008	F	4	Estonia, Pärnumaa, Kilingi-Nõmme	58.09N, 24.58E	& XP 33190	131 days, 428 km, 217°
		07.10.2008	F	4	Russia, Fringilla	55.05N, 20.44E		
VA72336	Estonia, Matsalu	23.09.2010	F	3	Estonia, Pärnumaa, Kabli	58.01N, 24.27E	& XH 27497	203 days, 387 km, 215°
		14.04.2011	F	5	Russia, Rybachy	55.09N, 20.51E		
VA91478	Estonia, Matsalu	26.09.2011	I	2	Estonia, Pärnumaa, Kabli	58.01N, 24.27E	& XH 42349	10 days, 398 km, 215°
		06.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
6093568	France, Paris	02.01.2011	F	6	France, Cher, Santranges, Chevillon	47.30N, 2.46E	& XH 22508	89 days, 1506 km, 56°
		01.04.2011	F	5	Russia, Fringilla	55.05N, 20.44E		
SC64518	France, Paris	06.12.2008	F	3	France, Nord, Steenwerck, La-Maladerie	50.42N, 2.17E	& XH 26300	845 days, 1338 km, 68°
		31.03.2011	F	6	Russia, Rybachy	55.09N, 20.51E		
LR71166	Italy, Bologna	21.10.2010	F	3	Italy, Trento, Cembra, Sauch	46.13N, 11.12E	& XH 71272	365 days, 1192 km, 34°
		21.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E		
VF01743	Lithuania, Kaunas	21.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 40779	3 days, 32 km, 226°
		24.10.2011	F	3	Russia, Rybachy	55.09N, 20.51E		
VF01957	Lithuania, Kaunas	22.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 73365	2 days, 43 km, 226°
		24.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VF02089	Lithuania, Kaunas	21.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 72767	1 day, 43 km, 226°
		22.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VF03478	Lithuania, Kaunas	22.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 73420	2 days, 43 km, 226°
		24.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VF05260	Lithuania, Kaunas	22.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 73468	2 days, 43 km, 226°
		24.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VL02000	Lithuania, Kaunas	04.10.2011	M	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 42904	4 days, 43 km, 226°
		08.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		
VL02194	Lithuania, Kaunas	28.09.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 39195	2 days, 32 km, 226°
		30.09.2011	F	3	Russia, Rybachy	55.09N, 20.51E		
VL10816	Lithuania, Kaunas	07.10.2011	M	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 70413	13 days, 43 km, 226°
		20.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		

VL12816	08.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 71213	13 days, 43 km, 226°
Lithuania, Kaunas	21.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	& XH 46375	4 days, 43 km, 226°
VL15567	12.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 46732	5 days, 43 km, 226°
Lithuania, Kaunas	16.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	& XH 47353	6 days, 43 km, 226°
VL15679	12.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 49479	6 days, 43 km, 226°
Lithuania, Kaunas	17.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	& XH 70729	4 days, 43 km, 226°
VL17546	12.10.2011	M	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 46768	1 day, 43 km, 226°
Lithuania, Kaunas	18.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	& XH 70409	3 days, 43 km, 226°
VL20069	13.10.2011	F	4	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 72010	3 days, 43 km, 226°
Lithuania, Kaunas	19.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E	& XH 70525	3 days, 59 km, 203°
VL20760	16.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 48819	2 days, 59 km, 203°
Lithuania, Kaunas	20.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	& XH 70402	3 days, 59 km, 203°
VL20786	16.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 70718	3 days, 59 km, 203°
Lithuania, Kaunas	17.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VL21582	17.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E		
Lithuania, Kaunas	20.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VL24712	19.10.2011	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E		
Lithuania, Kaunas	22.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VS00691	17.10.2011	F	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E		
Lithuania, Kaunas	20.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VS00692	17.10.2011	F	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E		
Lithuania, Kaunas	19.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VS00715	17.10.2011	M	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E		
Lithuania, Kaunas	20.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		
VS00719	17.10.2011	M	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E		
Lithuania, Kaunas	20.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		

VS00909	18.10.2011	M	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 49334	1 day, 59 km, 203°
Lithuania, Kaunas	19.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		
VS10310	07.10.2011	M	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 44798	4 days, 59 km, 203°
Lithuania, Kaunas	11.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		
VS10470	08.10.2011	F	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 46118	5 days, 59 km, 203°
Lithuania, Kaunas	13.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VS10882	16.10.2011	F	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 47349	2 days, 59 km, 203°
Lithuania, Kaunas	18.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VS10884	16.10.2011	F	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 49940	4 days, 59 km, 203°
Lithuania, Kaunas	20.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VS10967	17.10.2011	F	4	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 72871	5 days, 59 km, 203°
Lithuania, Kaunas	22.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VS11056	17.10.2011	M	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 70403	3 days, 59 km, 203°
Lithuania, Kaunas	20.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		
VS11071	17.10.2011	M	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 49969	3 days, 59 km, 203°
Lithuania, Kaunas	20.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		
VS11072	17.10.2011	M	4	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 49642	2 days, 59 km, 203°
Lithuania, Kaunas	19.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		
VS11089	17.10.2011	M	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 70405	3 days, 59 km, 203°
Lithuania, Kaunas	20.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		
VS11095	17.10.2011	M	4	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 49987	3 days, 59 km, 203°
Lithuania, Kaunas	20.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		
VS11235	18.10.2011	F	3	Lithuania, Neringa, Juodkrante	55.31N, 21.07E	& XH 40639	3 days, 44 km, 202°
Lithuania, Kaunas	21.10.2011	F	3	Russia, Rybachy	55.09N, 20.51E		
VS11252	18.10.2011	M	3	Lithuania, Neringa, Juodkrantes Gaudykle	55.34N, 21.06E	& XH 70799	2 days, 59 km, 203°
Lithuania, Kaunas	20.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		

VU75077	09.10.2010	F	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	& XH 70728	376 days, 43 km, 226°
Lithuania, Kaunas	20.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E		
VU78691	15.10.2010	F	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	& XH 39539	356 days, 32 km, 226°
Lithuania, Kaunas	06.10.2011	F	4	Russia, Rybachy	55.09N, 20.51E		
VU91122	21.09.2011	M	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	& XH 34726	2 days, 43 km, 226°
Lithuania, Kaunas	23.09.2011	M	3	Russia, Fringilla	55.05N, 20.44E		
VU95252	25.09.2011	F	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	& XH 31807	3 days, 43 km, 226°
Lithuania, Kaunas	28.09.2011	F	3	Russia, Fringilla	55.05N, 20.44E		
VU97085	25.09.2011	M	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	& XH 31505	2 days, 43 km, 226°
Lithuania, Kaunas	27.09.2011	M	3	Russia, Fringilla	55.05N, 20.44E		
14900. Remiz pendulinus, Penduline Tit (1)							
JA17432	22.07.2011	I	3	Latvia, Liepaja, Pape	56.10N, 21.01E		
Riga	17.09.2011	I	3	Russia, Rybachy	55.09N, 20.51E	& XH 36556	57 days, 113 km, 185°
15820. Sturnus vulgaris, Starling (2)							
H267524	20.05.2007	I	1	Estonia, Viljandimaa, Saarepeedi, Valgita	58.28N, 25.39E		
Matsalu	22.07.2007	F	3	Russia, Rybachy	55.09N, 20.51E	& TA 18996	63 days, 470 km, 218°
KV82470	27.06.2011	I	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
Lithuania, Kaunas	30.06.2011	M	3	Russia, Fringilla	55.05N, 20.44E	& TA 78559	3 days, 43 km, 226°
16540. Carduelis spinus, Siskin (1)							
X486349	01.03.2010	F	5	Great Britain, Devon, Broad Oak	50.44N, 3.20W		
Britain, London	02.05.2011	F	6	Russia, Fringilla	55.05N, 20.44E	& XH 24590	427 days, 1683 km, 73°
18770. Emberiza schoeniclus, Reed Bunting (3)							
CIT6025	20.10.2009	F	3	Germany, Saarland, Lisdorf	49.18N, 6.46E		
Radolfzell	28.05.2011	I	2	Russia, Kaliningrad	54.41N, 20.31E	x	585 days, 1115 km, 58°
VU86700	24.04.2011	F	5	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
Lithuania, Kaunas	29.04.2011	F	4	Russia, Rybachy	55.09N, 20.51E	& XH 28883	5 days, 32 km, 226°
1ES80775	02.09.2011	F	3	Sweden, Västerbotten, Degernas	63.47N, 20.15E		
Stockholm	09.10.2011	F	3	Russia, Rybachy	55.09N, 20.51E	& XH 39653	37 days, 960 km, 178°

Table 3.3. Data with ringing information still not available

00720. <i>Phalacrocorax carbo</i>, Cormorant (2)									
K23015	Belgium, Bruxelles	00.03.2011	I	2	Russia, Courish Spit, 36 th km	55.13N, 20.54E	x		
MA0814	Lithuania, Kaunas	24.08.2011	I	2	Russia, Kaliningrad, Zelenogradsk, Morskoye	55.13N, 20.54E	x		
10840. <i>Prunella modularis</i>, Dunnock (1)									
365913H	Finland, Helsinki	01.10.2011	I	4	Russia, Rybachy	55.09N, 20.51E		& XH 39314	
11870. <i>Turdus merula</i>, Blackbird (1)									
HE5708	Poland, Gdansk	10.05.2011	M	5	Russia, Fringilla	55.05N, 20.44E		& TA 78422	
12510. <i>Acrocephalus scirpaceus</i>, Reed Warbler (2)									
1172790	Belgium, Bruxelles	10.06.2011	I	4	Russia, Rybachy	55.09N, 20.51E		& XH 37417	
11732206	Belgium, Bruxelles	29.05.2011	I	4	Russia, Rybachy	55.09N, 20.51E		& XH 37056	
13120. <i>Phylloscopus trochilus</i>, Willow Warbler (1)									
KY0024	Spain, Madrid (SEO)	06.05.2011	I	4	Russia, Fringilla	55.05N, 20.44E		& VN 16633	
14640. <i>Parus major</i>, Great Tit (6)									
45V14906	Belgium, Bruxelles	12.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E		& XH 45263	
JA21051	Latvia, Riga	24.09.2011	F	3	Russia, Fringilla	55.05N, 20.44E		& XH 34817	
VL10941	Lithuania, Kaunas	19.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		V	
VZ 66658	Lithuania, Kaunas	11.10.2011	M	4	Russia, Fringilla	55.05N, 20.44E		& XH 44285	
K1H1189	Poland, Gdansk	23.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E		& XH 73091	
K1H3200	Poland, Gdansk	13.04.2011	F	5	Russia, Fringilla	55.05N, 20.44E		& XH 23548	

References

- Bairlein, F., Jenni, I., Kaiser, A., Karlsson, L., van Noordwijk, A., Peach, W., Pilastro, A., Spina, F. & Walinder, G. 1995. European-African Songbird Migration Network. Manual of Field Methods: 1–34. Wilhelmshaven.
- Berthold, P., Fliege, G., Heine, G., Querner, U. & Schlenker, R. 1991. Wegzug, Rastverhalten, Biometrie und Mauser von Kleinvoögeln in Mitteleuropa. *Vogelwarte* 36 (Sonderheft): 1–221.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 1999. Results of bird trapping and ringing by the Biological Station „Rybachy“ on the Courish Spit in 1998. *Avian Ecol. Behav.* 2: 105–150.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2000. Results of bird trapping and ringing by the Biological Station „Rybachy“ on the Courish Spit in 1999. *Avian Ecol. Behav.* 4: 85–145.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2002a. Results of bird trapping and ringing by the Biological Station “Rybachy” on the Courish Spit in 2000. *Avian Ecol. Behav.* 8: 109–166.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2002b. Results of bird trapping and ringing by the Biological Station “Rybachy” on the Courish Spit in 2001. *Avian Ecol. Behav.* 9: 67–114.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2003. Results of bird trapping and ringing by the Biological Station “Rybachy” on the Courish Spit in 2002. *Avian Ecol. Behav.* 10: 67–114.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2004. Results of bird trapping and ringing by the Biological Station “Rybachy” on the Courish Spit in 2003. *Avian Ecol. Behav.* 12: 77–132.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2005. Results of bird trapping and ringing by the Biological Station “Rybachy” on the Courish Spit in 2004. *Avian Ecol. Behav.* 13: 47–95.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2008. Results of bird trapping and ringing by the Biological Station “Rybachy” on the Courish Spit in 2005. *Avian Ecol. Behav.* 14: 49–100.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2009a. Results of bird trapping and ringing by the Biological Station “Rybachy” on the Courish Spit in 2006. *Avian Ecol. Behav.* 15: 49–85.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2009b. Results of bird trapping and ringing by the Biological Station “Rybachy” on the Courish Spit in 2007. *Avian Ecol. Behav.* 16: 21–51.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2009c. Results of bird trapping and ringing by the Biological Station “Rybachy” on the Courish Spit in 2008. *Avian Ecol. Behav.* 16: 53–89.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2010. Results of bird trapping and ringing by the Biological Station “Rybachy” on the Courish Spit in 2009. *Avian Ecol. Behav.* 17: 25–60.
- Bolshakov, C.V., Shapoval, A.P. & Zelenova, N.P. 2011. Results of bird trapping and ringing by the Biological Station “Rybachy” on the Courish Spit in 2010. *Avian Ecol. Behav.* 20: 9–52.
- Chernetsov N., Sokolov L.V., Kosarev V., Leoke D., Markovets M., Tsvey A. & Shapoval A.P. 2006. Sex-related natal dispersal of Pied Flycatchers: How far away from home? *Condor*. 108: 711–716.

- EURING manual: new EURING. BTO publ., 1979.
- Jonsson L., 1992. Birds of Europe. Christopher Helm, A & C. Black, London. 559 p.
- Payesky, V.A. 1973. Atlas of bird migrations according to banding data on the Courland Spit. In: Bykhovskiy, B.E. (ed.) Bird migration – ecological and physiological factors. John Wiley & Sons, Ltd, NY.
- Payesky, V.A. 2000. Rybachy-type trap. In: Busse P. (ed.). Bird Station Manual, Gdansk University press: 20–24.
- Sinelschikova A. & Sokolov L.V. 2004. Long-term monitoring of the timing of migration in thrushes (*Turdus philomelos*, *T. iliacus*) in the Eastern Baltic. Avian Ecol. Behav. 12: 11–30.
- Sokolov, L.V. 1999. Population dynamics in 20 sedentary and migratory passerine species on the Courish Spit on the Baltic Sea. Avian Ecol. Behav. 3: 23–50.
- Sokolov L.V. 2006. Effect of Global Warming on the Timing of Migration and Breeding of Passerine Birds in the 20th Century. Entomol. Rev. 86. Suppl. 1: 59–81.
- Sokolov, L.V. & Payesky, V.A. 1998. Spring temperatures influence year-to-year variations in the breeding phenology of passerines on the Courish Spit, Eastern Baltic. Avian Ecol. Behav. 1: 22–36.
- Sokolov, L.V., Markovets, M.Yu., Shapoval, A.P. & Morosov, Yu.G. 1998 a. Long-Term trends in the timing of spring migration of passerines on the Courish Spit of the Baltic Sea. Avian Ecol. Behav. 1: 1–21.
- Sokolov, L.V., Markovets, M.Yu. & Morosov, Yu.G. 1998 b. Long-term dynamics of the mean date of autumn migration in passerines of the Courish Spit of the Baltic Sea. Avian Ecol. Behav. 2: 1–18.
- Sokolov, L.V., Yefremov, V.D., Markovets, M.Yu., Shapoval, A.P. & Shumakov, M.E. 2000. Monitoring of numbers of passage populations of passerines over 42 years (1958–1999) on the Courish Spit of the Baltic Sea. Avian Ecol. Behav. 4: 31–53.
- Sokolov, L.V., Baumanis, J., Leivits, A., Poluda, A.M., Yefremov, V.D., Markovets, M.Yu., Morosov, Yu.G. & Shapoval, A.P. 2001a. Changes in numbers of passerines in Europe in the second half on 20th century. Proc. Intern. Ornithol. Conference. Kazan, 187–212.
- Sokolov, L.V., Baumanis, J., Leivits, A., Poluda, A.M., Yefremov, V.D., Markovets, M.Yu., Morosov, Yu.G. & Shapoval, A.P. 2001b. Comparative analysis of long-term monitoring data on numbers of passerines in nine European countries in the second half on 20th century. Avian Ecol. Behav. 7: 41–74.
- Sokolov, L.V., Markovets, M.Yu., Yefremov, V.D. & Shapoval, A.P. 2002a. Long-term monitoring of number of irruptions species on the Courish Spit of the Baltic Sea. Proc. Intern. Symposium. Kazan, 18–29.
- Sokolov, L.V., Markovets, M.Yu., Yefremov, V.D. & Shapoval, A.P. 2002 b. Irregular migrations (irruptions) in six bird species on the Courish Spit of the Baltic Sea in 1957–2002. Avian Ecol. Behav. 9: 39–53.
- Sokolov, L.V., Kosarev, V.V., Fedoseeva, N.V., Markovets, M.Yu., Shapoval, A.P. & Yefremov, V.D. 2003 a. Relationship between autumn numbers of the Coal Tit *Parus ater*, air temperatures and North Atlantic Oscillation index. Avian Ecol. Behav. 11: 71–88.
- Sokolov, L.V., Yefremov, V.D. & Shapoval, A.P. 2003 b. Long-term monitoring of number of irruption species – long-tailed tit (*Aegithalos caudatus*) on the Courish Spit of the Baltic Sea. Abstract Volume 4th Conference of the European Ornithologists' Union, Germany, 2003: 77–78.
- Sokolov L.V., Shapoval A.P., Yefremov V.D., Kosarev V.V. & Markovets M.Yu. 2004. Timing and dynamics of autumn passage of the Long-Tailed Tits (*Aegithalos caudatus*) on the Courish Spit, eastern Baltic. Avian Ecol. Behav. 12: 31–52.

- Sparks T.H., Bairlein F., Bojarinova J.G., Huppopp O., Lehtikoinens E.A., Rainio K., Sokolov L.V. & Walker D. 2005. Examining the total arrival distribution of migratory birds. *Global Change Biology*. 11: 22–30.
- Sokolov L.V., Shapoval A.P., Yefremov V.D., Kosarev, Markovets M.Yu. & Gavrilov V.V. 2008. Relationship between invasions of the Long-Tailed Tits (*Aegithalos caudatus*) and air temperatures and North Atlantic Oscillation index in the Eastern Baltic. *Avian Ecol. Behav.* 14: 35–47.
- Sokolov L.V., Shapoval A.P. & Morozov Yu.G. 2012. Impact of climate change on the timing of migration, dispersal, and numbers of the Sparrowhawk *Accipiter nisus* in the Baltic region. *Avian Ecol. Behav.* 22: 1–32.