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Results of bird trapping and ringing by the Biological Station "Rybachy" on the Courish Spit in 2012

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In 2012, a grand total of 50,522 birds of 99 species were trapped and ringed by the Biological Station "Rybachy" in the framework of long- and short-term research projects. A total of 1,399 ringed birds of 50 species produced 2,184 recaptures. In 2012, 303 birds of 24 species ringed on the Courish Spit in previous years were retrapped. Between 15.03.2012 and 15.03.2013, 127 birds of 20 species ringed on the Courish Spit were reported as recovered more than 20 km from the ringing site. In 2012, 86 birds of 20 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.

Key words: bird ringing, retraps, long-distance recoveries, research projects

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This annual report is the 15th 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, 2012) 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 in the second half of the 20th century and in the first decade of the 21st century. 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; 2006; Sokolov *et al.* 1998 a, b; 2000; 2001a, b; 2002a, b; 2003 a, b; 2004; 2008; 2012; Sokolov & Payevsky 1998; Payevsky 2005; 2006 a, b; 2008; 2009; Payevsky *et al.* 2003; 2005; Sparks *et al.* 2005). Within the framework of this project two traps were operated at “Fringilla” in 2012: trap 4 (NE orientation of entrance) – from March 30 until September 21, trap 5 (SW orientation of entrance) – from March 30 until October 29. 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 2012, 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.

Table 1. Numbers of birds ringed by Biological station “Rybachy” in 2012.

EUR- ING code	Species	Rybachy- type traps ("Frin- gilla")	Mist- nets ("Ryba- chy")	Nests		Other research projects and methods	Total ringed in 2012	Grand total 1956– 2012
				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	–	1	–	–	–	1	4
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	84	3	–	–	–	87	7,395

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps (“Fringilla”)	Mist- nets (“Rybachy”)	Nests		Other research projects and methods	Total ringed in 2012	Grand total 1956– 2012
				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	1	–	–	–	–	1	16
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	1	–	–	–	–	1	5
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 ("Fringilla")	Mist- nets ("Rybachy")	Nests		Other research projects and methods	Total ringed in 2012	Grand total 1956– 2012
				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	2	–	–	–	–	2	213
05410	<i>Numenius arquata</i> Curlew	–	–	–	–	–	–	1
05530	<i>Tringa ochropus</i> Green Sandpiper	1	–	–	–	–	1	21
05540	<i>Tringa glareola</i> Wood Sandpiper	–	–	–	–	–	–	18
05560	<i>Actitis hypoleucos</i> Common Sandpiper	1	–	–	–	–	1	42
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 (“Frin- gilla”)	Mist- nets (“Ryba- chy”)	Nests		Other research projects and methods	Total ringed in 2012	Grand total 1956– 2012
				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	–	1	–	–	–	1	67
06840	<i>Streptopelia decaocto</i> Collared Dove	–	–	–	–	–	–	34
06870	<i>Streptopelia turtur</i> Turtle Dove	–	–	–	–	–	–	124
07240	<i>Cuculus canorus</i> Cuckoo	31	6	–	–	–	37	1,527
07350	<i>Tyto alba</i> Barn Owl	–	–	–	–	–	–	7
07500	<i>Surnia uhula</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	9	–	–	–	–	9	3,373
07680	<i>Asio flammeus</i> Short-eared Owl	–	–	–	–	–	–	57
07700	<i>Aegolius funereus</i> Tengmalm’s Owl	1	–	–	–	–	1	340
07780	<i>Caprimulgus europaeus</i> Nightjar	1	–	–	–	–	1	424
07950	<i>Apus apus</i> Swift	1	–	–	–	1	2	663
08310	<i>Alcedo atthis</i> Kingfisher	1	1	–	–	–	2	218
08410	<i>Coracias garrulus</i> Roller	–	–	–	–	–	–	3
08460	<i>Upupa epops</i> Hoopoe	–	–	–	–	–	–	170
08480	<i>Jynx torquilla</i> Wryneck	2	2	–	–	2	6	1,187

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 2012	Grand total 1956– 2012
				Nest- lings	Adults			
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	157	37	–	–	22	216	3,393
08830	<i>Dendrocopos medius</i> Middle Spotted Woodpecker	2	3	–	–	2	7	68
08840	<i>Dendrocopos leucotos</i> White-backed Woodpecker	–	–	–	–	–	–	4
08870	<i>Dendrocopos minor</i> Lesser Spotted Woodpecker	6	10	–	–	–	16	486
09740	<i>Lullula arborea</i> Woodlark	2	–	–	–	–	2	4,777
09760	<i>Alauda arvensis</i> Skylark	–	–	–	–	–	–	488
09780	<i>Eremophilla alpestris</i> Shore Lark	–	–	–	–	–	–	5
09810	<i>Riparia riparia</i> Sand Martin	8	–	–	–	–	8	5,114
09920	<i>Hirundo rustica</i> Swallow	141	32	26	–	5	204	11,856
10010	<i>Delichon urbica</i> House Martin	36	–	–	–	–	36	8,680
10020	<i>Anthus novaseelandiae</i> Richard's Pipit	–	–	–	–	–	–	3
10050	<i>Anthus campestris</i> Tawny Pipit	–	–	–	–	–	–	140
10090	<i>Anthus trivialis</i> Tree Pipit	5	3	–	–	16	24	6,123
10110	<i>Anthus pratensis</i> Meadow Pipit	3	–	–	–	–	3	11,043

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 2012	Grand total 1956– 2012
				Nest- lings	Adults			
10140	<i>Anthus spinoletta</i> Water Pipit	–	–	–	–	–	–	3
10142	<i>Anthus petrosus</i> Rock Pipit	–	–	–	–	–	–	1
10170	<i>Motacilla flava</i> Yellow Wagtail	5	27	–	–	–	32	2,919
10180	<i>Motacilla citreola</i> Citrine Wagtail	–	–	–	–	–	–	1
10190	<i>Motacilla cinerea</i> Grey Wagtail	–	–	–	–	–	–	11
10200	<i>Motacilla alba</i> Pied Wagtail	152	24	5	–	4	185	12,790
10480	<i>Bombicilla garrulus</i> Waxwing	1	12	–	–	4	17	1,342
10500	<i>Cinclus cinclus</i> Dipper	–	–	–	–	–	–	1
10660	<i>Troglodytes troglodytes</i> Wren	96	199	–	–	25	320	13,408
10840	<i>Prunella modularis</i> Dunnock	14	103	–	–	15	132	6,661
10990	<i>Erithacus rubecula</i> Robin	2,125	2,911	–	–	412	5,448	188,800
11030	<i>Luscinia luscinia</i> Thrush Nightingale	1	65	–	–	8	74	2,554
11060	<i>Luscinia svecica</i> Bluethroat	–	2	–	–	–	2	226
11130	<i>Tarsiger cyanurus</i> Red-flanked Bluetail	–	–	–	–	–	–	3
11210	<i>Phoenicurus ochruros</i> Black Redstart	35	2	–	–	–	37	1,597
11220	<i>Phoenicurus phoenicurus</i> Redstart	87	87	14	–	22	210	13,951
11370	<i>Saxicola rubetra</i> Whinchat	15	5	–	–	–	20	3,316
11390	<i>Saxicola torquata</i> Stonechat	–	–	–	–	–	–	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 2012	Grand total 1956– 2012
				Nest- lings	Adults			
11460	<i>Oenanthe oenanthe</i> Northern Wheatear	1	–	–	–	–	1	861
11860	<i>Turdus torquatus</i> Ring Ouzel	–	–	–	–	–	–	14
11870	<i>Turdus merula</i> Blackbird	310	234	–	–	26	570	14,647
11980	<i>Turdus pilaris</i> Fieldfare	8	2	–	–	–	10	2,548
12000	<i>Turdus philomelos</i> Song Thrush	418	398	–	–	10	826	29,298
12010	<i>Turdus iliacus</i> Redwing	9	15	–	–	1	25	6,270
12020	<i>Turdus viscivorus</i> Mistle Thrush	7	–	–	–	–	7	314
12360	<i>Locustella naevia</i> Grasshopper Warbler	4	7	–	–	1	12	764
12370	<i>Locustella fluviatilis</i> River Warbler	–	7	–	–	–	7	168
12380	<i>Locustella luscinioides</i> Savi's Warbler	–	–	–	–	–	–	88
12430	<i>Acrocephalus schoenobaenus</i> Sedge Warbler	1	218	–	–	1	220	10,674
12470	<i>Acrocephalus agricola</i> Paddyfield Warbler	–	1	–	–	–	1	6
12480	<i>Acrocephalus dumetorum</i> Blyth's Reed Warbler	–	6	–	–	1	7	111
12500	<i>Acrocephalus palustris</i> Marsh Warbler	–	240	–	–	15	255	6,547
12510	<i>Acrocephalus scirpaceus</i> Reed Warbler	1	509	15	–	12	537	21,799
12530	<i>Acrocephalus arundinaceus</i> Great Reed Warbler	–	90	–	–	–	90	3,333
12560	<i>Hippolais caligata</i> Booted Warbler	–	–	–	–	–	–	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 2012	Grand total 1956– 2012
				Nest- lings	Adults			
12590	<i>Hippolais icterina</i> Icterine Warbler	63	102	–	–	74	239	11,894
12650	<i>Sylvia cantillans</i> Subalpine Warbler	–	–	–	–	–	–	4
12670	<i>Sylvia melanocephala</i> Sardinian Warbler	–	–	–	–	–	–	1
12730	<i>Sylvia nisoria</i> Barred Warbler	–	2	–	–	–	2	3,984
12740	<i>Sylvia curruca</i> Lesser Whitethroat	60	151	5	–	20	236	19,645
12750	<i>Sylvia communis</i> Whitethroat	59	183	–	–	14	256	13,828
12760	<i>Sylvia borin</i> Garden Warbler	23	272	–	–	174	469	24,130
12770	<i>Sylvia atricapilla</i> Blackcap	76	859	–	–	284	1,219	27,235
12930	<i>Phylloscopus trochiloides</i> Greenish Warbler	2	5	–	–	1	8	117
12980	<i>Phylloscopus proregulus</i> Pallas's Warbler	2	–	–	–	–	2	29
13000	<i>Phylloscopus inornatus</i> Yellow-browed Warbler	4	1	–	–	–	5	120
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	56	89	–	–	119	264	16,599
13110	<i>Phylloscopus collybita</i> Chiffchaff	123	204	–	–	7	334	12,537
13120	<i>Phylloscopus trochilus</i> Willow Warbler	606	307	7	–	152	1,072	158,654

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 2012	Grand total 1956– 2012
				Nest- lings	Adults			
13140	<i>Regulus regulus</i> Goldcrest	12,414	2,082	–	–	72	14,568	389,565
13150	<i>Regulus ignicapillus</i> Firecrest	2	3	–	–	–	5	94
13350	<i>Muscicapa striata</i> Spotted Flycatcher	45	63	–	–	63	171	10,671
13430	<i>Ficedula parva</i> Red-breasted Flycatcher	5	10	–	–	8	23	1,239
13480	<i>Ficedula albicollis</i> Collared Flycatcher	–	–	–	–	1	1	27
13490	<i>Ficedula hypoleuca</i> Pied Flycatcher	63	171	199	17	264	714	29,808
13640	<i>Panurus biarmicus</i> Bearded Tit	–	–	–	–	–	–	500
14370	<i>Aegithalos caudatus</i> Long-tailed Tit	362	276	–	–	–	638	61,429
14400	<i>Parus palustris</i> Marsh Tit	8	13	17	2	22	62	2,335
14420	<i>Parus montanus</i> Willow Tit	16	–	–	–	15	31	2,336
14540	<i>Parus cristatus</i> Crested Tit	4	–	–	–	11	15	793
14610	<i>Parus ater</i> Coal Tit	1,485	–	88	5	42	1,620	57,654
14620	<i>Parus caeruleus</i> Blue Tit	902	354	43	6	103	1,408	95,845
14640	<i>Parus major</i> Great Tit	4,560	557	125	6	189	5,437	251,118
14790	<i>Sitta europaea</i> Nuthatch	1	–	–	–	6	7	388
14860	<i>Certhia familiaris</i> Treetreeper	26	73	–	–	6	105	8,943
14870	<i>Certhia brachydactyla</i> Short-toed Treetreeper	–	–	–	–	–	–	17

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 2012	Grand total 1956– 2012
				Nest- lings	Adults			
14900	<i>Remiz pendulinus</i> Penduline	11	67	–	–	–	78	1,351
15080	<i>Oriolus oriolus</i> Golden Oriole	2	–	–	–	–	2	288
15150	<i>Lanius collurio</i> Red-backed Shrike	14	20	–	–	8	42	3,502
15200	<i>Lanius excubitor</i> Great Gray Shrike	–	–	–	–	–	–	114
15390	<i>Garrulus glandarius</i> Jay	14	4	–	–	1	19	6,440
15490	<i>Pica pica</i> Magpie	–	1	–	–	–	1	87
15570	<i>Nucifraga caryocatactes</i> Nutcracker	–	–	–	–	–	–	472
15600	<i>Coloeus monedula</i> Jackdaw	–	–	–	–	–	–	78
15630	<i>Corvus frugilegus</i> Rook	–	–	–	–	–	–	60
15672	<i>Corvus corone cornix</i> Hooded Crow	–	–	–	–	–	–	73
15720	<i>Corvus corax</i> Raven	–	–	–	–	–	–	4
15820	<i>Sturnus vulgaris</i> Starling	190	65	–	–	6	261	108,347
15910	<i>Passer domesticus</i> House Sparrow	–	–	–	–	–	–	1,075
15980	<i>Passer montanus</i> Tree Sparrow	1	3	–	–	1	5	351
16360	<i>Fringilla coelebs</i> Chaffinch	6,161	405	8	–	386	6,960	763,641
16380	<i>Fringilla montifringilla</i> Brambling	419	11	–	–	5	435	74,641
16400	<i>Serinus serinus</i> Serin	5	–	–	–	–	5	470

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 2012	Grand total 1956– 2012
				Nest- lings	Adults			
16490	<i>Carduelis chloris</i> Greenfinch	11	4	–	–	12	27	7,856
16530	<i>Carduelis carduelis</i> Goldfinch	2	5	–	–	1	8	3,123
16540	<i>Carduelis spinus</i> Siskin	2,288	91	–	–	1,422	3,801	227,703
16600	<i>Carduelis cannabina</i> Linnet	1	–	–	–	–	1	1,648
16620	<i>Carduelis flavirostris</i> Twite	–	–	–	–	–	–	32
16630	<i>Carduelis flammea</i> Redpoll	3	10	–	–	5	18	13,836
16640	<i>Carduelis hornemanni</i> Arctic Redpoll	–	–	–	–	–	–	18
16650	<i>Loxia leucoptera</i> Two-barred Crossbill	–	–	–	–	–	–	21
16660	<i>Loxia curvirostra</i> Crossbill	–	–	–	–	37	37	15,487
16680	<i>Loxia pytyopsittacus</i> Parrot Crossbill	1	–	–	–	–	1	19
16790	<i>Carpodacus erythrinus</i> Scarlet Rosefinch	12	51	–	–	17	80	7,176
16990	<i>Pinicola enucleator</i> Pine Grosbeak	–	–	–	–	–	–	1
17100	<i>Pyrrhula pyrrhula</i> Bullfinch	5	15	–	–	1	21	14,579
17170	<i>Coccothraustes coccothraustes</i> Hawfinch	4	6	–	–	16	26	1,813
18470	<i>Calcarius lapponicus</i> Lapland Bunting	–	–	–	–	–	–	3
18500	<i>Plectrophenax nivalis</i> Snow Bunting	–	–	–	–	–	–	1
18570	<i>Emberiza citrinella</i> Yellowhammer	15	1	–	–	7	23	4,798

Table 1. *Continued*

EUR- ING code	Species	Rybachy- type traps (“Fringilla”)	Mist- nets (“Rybachy”)	Nests		Other research projects and methods	Total ringed in 2012	Grand total 1956– 2012
				Nest- lings	Adults			
18660	<i>Emberiza hortulana</i> Ortolan Bunting	1	–	–	–	–	1	517
18730	<i>Emberiza rustica</i> Rustic Bunting	–	–	–	–	–	–	10
18740	<i>Emberiza pusilla</i> Little Bunting	–	–	–	–	–	–	11
18770	<i>Emberiza schoeniclus</i> Reed Bunting	–	45	–	–	–	45	2,787
18810	<i>Emberiza melanocephala</i> Black-headed Bunting	–	–	–	–	–	–	1
18820	<i>Miliaria calandra</i> Corn Bunting	–	–	–	–	–	–	8
	Total birds	33,913	11,844	552	36	4,177	50,522	2,878,414
	Total species	86	72	12	5	58	99	199

2. Results of bird ringing in 2012

Overall, 50,522 birds of 99 species were trapped and ringed by the Biological Station “Rybachy” in the framework research projects. A total of 33,913 birds of 86 species were trapped and ringed in Rybachy-type traps and the field site “Fringilla”, and 11,844 birds of 72 species were trapped and ringed in mist nets at the field site “Rybachy”. In 2012, 552 pulli of 12 species and 36 adults of 5 species were ringed at nests. Finally, 4,177 birds of 58 species were trapped and ringed by other methods in the framework of short-term research projects in 2012, 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 2012. Additionally, the grand ringing totals for 1956–2012 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 1,399 individuals of 50 species ringed in 2012 produced 2,184 retraps. In addition, 303 controls (24 species) were obtained from birds ringed in previous years.

3. List of long-distance recoveries reported in 2012

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 15.03.2012 and 15.03.2013. 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”, “XY” and “XZ” bear the inscription “Moskwa”, series “K”, “V” and “AX” bear the inscription “Russia, Petersburg”.

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.

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

EUR- ING code	Species	Retraps of birds ringed in 2012		Controls of birds ringed earlier than 2012	Recoveries of our birds outside the Courish Spit	Recoveries of birds ringed outside the Courish Spit
		birds	retraps			
02690	<i>Accipiter nisus</i> Sparrowhawk	–	–	–	2	–
05820	<i>Larus ridibundus</i> Black-headed Gull	–	–	–	–	1
07240	<i>Cuculus canorus</i> Cuckoo	2	2	–	–	–
08760	<i>Dendrocopos major</i> Great Spotted Woodpecker	13	18	–	–	–
08870	<i>Dendrocopos minor</i> Lesser Spotted Woodpecker	2	2	–	–	–
09920	<i>Hirundo rustica</i> Swallow	8	12	2	–	–
07950	<i>Apus apus</i> Swift	–	–	–	1	–
10090	<i>Anthus trivialis</i> Tree Pipit	–	–	3	–	–
10200	<i>Motacilla alba</i> White Wagtail	8	16	5	–	1
10660	<i>Troglodytes troglodytes</i> Wren	32	54	1	–	–
10840	<i>Prunella modularis</i> Dunnock	8	11	–	–	4
10990	<i>Erithacus rubecula</i> Robin	243	346	–	11	4
11030	<i>Luscinia luscinia</i> Thrush Nightingale	19	48	9	1	–
11220	<i>Phoenicurus phoenicurus</i> Redstart	12	21	1	–	2
11870	<i>Turdus merula</i> Blackbird	14	19	6	1	–
12000	<i>Turdus philomelos</i> Song Thrush	1	1	–	3	–
12010	<i>Turdus iliacus</i> Redwing	1	1	–	1	–
12370	<i>Locustella fluviatilis</i> River Warbler	1	2	–	–	–
12430	<i>Acrocephalus schoenobaenus</i> Sedge Warbler	17	18	1	–	1
12500	<i>Acrocephalus palustris</i> Marsh Warbler	37	45	8	–	–

Table 2. *Continued*

EUR- ING code	Species	Retraps of birds ringed in 2012		Controls of birds ringed earlier than 2012	Recoveries of our birds outside the Courish Spit	Recoveries of birds ringed outside the Courish Spit
		birds	retraps			
12510	<i>Acrocephalus scirpaceus</i> Reed Warbler	133	232	38	2	2
12530	<i>Acrocephalus arundinaceus</i> Great Reed Warbler	32	51	10	–	1
12590	<i>Hippolais icterina</i> Icterine Warbler	22	34	8	–	–
12740	<i>Sylvia curruca</i> Lesser Whitethroat	18	28	4	–	–
12750	<i>Sylvia communis</i> Whitethroat	8	10	2	1	1
12760	<i>Sylvia borin</i> Garden Warbler	13	18	2	–	–
12770	<i>Sylvia atricapilla</i> Blackcap	164	225	13	2	1
13080	<i>Phylloscopus sibilatrix</i> Wood Warbler	4	4	–	–	–
13110	<i>Phylloscopus collybita</i> Chiffchaff	20	26	–	–	1
13120	<i>Phylloscopus trochilus</i> Willow Warbler	100	225	81	1	–
13140	<i>Regulus regulus</i> Goldcrest	94	121	–	15	11
13150	<i>Regulus ignicapillus</i> Firecrest	2	3	–	–	–
13350	<i>Muscicapa striata</i> Spotted Flycatcher	2	2	–	–	–
13430	<i>Ficedula parva</i> Red-breasted Flycatcher	1	1	–	–	–
13480	<i>Ficedula albicollis</i> Collared Flycatcher	–	–	–	–	2
13490	<i>Ficedula hypoleuca</i> Pied Flycatcher	8	9	–	–	2
14370	<i>Aegithalos caudatus</i> Long-tailed Tit	9	13	–	2	6
14400	<i>Parus palustris</i> Marsh Tit	12	24	1	–	–
14420	<i>Parus montanus</i> Willow Tit	4	11	–	–	–

Table 2. *Continued*

EUR- ING code	Species	Retraps of birds ringed in 2012		Controls of birds ringed earlier than 2012	Recoveries of our birds outside the Courish Spit	Recoveries of birds ringed outside the Courish Spit
		birds	retraps			
14610	<i>Parus ater</i> Coal Tit	4	6	–	4	6
14620	<i>Parus caeruleus</i> Blue Tit	96	154	12	9	13
14640	<i>Parus major</i> Great Tit	95	168	11	56	25
14790	<i>Sitta europaea</i> Nuthatch	2	2	–	–	–
14860	<i>Certhia familiaris</i> Treecreeper	10	19	–	–	–
14900	<i>Remiz pendulinus</i> Penduline Tit	4	4	–	–	1
15080	<i>Oriolus oriolus</i> Golden Oriole	1	1	–	–	–
15150	<i>Lanius collurio</i> Red-backed Shrike	3	5	–	–	–
15820	<i>Sturnus vulgaris</i> Starling	–	–	–	1	1
16360	<i>Fringilla coelebs</i> Chaffinch	89	126	78	4	–
16380	<i>Fringilla montifringilla</i> Brambling	1	1	–	1	–
16490	<i>Carduelis chloris</i> Greenfinch	2	2	–	–	–
16540	<i>Carduelis spinus</i> Siskin	15	20	–	9	2
16790	<i>Carpodacus erythrinus</i> Scarlet Rosefinch	6	13	3	–	–
17170	<i>Coccothraustes coccothraustes</i> Hawfinch	1	1	–	–	–
18570	<i>Emberiza citrinella</i> Yellowhammer	1	1	3	–	–
18770	<i>Emberiza schoeniclus</i> Reed Bunting	5	8	1	–	–
	Total birds	1,399	2,184	303	127	86
	Total species	50	50	24	20	20

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 send 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 15.03.2012 and 15.03.2013, we received from the national Ringing Centre in Moscow information on 127 recoveries of birds of 20 species, ringed on the Courish Spit (see 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 2012 the station controlled a total of 86 birds of 20 species ringed outside the Courish Spit. The line structure is the same: after the ring number, we give the ringing scheme (see 3.2, controls of birds ringed outside the Courish Spit). For 14 birds

of 9 species ringed outside the Courish Spit and controlled by the Biological Station Rybachy in 2012, ringing information is still not available from the national Ringing Centre (see 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 2012 (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, Yu. Sleptsov, L. Sokolov, N. Sosedova, E. Tronikova, A. Tsvey, V. Veprintsev.

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

02690. <i>Accipiter nisus</i>, Sparrowhawk (2)									
M 758641	02.04.2011	F	6	Russia, Fringilla	55.05N, 20.44E				
	17.09.2012	F	4	Finland, Uusimaa, Uddskatan, Hanko	59.49N, 22.54E	V		534 days, 542 km, 14°	
P 966129	24.10.2000	M	3	Russia, Fringilla	55.05N, 20.44E				
	12.04.2002	M	6	Poland, Gdansk, Hel	54.46N, 18.28E		& GA11772 Gdansk	535 days, 149 km, 256°	
07950. <i>Apus apus</i>, Swift (1)									
TA 78516	22.06.2011	I	2	Russia, Fringilla	55.05N, 20.44E				
	22.06.2012			Sweden, Kronoberg, Rottne, Basbro	57.04N, 14.52E	x		366 days, 425 km, 301°	
10990. <i>Eriothacus rubecula</i>, Robin (11)									
O 804197	18.04.1996	I	5	Russia, Rybachy	55.09N, 20.51E				
	07.10.1997			Poland, Gdansk, Mierzeja Wislana	54.21N, 19.19E		& KL74836 Gdansk	537 days, 133 km, 228°	
XH 27684	16.04.2011	I	5	Russia, Rybachy	55.09N, 20.51E				
	08.01.2013			France, Loire-Atlantique, Pornic	47.07N, 2.06W	x		633 days, 1832 km, 241°	
XH 28264	21.04.2011	I	6	Russia, Rybachy	55.09N, 20.51E				
	17.04.2012	I	6	Italy, Como, Erba, Sassonia	45.48N, 9.14E	V		362 days, 1324 km, 218°	
XH 39601	09.10.2011	I	3	Russia, Rybachy	55.09N, 20.51E				
	11.10.2011	I	3	Lithuania, Neringa, Juodkrante	55.31N, 21.07E	V		2 days, 44 km, 22°	
XH 84385	15.09.2012	I	3	Russia, Fringilla	55.05N, 20.44E				
	01.11.2012			Netherlands, Friesland, Walterswald	53.18N, 6.02E	+K		47 days, 976 km, 258°	
XH 85232	18.09.2012	I	3	Russia, Fringilla	55.05N, 20.44E				
	07.10.2012			Netherlands, Noord-Brabant, Oeffelt	51.41N, 5.55E	xG		19 days, 1052 km, 249°	
XP 69351	13.04.2009	I	6	Russia, Rybachy	55.09N, 20.51E				
	03.11.2010			Italy, Venezia, Annone Veneto, Bregomasco	45.46N, 12.41E	V		569 days, 1192 km, 209°	

XP 97351	15.09.2009	I	3	Russia, Fringilla	55.05N, 20.44E			565 days, 1228 km, 226°	
	03.04.2011			Switzerland, Aargau, Rombach	47.24N, 8.03E	x			
XZ 01658	12.10.2012	I	3	Russia, Rybachy	55.09N, 20.51E			70 days, 638 km, 248°	
	21.12.2012			Germany, Brandenburg, Prignitz, Hinzdorf	52.58N, 11.48E	x			
XZ 04422	03.10.2012	I	3	Russia, Fringilla	55.05N, 20.44E			2 days, 54 km, 27°	
	05.10.2012	I	3	Lithuania, Neringa, Juodkrante	55.31N, 21.07E	V			
XZ 08114	18.10.2012	I	3	Russia, Fringilla	55.05N, 20.44E			57 days, 1057 km, 247°	
	14.12.2012			Netherlands, Limburg, Tegelen	51.20N, 6.08E	V			
11030. <i>Luscinia luscinia</i>, Thrush Nightingale (1)									
XG 79809	30.06.2010	I	3	Russia, Rybachy	55.09N, 20.51E			348 days, 32 km, 46°	
	13.06.2011	M	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V			
11870. <i>Turdus merula</i>, Blackbird (1)									
TA 80173	24.10.2012	F	3	Russia, Fringilla	55.05N, 20.44E			38 days, 1224 km, 220°	
	01.12.2012	F	3	Switzerland, Graubünden, Thusis	46.41N, 9.26E	x			
12000. <i>Turdus philomelos</i>, Song Thrush (3)									
TA 31848	08.04.2009	I	6	Russia, Rybachy	55.09N, 20.51E			673 days, 2600 km, 233°	
	10.02.2011			Portugal, Guarda, Castello Melhor	41.01N, 7.04W	x			
TA 49104	28.09.2009	I	3	Russia, Rybachy	55.09N, 20.51E			1162 days, 2238 km, 223°	
	03.12.2012			Spain, Castelon, Calig	40.27N, 0.21E	+			
TA 82003	26.09.2012	I	3	Russia, Rybachy	55.09N, 20.51E			102 days, 2998 km, 228°	
	06.01.2013			Portugal, Algarve, Faro, Albufeira, Pademe	37.10N, 8.12W	xA			
12010. <i>Turdus iliacus</i>, Redwing (1)									
XD 386663	24.10.1994	I	3	Russia, Rybachy	55.09N, 20.51E			70 days, 1663 km, 220°	
	02.01.1995			France, Var, Regusse	43.39N, 6.08E	+			
12510. <i>Acrocephalus scirpaceus</i>, Reed Warbler (2)									
XH 37547	07.07.2011	I	4	Russia, Rybachy	55.09N, 20.51E			12 days, 32 km, 46°	
	19.07.2011	M	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V			

XH 38568	28.08.2011	I	3	Russia, Rybachy	55.09N, 20.51E			298 days, 32 km, 46°	
	21.06.2012	I	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V			
12750. <i>Sylvia communis</i>, Whitethroat (1)									
XG 79227	16.07.2010	I	3	Russia, Rybachy	55.09N, 20.51E			322 days, 32 km, 46°	
	03.06.2011	M	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V			
12770. <i>Sylvia atricapilla</i>, Blackcap (2)									
XH 78673	09.06.2012	M	5	Russia, Rybachy	55.09N, 20.51E			94 days, 309 km, 200°	
	11.09.2012	M	4	Poland, Bydgoszcz, Kujawsko-Pomorskie, Krzewent	52.32N, 19.15E	V			
XP 08507	17.09.2008	M	3	Russia, Rybachy	55.09N, 20.51E			1371 days, 609 km, 332°	
	19.06.2012			Sweden, Västmanland, Angelsberg, Staback	59.59N, 16.01E	x			
13120. <i>Phylloscopus trochilus</i>, Willow Warbler (1)									
VN 17693	01.09.2011	M	3	Russia, Fringilla	55.05N, 20.44E			11 days, 769 km, 200°	
	12.09.2011	I	3	Austria, Niederösterreich, Hohenau-Ringelsdorf	48.35N, 16.54E	V			
13140. <i>Regulus regulus</i>, Goldcrest (15)									
VK 77946	11.10.2010	M	3	Russia, Rybachy	55.09N, 20.51E			6 days, 44 km, 22°	
	17.10.2010	M	3	Lithuania, Neringa, Juodkrante	55.31N, 21.07E	V			
VN 06528	11.10.2012	F	3	Russia, Fringilla	55.05N, 20.44E		xG	6 days, 1783 km, 239°	
	17.10.2012			France, Vendee, La Riviere, Nouchamps	46.47N, 1.04W				
VN 06664	11.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E		V	8 days, 503 km, 274°	
	19.10.2012	M	3	Sweden, Skane, Falsterbo, Fyren	55.23N, 12.49E				
VN 10531	13.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E		V	5 days, 530 km, 355°	
	18.10.2012	M	3	Finland, Aland, Lemland, Lagskär	59.50N, 19.58E				
VN 1324?	17.10.2010	F	3	Russia, Fringilla	55.05N, 20.44E		I	14 days, 621 km, 189°	
	31.10.2010			Poland, Slaskie, Romanka	49.34N, 19.15E				
VN 20148	08.10.2012	F	3	Russia, Fringilla	55.05N, 20.44E		V	11 days, 503 km, 274°	
	19.10.2012	F	3	Sweden, Skane, Falsterbo, Fyren	55.23N, 12.49E				

VN 20406	10.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	V	10 days, 503 km, 274°
	20.10.2012	M	3	Sweden, Skane, Falsterbo, Fyren	55.23N, 12.49E	V	
VN 53080	24.10.2012	F	3	Russia, Rybachy	55.09N, 20.51E	V	15 days, 573 km, 229°
	08.11.2012			Germany, Brandenburg, Cottbus	51.45N, 14.20E	V	
VN 54229	19.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	V	35 days, 1552 km, 230°
	23.11.2012			France, Loire, Pouilly-les-Nonains	46.02N, 3.59E	V	
VN 55162	16.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	+K	3 days, 49 km, 224°
	19.10.2012			Russia, Kaliningrad, Logvino	54.46N, 20.12E	+K	
VN 55750	16.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	xG	23 days, 1035 km, 229°
	08.11.2012			Germany, Nordwürttemberg, Kirchberg an der Muur	48.57N, 9.20E	xG	
VN 59028	18.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	xG	26 days, 418 km, 242°
	13.11.2012			Poland, Szczecin, Stargrad Szczecinski	53.20N, 15.02E	xG	
VN 60368	20.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	V	17 days, 1095 km, 255°
	06.11.2012	M	3	Netherlands, Noord-Holland, Castricum	52.32N, 4.37E	V	
XZ 10024	21.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	x	85 days, 492 km, 234°
	14.01.2013			Poland, Lubuskie, Gorzyca	52.30N, 14.39E	x	
XZ 10216	22.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	V	13 days, 1190 km, 251°
	04.11.2012	M	3	Netherlands, Zeeland, Burgh- Haamstede	51.41N, 3.42E	V	
14370. <i>Aegithalos caudatus</i>, Long-tailed Tit (2)							
O 347088	11.10.1986	I	3	Russia, Fringilla	55.05N, 20.44E	& KE95322 Gdansk	1 day, 122 km, 228°
	12.10.1986			Poland, Gdansk, Mierzeja Wislana	54.21N, 19.19E	& KE95322 Gdansk	
VK 67650	06.10.2010	I	3	Russia, Rybachy	55.09N, 20.51E	V	172 days, 153 km, 252°
	27.03.2011	I	4	Poland, Gdansk, Kuznica	54.44N, 18.34E	V	
14610. <i>Parus ater</i>, Coal Tit (4)							
O 131196	07.07.1983	I	3	Russia, Fringilla	55.05N, 20.44E	V	55 days, 46 km, 27°
	31.08.1983	I	3	Lithuania, Neringa	55.27N, 21.04E	V	
XH 82413	29.08.2012	M	3	Russia, Fringilla	55.05N, 20.44E	x	42 days, 583 km, 256°
	10.10.2012			Germany, Mecklenburg, Tarnow	53.47N, 12.00E	x	

XH 83437	11.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E			4 days, 164 km, 236°	
	15.09.2012			Poland, Gdansk, Pruszcz Gdanski	54.15N, 18.38E	x			
XH 84929	17.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E			65 days, 1069 km, 252°	
	21.11.2012			Netherlands, Utrecht, Soest	52.11N, 5.16E	!			
14620. <i>Parus caeruleus</i>, Blue Tit (9)									
O 839009	10.10.1996	F	3	Russia, Rybachy	55.09N, 20.51E			10 days, 133 km, 228°	
	20.10.1996	F	3	Poland, Gdansk, Mierzeja Wislana	54.21N, 19.19E	&	KL22064 Gdansk		
XG 13177	09.10.2009	M	3	Russia, Fringilla	55.05N, 20.44E	V		735 days, 43 km, 46°	
	14.10.2011	M	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V			
XH 08241	02.09.2010	M	3	Russia, Rybachy	55.09N, 20.51E	V		385 days, 32 km, 46°	
	22.09.2011	M	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V			
XH 35362	30.09.2011	F	4	Russia, Fringilla	55.05N, 20.44E	V		360 days, 43 km, 46°	
	24.09.2012	F	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V			
XH 44945	11.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E	V		27 days, 287 km, 256°	
	07.11.2011	M	3	Poland, Szczecin, Darlowo, Kopan	54.27N, 16.24E	V			
XH 45248	12.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E	V		362 days, 43 km, 46°	
	08.10.2012	F	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V			
XH 48991	19.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E	V		337 days, 43 km, 46°	
	20.09.2012	F	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V			
XH 85905	20.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E	xG		86 days, 1126 km, 252°	
	15.12.2012			Netherlands, Zuid-Holland, Capelle aan den IJssel	51.55N, 4.33E				
XP 31940	03.10.2008	M	3	Russia, Fringilla	55.05N, 20.44E	V		45 days, 957 km, 251°	
	17.11.2008	M	3	Netherlands, Overijssel, Overdinkel	52.14N, 7.01E	V			
14640. <i>Parus major</i>, Great Tit (56)									
XG 06874	24.09.2009	F	3	Russia, Fringilla	55.05N, 20.44E	V		163 days, 428 km, 252°	
	06.03.2010	F	5	Poland, Poznan, Miedzdroje, Wapnica	53.53N, 14.26E	V			
XH 14986	06.10.2010	F	3	Russia, Fringilla	55.05N, 20.44E	V		24 days, 957 km, 251°	
	30.10.2010	F	3	Netherlands, Overijssel, Overdinkel	52.14N, 7.01E	V			

XH 15085	06.10.2010	F	3	Russia, Fringilla	55.05N, 20.44E		174 days, 158 km, 245°
	29.03.2011	F	5	Poland, Gdansk, Gdynia-Witomino	54.29N, 18.30E	V	
XH 16411	08.10.2010	M	3	Russia, Fringilla	55.05N, 20.44E		159 days, 428 km, 252°
	16.03.2011	M	5	Poland, Poznan, Miedzzydroje, Wapnica	53.53N, 14.26E	V	
XH 16649	09.10.2010	F	4	Russia, Fringilla	55.05N, 20.44E		372 days, 542 km, 14°
	16.10.2011	F	4	Finland, Uusimaa, Tulliniemi, Hanko	59.49N, 22.54E	V	
XH 20316	07.10.2010	M	3	Russia, Rybachy	55.09N, 20.51E		732 days, 32 km, 46°
	08.10.2012	M	4	Lithuania, Silute, Ventes Ragas	55.21N, 21.13E	V	
XH 21090	29.10.2010	M	3	Russia, Fringilla	55.05N, 20.44E		357 days, 43 km, 46°
	21.10.2011	M	4	Lithuania, Silute, Ventes Ragas	55.21N, 21.13E	V	
XH 22086	31.03.2011	F	5	Russia, Fringilla	55.05N, 20.44E		200 days, 287 km, 256°
	17.10.2011	F	3	Poland, Szczecin, Darlowo, Kopan	54.27N, 16.24E	V	
XH 22839	04.04.2011	F	5	Russia, Fringilla	55.05N, 20.44E		204 days, 282 km, 256°
	25.10.2011	F	4	Poland, Szczecin, Darlowo, Wicie	54.29N, 16.27E	V	
XH 26148	27.03.2011	M	5	Russia, Rybachy	55.09N, 20.51E		199 days, 32 km, 46°
	12.10.2011	M	4	Lithuania, Silute, Ventes Ragas	55.21N, 21.13E	V	
XH 31829	28.09.2011	F	3	Russia, Fringilla	55.05N, 20.44E		3 days, 110 km, 227°
	01.10.2011	F	3	Poland, Gdansk, Krynica Morska, 3 km NE	54.24N, 19.29E	V	
XH 34832	24.09.2011	F	3	Russia, Fringilla	55.05N, 20.44E		3 days, 119 km, 227°
	27.09.2011	F	3	Poland, Gdansk, Mierzeja Wislana-Siekierki	54.21N, 19.23E	V	
XH 39873	11.10.2011	M	3	Russia, Rybachy	55.09N, 20.51E		349 days, 32 km, 46°
	24.09.2012	M	4	Lithuania, Silute, Ventes Ragas	55.21N, 21.13E	V	
XH 41615	04.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E		182 days, 533 km, 43°
	03.04.2012	M		Estonia, Jogevamaa, Pataste	58.34N, 26.45E	x	
XH 42354	06.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		154 days, 525 km, 247°
	08.03.2012	F	5	Germany, Brandenburg, Lychen, Uckermark	53.13N, 13.19E	V	
XH 42756	08.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E		4 days, 119 km, 227°
	12.10.2011	F	3	Poland, Gdansk, Mierzeja Wislana-Siekierki	54.21N, 19.23E	V	

XH 43299	09.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E			
	20.10.2012	F	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V	377 days, 43 km, 46°	
XH 43981	10.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E			
	16.10.2012	M	4	Netherlands, Gelderland, Jasmijnstraat, Neede	52.08N, 6.37E	V	372 days, 987 km, 251°	
XH 44072	10.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E			
	29.09.2012	F	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V	355 days, 43 km, 46°	
XH 44126	10.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E			
	06.02.2012			Germany, Brandenburg, Gusow, Marleisch-Oderland	52.34N, 14.31E	x	119 days, 494 km, 236°	
XH 44275	11.10.2011	M	4	Russia, Fringilla	55.05N, 20.44E			
	12.03.2012			Germany, Thüringen, Greiz, Auma	50.42N, 11.54E	V	153 days, 767 km, 231°	
XH 44640	11.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E			
	01.11.2011	M	3	Poland, Gdansk, Krynica Morska	54.21N, 19.21E	V	21 days, 121 km, 227°	
XH 45923	12.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E			
	16.12.2012	F	3	Poland, Gdansk, Gdansk-Oliwa	54.25N, 18.32E	V	431 days, 159 km, 242°	
XH 47137	18.10.2011	F	3	Russia, Fringilla	55.05N, 20.44E			
	28.10.2011	F	3	Poland, Szczecin, Darlowo, Kopan	54.27N, 16.24E	V	10 days, 287 km, 256°	
XH 47228	18.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E			
	07.01.2012	M	5	Poland, Warminko-Mazurskie, Markusy, Zolwiniec	54.03N, 19.27E	V	81 days, 141 km, 216°	
XH 70586	20.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E			
	11.11.2011	M	3	Poland, Gdansk, Krynica Morska	54.22N, 19.22E	V	22 days, 118 km, 228°	
XH 72862	22.10.2011	M	3	Russia, Fringilla	55.05N, 20.44E			
	10.11.2011	M	3	Poland, Gdansk, Krynica Morska	54.23N, 19.26E	V	19 days, 114 km, 227°	
XH 73341	24.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E			
	17.11.2011	F	4	Poland, Gdansk, Krynica Morska	54.22N, 19.22E	V	24 days, 118 km, 228°	
XH 81253	08.06.2012	I	1	Russia, Zelenogradsk, Courish Spit	55.04N, 20.43E			
	01.12.2012	M	3	Germany, Wessee-Ems, Jever, Innenstadt	53.34N, 7.54E	V	176 days, 847 km, 259°	

XH 85330	18.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E		146 days, 1080 km, 254°
	11.02.2013			Netherlands, Noord-Holland, Den IJp	52.27N, 4.54E	xG	
XH 85740	19.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E	x	53 days, 1010 km, 251°
	11.11.2012			Netherlands, Gelderland, Eefde	52.10N, 6.13E		
XH 85760	19.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E		36 days, 1116 km, 253°
	25.10.2012			Netherlands, Zuid-Holland, Leiderdorp	52.09N, 4.32E	xG	
XH 86013	20.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E		23 days, 1003 km, 253°
	13.10.2012	F	3	Netherlands, Overijssel, Zwolle	52.29N, 6.06E	V	
XH 86161	20.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E		23 days, 960 km, 259°
	13.10.2012	F	3	Netherlands, Friesland, Schiermonnikoog	53.29N, 6.11E	V	
XH 86167	20.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E		32 days, 1337 km, 250°
	22.10.2012	F	3	France, Pas-de-Calais, Marck, Dunes du Fort Vert	50.57N, 1.57E	V	
XH 86168	20.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E		20 days, 1022 km, 250°
	10.10.2012	F	3	Netherlands, Gelderland, Doesburg	52.00N, 6.09E	V	
XH 86340	20.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E		18 days, 564 km, 264°
	08.10.2012	F	4	Denmark, Seeland, Gedser, Gedser Odde	54.34N, 11.58E	V	
XH 86658	21.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E		22 days, 981 km, 257°
	13.10.2012	F	3	Netherlands, Friesland, Lippenhuizen	53.02N, 6.06E	V	
XH 86722	21.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E		30 days, 957 km, 251°
	21.10.2012	M	3	Netherlands, Overijssel, Overdinkel	52.14N, 7.01E	V	
XH 86761	21.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E		134 days, 913 km, 252°
	02.02.2013			Germany, Niedersachsen, Gersten	52.34N, 7.29E	xG	
XH 88064	24.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E		20 days, 957 km, 251°
	14.10.2012	M	3	Netherlands, Overijssel, Overdinkel	52.14N, 7.01E	V	
XH 88672	26.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E		23 days, 918 km, 258°
	19.10.2012	F	3	Netherlands, Groningen, Eemshaven-oost	53.26N, 6.52E	V	

XH 88802	27.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E	V	22 days, 1042 km, 250°
	19.10.2012	M	3	Netherlands, Gelderland, Erlecom, VRS Ooijse Graaf	51.51N, 5.57E	V	
XH 88977	27.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E	V	4 days, 118 km, 228°
	01.10.2012	F	3	Poland, Pomorskie, Piszczek	54.22N, 19.22E	V	
XH 89099	28.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E	V	4 days, 118 km, 228°
	02.10.2012	F	3	Poland, Pomorskie, Piszczek	54.22N, 19.22E	V	
XH 89159	28.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E	V	23 days, 958 km, 257°
	21.10.2012	F	3	Netherlands, Groningen, Leek	53.11N, 6.23E	V	43 days, 958 km, 257°
	10.11.2012	F	3	Netherlands, Groningen, Leek	53.11N, 6.23E	V	105 days, 958 km, 257°
	23.02.2013	F	5	Netherlands, Groningen, Leek	53.11N, 6.23E	V	
XH 89281	28.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E	x	127 days, 683 km, 256°
	02.02.2013			Germany, Mecklenburg, Elmenhorst	53.33N, 10.32E		
XH 89358	28.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E	V	44 days, 159 km, 250°
	11.11.2012	M	3	Poland, Pomorskie, Lotnisko, Rumia	54.35N, 18.24E	V	
XH 89641	29.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E	V	25 days, 928 km, 257°
	24.10.2012	F	3	Netherlands, Groningen, Schildwolde	53.14N, 6.49E	V	
XN 18464	27.03.2007	M	5	Russia, Rybachy	55.09N, 20.51E	V	210 days, 966 km, 250°
	23.10.2007	M	4	Netherlands, Overijssel, Overdinkel	52.14N, 7.01E	V	
XP 01991	30.05.2008	I	1	Russia, Zelenogradsk, Courish Spit	55.04N, 20.42E	V	290 days, 422 km, 253°
	16.03.2009	F		Poland, Poznan, Zachyodniopomorskie, Miedzdroje	53.56N, 14.27E	V	
XZ030 23	29.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E	V	3 days, 118 km, 228°
	02.10.2012	M	3	Poland, Pomorskie, Piszczek	54.22N, 19.22E	V	
XZ 03330	30.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E	V	78 days, 160 km, 249°
	17.12.2012	M	3	Poland, Pomorskie, Lotnisko, Rumia	54.34N, 18.24E	V	
XZ 03953	01.10.2012	F	3	Russia, Fringilla	55.05N, 20.44E	V	2 days, 118 km, 228°
	03.10.2012	F	3	Poland, Pomorskie, Piszczek	54.22N, 19.22E	V	
XZ 04508	03.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	V	22 days, 428 km, 252°
	25.10.2012	M	3	Poland, Szczecin, Miedzdroje, Wapnica	53.53N, 14.26E	V	32 days, 428 km, 252°
	04.11.2012	M	3	Poland, Szczecin, Miedzdroje, Wapnica	53.53N, 14.26E	V	

XZ 06155	10.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E			5 days, 299 km, 295°	
	15.10.2012	M	3	Sweden, Öland, Ottenby	56.12N, 16.24E	V			
15820. <i>Sturnus vulgaris</i>, Starling (1)									
TA 69672	08.08.2010	M	3	Russia, Fringilla	55.05N, 20.44E			657 days, 821 km, 54°	
	26.05.2012			Russia, Leningrad, Kirishskiy distr., Kusino	59.25N, 31.48E	x			
16360. <i>Fringilla coelebs</i>, Chaffinch (4)									
XH 11643	24.09.2010	M	3	Russia, Fringilla	55.05N, 20.44E			20 days, 1269 km, 215°	
	14.10.2010	M	3	Italy, Brescia, Toscolano-Maderno, Passo Di Spina	45.41N, 10.33E	V			
XH 34902	24.09.2011	F	4	Russia, Fringilla	55.05N, 20.44E			234 days, 608 km, 26°	
	15.05.2012			Finland, Häme, Hameenkoski, Huljala	60.00N, 25.13E	xA			
XN 68760	25.09.2007	M	3	Russia, Fringilla	55.05N, 20.44E			678 days, 362 km, 16°	
	03.08.2009			Estonia, Saaremaa, Mandjala	58.13N, 22.22E	xG			
XZ 05950	09.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E			104 days, 928 km, 250°	
	21.01.2013			Germany, Nordrhein-Westfalen, Emsdetten	52.10N, 7.32E	V			
16380. <i>Fringilla montifringilla</i>, Brambling (1)									
XZ 05934	09.10.2012	F	4	Russia, Fringilla	55.05N, 20.44E			73 days, 1673 km, 255°	
	21.12.2012	M	3	Great Britain, Somerset, Bratton, Minehead	51.12N, 3.31W	V			
16540. <i>Carduelis spinus</i>, Siskin (9)									
XG 15183	25.10.2009	M	3	Russia, Fringilla	55.05N, 20.44E			874 days, 43 km, 46°	
	17.03.2012	M	6	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V			
XH 05152	28.07.2010	M	3	Russia, Fringilla	55.05N, 20.44E			571 days, 1027 km, 232°	
	19.02.2012	M	6	Germany, Nordbaden, Neckarsteinach	49.24N, 8.50E	V			
XH 23962	18.04.2011	M	3	Russia, Fringilla	55.05N, 20.44E			317 days, 704 km, 218°	
	29.02.2012	M	6	Czech Republic, Stredocesky a Praha, Praha-Rusyne	50.06N, 14.17E	V			
XH 24768	08.05.2011	M	5	Russia, Fringilla	55.05N, 20.44E			528 days, 1286 km, 217°	
	17.10.2012	M	4	Italy, Bergamo, Colzate, P. So Di Biliben	45.50N, 9.48E	V			

XH 35552	30.09.2011	F	3	Russia, Fringilla	55.05N, 20.44E		209 days, 706 km, 18°
	26.04.2012	F	5	Finland, Häme, Hattula, Anomaa	61.08N, 24.24E	V	
XH 39632	06.10.2011	F	3	Russia, Rybachy	55.09N, 20.51E		378 days, 1228 km, 128°
	18.10.2012	F		Ukraine, Dnepropetrovsk reg., Dnepropetrovsk	48.26N, 35.02E	V	
XH 88350	24.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E		12 days, 141 km, 216°
	06.10.2012	M	3	Poland, Warminko-Mazurskie, Markusy, Zolwiniec	54.03N, 19.27E	V	
XH 88394	24.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E		99 days, 2168 km, 218°
	01.01.2013	M	5	Spain, Mallorca, Maria de la Salut	39.40N, 3.04E	V	
XP 94433	27.04.2009	M	5	Russia, Fringilla	55.05N, 20.44E		167 days, 1362 km, 225°
	11.10.2009	M	4	Switzerland, Vaud, Col de Jaman	46.27N, 6.58E	V	

3.2. Controls of birds, ringed outside the Courish Spit

05820. Larus ridibundus, Black-headed Gull (1)							
HA16985	Lithuania,	20.06.2012	I	2	Lithuania, Kaunas, Striuos Tvenkinys	55.07N, 23.45E	
Kaunas		02.07.2012	I	2	Russia, Kaliningrad, Zelenogradsk, 2 km W	54.57N 20.26E	x
10200. Motacilla alba, White Wagtail (1)							
VF06837	Lithuania,	03.07.2012	I	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	
Kaunas		17.07.2012	I	3	Russia, Fringilla	55.05N, 20.44E	V
10840. Prunella modularis, Dunnoek (5)							
365913H	Finland,	02.10.2010	I	4	Finland, Turku-Pori, Askainen	60.32N, 21.47E	
Helsinki		01.10.2011	I	4	Russia, Rybachy	55.09N, 20.51E	& XH 39314
H471776	Finland,	10.09.2012	I	3	Finland, Häme, Tuulos	61.10N, 24.48E	
Helsinki		07.10.2012	I	4	Russia, Rybachy	55.09N, 20.51E	& XZ 01481
VU52511	Lithuania,	13.09.2010	I	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	
Kaunas		12.04.2012	I	5	Russia, Rybachy	55.09N, 20.51E	& XH 76651

1ES19613 Sweden, Stockholm	30.09.2012	I 4	Sweden, Uppsala, Bjorn, Hallnas	60.38N, 18.00E		
	12.10.2012	I 4	Russia, Rybachy	55.09N, 20.51E	& XZ 01630	12 days, 632 km, 165°
A741267 Switzerland, Sempach	22.10.2011	I 5	Switzerland, St. Gallen, Jona	47.13N, 8.52E		
	01.04.2012	I 5	Russia, Rybachy	55.09N, 20.51E	& XH 76218	162 days, 1214 km, 43°
10990. <i>Eritriacus rubecula</i>, Robin (3)						
359394H Finland, Helsinki	18.09.2011	I 3	Finland, Häme, Kangasala, Kirkkojärvi	61.27N, 24.05E		
	13.10.2012	I 4	Russia, Fringilla	55.05N, 20.44E	& XH 81741	391 days, 734 km, 195°
ZE44004 Germany, Hiddensee	04.05.2012	I 5	Germany, Mecklenburg-Vorpommern, Greifswalder Oie	54.15N, 13.55E		
	11.05.2012	I 5	Russia, Rybachy	55.09N, 20.51E	& XH 77835	7 days, 456 km, 77°
VS14675 Lithuania, Kaunas	18.10.2012	I 3	Lithuania, Neringa, Juodkrante	55.31N, 21.07E		
	20.10.2012	I 3	Russia, Fringilla	55.05N, 20.44E	& XZ 08354	2 days, 54 km, 207°
11220. <i>Phoenicurus phoenicurus</i>, Redstart (1)						
315258V Finland, Helsinki	21.06.2011	I 1	Finland, Oulu, Kajaani	64.05N, 27.41E		
	04.10.2012	F 4	Russia, Fringilla	55.05N, 20.44E	& XZ 04588	471 days, 1074 km, 201°
12430. <i>Acrocephalus schoenobaenus</i>, Sedge Warbler (1)						
VF09069 Lithuania, Kaunas	16.06.2012	M 4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
	04.07.2012	M 4	Russia, Rybachy	55.09N, 20.51E	& XH 78833	18 days, 32 km, 226°
12510. <i>Acrocephalus scirpaceus</i>, Reed Warbler (3)						
1172904 Belgium, Brussels	20.08.2010	I 4	Belgium, Luxembourg, Uebersyren	49.38N, 6.17E		
	19.07.2011	M 4	Russia, Rybachy	55.09N, 20.51E	& XH 37417	294 days, 1162 km, 58°
VU48047 Lithuania, Kaunas	07.08.2010	I 3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
	20.05.2012	I 4	Russia, Rybachy	55.09N, 20.51E	& XH 78032	652 days, 32 km, 226°
AT91326 Netherlands, Arnhem	27.09.2011	I 3	Netherlands, Noord-Holland, Castricum	52.32N, 4.37E		
	28.05.2012	I 4	Russia, Rybachy	55.09N, 20.51E	& XH 78319	244 days, 1103 km, 75°
12750. <i>Sylvia communis</i>, Whitethroat (1)						
1A73453 Italy, Bologna	12.05.2010	I 4	Italy, Pesaro e Urbino, M. Brisighella	43.57N, 12.50E		
	10.05.2012	M 6	Russia, Rybachy	55.09N, 20.51E	& XH 77824	729 days, 1372 km, 25°

13110. <i>Phylloscopus collybita</i>, Chiffchaff (1)										
LH84451	Poland,	19.04.2012	I	5	Poland, Gdansk, Jastarnia, Kuznica	54.44N, 18.34E				
Gdansk		19.07.2012	M	4	Russia, Rybachy	55.09N, 20.51E	& VN 35390	91 days, 153 km, 72°		
13140. <i>Regulus regulus</i>, Goldcrest (10)										
XA29236	Estonia,	04.10.2012	M	3	Estonia, Saaremaa, Sörve	57.55N, 22.03E				
Matsalu		12.10.2012	M	4	Russia, Fringilla	55.05N, 20.44E	& VN 07410	8 days, 325 km, 194°		
49205U	Finland,	04.10.2012	I	2	Finland, Vaasa, Kokkola, Tankar	63.57N, 22.51E				
Helsinki		11.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	& VN 06095	7 days, 992 km, 187°		
72117U	Finland,	06.10.2012	M	3	Finland, Uusimaa, Pernaja, Aspskar	60.15N, 26.25E				
Helsinki		21.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	& XZ 10019	15 days, 666 km, 210°		
XE01241	Lithuania,	11.10.2012	M	2	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E				
Kaunas		19.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	& VN 54303	8 days, 43 km, 226°		
XE05037	Lithuania,	10.10.2012	M	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E				
Kaunas		12.10.2012	M	3	Russia, Rybachy	55.09N, 20.51E	& VN 36798	2 days, 32 km, 226°		
XE05086	Lithuania,	10.10.2012	M	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E				
Kaunas		16.10.2012	M	4	Russia, Fringilla	55.05N, 20.44E	& VN 55598	6 days, 43 km, 226°		
XE06827	Lithuania,	18.10.2012	F	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E				
Kaunas		21.10.2012	F	3	Russia, Fringilla	55.05N, 20.44E	V	3 days, 43 km, 226°		
VN 47375	Moskwa,	22.09.2012	M	3	Russia, Leningrad, Gumbartitsy	60.41N, 32.57E				
Russia		11.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E	V	19 days, 953 km, 229°		
SJ6694	Sweden,	05.09.2010	F	3	Sweden, Västerbotten, Holmon, Stora Fjäderagg	63.49N, 21.00E				
Stockholm		27.10.2012	F	4	Russia, Fringilla	55.05N, 20.44E	V	783 days, 970 km, 181°		
SP4120	Sweden,	28.09.2011	F	3	Sweden, Västerbotten, Holmon, Stora Fjäderagg	63.49N, 21.00E				
Stockholm		16.10.2012	F	4	Russia, Fringilla	55.05N, 20.44E	& VN 55287	384 days, 970 km, 181°		
14370. <i>Aegithalos caudatus</i>, Long-tailed Tit (3)										
XC61192	Estonia,	08.10.2012	I	2	Estonia, Pärnu, Kabi	58.01N, 24.27E				
Matsalu		17.10.2012	I	3	Russia, Rybachy	55.09N, 20.51E	& VN 37630	9 days, 387 km, 215°		

XE06175	Lithuania,	16.10.2012	I	2	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XZ 08657	4 days, 43 km, 226°
Kaunas		20.10.2012	I	2	Russia, Fringilla	55.05N, 20.44E		
XX34794	Lithuania,	16.10.2012	I	2	Lithuania, Nering, Joudkrante, Gaudykle	55.34N, 21.06E	& VN 37952	6 days, 49 km, 199°
Kaunas		22.10.2012	I	3	Russia, Rybachy	55.09N, 20.51E		
14610. Parus ater, Coal Tit (4)								
J171633	Latvia,	13.09.2012	I	3	Latvia, Pape, Liepaja	56.09N, 21.01E	& XH 84604	3 days, 120 km, 189°
Riga		16.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E		
XE03707	Lithuania,	24.09.2012	I	2	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 88764	2 days, 43 km, 226°
Kaunas		26.09.2012	M	3	Russia, Fringilla	55.05N, 20.44E		
XP97524	Lithuania,	11.09.2012	I	2	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 84061	3 days, 43 km, 226°
Kaunas		14.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E		
XP99897	Lithuania,	15.09.2012	I	2	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 85035	2 days, 43 km, 226°
Kaunas		17.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E		
14620. Parus caeruleus, Blue Tit (13)								
VL34582	Lithuania,	29.09.2012	I	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XZ 07479	17 days, 43 km, 226°
Kaunas		16.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E		
VL37355	Lithuania,	29.09.2012	F	4	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XZ 04590	5 days, 43 km, 226°
Kaunas		04.10.2012	F	4	Russia, Fringilla	55.05N, 20.44E		
VL41573	Lithuania,	01.10.2012	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XZ 04633	3 days, 43 km, 226°
Kaunas		04.10.2012	F	3	Russia, Fringilla	55.05N, 20.44E		
VL43232	Lithuania,	01.10.2012	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XZ 04632	3 days, 43 km, 226°
Kaunas		04.10.2012	F	3	Russia, Fringilla	55.05N, 20.44E		
VL45715	Lithuania,	08.10.2012	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 81325	4 days, 43 km, 226°
Kaunas		12.10.2012	F	3	Russia, Fringilla	55.05N, 20.44E		
VL46253	Lithuania,	07.10.2012	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XZ 01592	4 days, 32 km, 226°
Kaunas		11.10.2012	F	3	Russia, Rybachy	55.09N, 20.51E		
VL48159	Lithuania,	08.10.2012	F	3	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XZ 07398	6 days, 43 km, 226°
Kaunas		14.10.2012	F	3	Russia, Fringilla	55.05N, 20.44E		
VL49641	Lithuania,	10.10.2012	F	4	Lithuania, Šilute, Ventės Ragas	55.21N, 21.13E	& XH 81567	2 days, 43 km, 226°
Kaunas		12.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E		

VL54031 Lithuania, Kaunas	11.10.2012	F	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XZ 07561	5 days, 43 km, 226°	
VL54064 Lithuania, Kaunas	16.10.2012	F	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XZ 07622	6 days, 43 km, 226°	
VS13472 Lithuania, Kaunas	11.10.2012	F	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E	& XZ 04172	1 day, 54 km, 207°	
VS14003 Lithuania, Kaunas	30.09.2012	M	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E	& XZ 07020	3 days, 54 km, 207°	
VU93330 Lithuania, Kaunas	10.10.2012	M	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XH 86219	364 days, 43 km, 226°	
14640. Parus major, Great Tit (26)								
45V14906 Belgium, Brussels	19.01.2011	M	5	Belgium, West-Vlaanderen, Sint Kruis	51.13N, 3.16E	& XH 45263	266 days, 1241 km, 70°	
VA68548 Estonia, Matsalu	12.10.2011	F	4	Russia, Fringilla	55.05N, 20.44E	& XH 89670	119 days, 426 km, 216°	
VA90642 Estonia, Matsalu	02.06.2012	I	1	Estonia, Pärnumaa, Saarde, Lodja	58.10N, 24.52E	& XZ 03276	11 days, 398 km, 215°	
VF06734 Lithuania, Kaunas	29.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E	& XZ 06874	346 days, 43 km, 226°	
VF15237 Lithuania, Kaunas	19.09.2012	F	3	Estonia, Pärnu, Kabli	58.01N, 24.27E	& XH 85885	4 days, 43 km, 226°	
VF19434 Lithuania, Kaunas	30.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E	& XH 88212	4 days, 43 km, 226°	
VF23384 Lithuania, Kaunas	31.10.2011	F	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XH 87800	3 days, 43 km, 226°	
VL30462 Lithuania, Kaunas	11.10.2012	F	4	Russia, Fringilla	55.05N, 20.44E	& XH 88990	3 days, 43 km, 226°	
VL34635 Lithuania, Kaunas	16.09.2012	F	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XZ 03700	2 days, 43 km, 226°	
	20.09.2012	F	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E			
	24.09.2012	M	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E			
	24.09.2012	M	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E			
	24.09.2012	M	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E			
	27.09.2012	M	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E			
	29.09.2012	F	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E			
	01.10.2012	F	3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E			

VL48283	Lithuania, Kaunas	10.10.2012	M	3	Lithuania, Šilute, Ventės Ragas Russia, Rybachy	55.21N, 21.13E 55.09N, 20.51E	& XZ 01741	4 days, 32 km, 226°
VL50741	Lithuania, Kaunas	14.10.2012	M	3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XZ 07895	1 day, 43 km, 226°
VL53908	Lithuania, Kaunas	16.10.2012	M	3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XZ 08214	2 days, 43 km, 226°
VL54637	Lithuania, Kaunas	17.10.2012	F	3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XZ 07513	0 day, 43 km, 226°
VL54784	Lithuania, Kaunas	17.10.2012	F	3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XZ 08069	1 day, 43 km, 226°
VL56422	Lithuania, Kaunas	18.10.2012	M	4	Lithuania, Šilute, Ventės Ragas Russia, Kaliningrad, Guryevsk, Lugovoye	55.21N, 21.13E 54.38N, 20.37E	V	2 days, 88 km, 206°
VS13097	Lithuania, Kaunas	20.10.2012	M	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E	& XZ 04050	5 days, 54 km, 207°
VS13103	Lithuania, Kaunas	26.09.2012	M	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E	& XZ 03655	5 days, 54 km, 207°
VS13311	Lithuania, Kaunas	26.09.2012	F	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E	& XZ 04006	3 days, 54 km, 207°
VS13373	Lithuania, Kaunas	28.09.2012	F	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E	& XZ 04303	3 days, 54 km, 207°
VS13811	Lithuania, Kaunas	01.10.2012	F	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E	& XZ 05816	4 days, 54 km, 207°
VS13813	Lithuania, Kaunas	29.09.2012	M	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E	& XZ 06223	6 days, 54 km, 207°
VS13842	Lithuania, Kaunas	02.10.2012	M	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E	& XZ 06744	7 days, 54 km, 207°
VS14617	Lithuania, Kaunas	04.10.2012	F	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E	& XZ 08087	1 day, 54 km, 207°
VU94435	Lithuania, Kaunas	08.10.2012	M	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.13E 55.05N, 20.44E	& XH 85756	363 days, 43 km, 226°
		04.10.2012	F	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E		6 days, 54 km, 207°
		10.10.2012	F	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E		7 days, 54 km, 207°
		04.10.2012	F	3	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E		1 day, 54 km, 207°
		11.10.2012	F	4	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E		1 day, 54 km, 207°
		17.10.2012	F	4	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E		363 days, 43 km, 226°
		18.10.2012	F	4	Lithuania, Neringa, Juodkrante Russia, Fringilla	55.31N, 21.07E 55.05N, 20.44E		
		22.09.2011	F	3	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E		
		19.09.2012	F	4	Lithuania, Šilute, Ventės Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E		

K1H1189	Poland, Gdansk	24.10.2010	F	3	Poland, Gdansk, Mierzeja Wislana Russia, Fringilla	54.22N, 19.24E 55.05N, 20.44E	& XH 73091	364 days, 117 km, 47°	
K1H3200	Poland, Gdansk	01.04.2011	F	5	Poland, Pomorskie, Kuznica Russia, Fringilla	54.44N, 18.34E 55.05N, 20.44E	& XH 23548	& XH 23548	
14900. Remiz pendulinus, Penduline Tit (1)									
686358	France, Paris	02.10.2011	F	3	France, Drome, La Vanelle Russia, Rybachy	45.01N, 5.00E 55.09N, 20.51E	& XH 76850	195 days, 1595 km, 45°	
15820. Sturnus vulgaris, Starling (1)									
KV89035	Lithuania, Kaunas	22.06.2012	I	3	Lithuania, Šilute, Ventės Ragas Russia, Kaliningrad, Guryevsk, Lugovoye	55.21N, 21.13E 54.38N, 20.37E	x	104 days, 88 km, 206°	
16540. Carduelis spinus, Siskin (2)									
XX33634	Lithuania, Kaunas	22.09.2012	F	4	Lithuania, Neringa, Joudkrante, Gaudykle Russia, Rybachy	55.34N, 21.06E 55.09N, 20.51E	& XZ 02000	28 days, 49 km, 199°	
XX33892	Lithuania, Kaunas	22.09.2012	M	3	Lithuania, Neringa, Joudkrante, Gaudykle Russia, Fringilla	55.34N, 21.06E 55.05N, 20.44E	& XH 88257	2 days, 58 km, 203°	

3.3. Data with ringing information still not available

10990. Erithacus rubecula, Robin (1)									
J171692	Latvia, Riga	20.09.2012	I	3	Russia, Fringilla	55.05N, 20.44E		& XH 85798	
11220. Phoenicurus phoenicurus, Redstart (1)									
MC3391	Spain, Madrid (ICONA)	05.05.2012	F	5	Russia, Rybachy	55.09N, 20.52E		& XH 77637	
12530. Acrocephalus arundinaceus, Great Reed Warbler (1)									
TV11218	Lithuania, Kaunas	20.05.2012	I	4	Russia, Rybachy	55.09N, 20.52E		& KS 11807	
12770. Sylvia atricapilla, Blackcap (1)									
VU52511	Lithuania, Kaunas	12.04.2012	M	6	Russia, Rybachy	55.09N, 20.52E		& XH 76651	

13140. <i>Regulus regulus</i>, Goldcrest (1)						
SX6247	Sweden, Stockholm	20.10.2012	M	3	Russia, Fringilla	55.05N, 20.44E V
13480. <i>Ficedula albicollis</i>, Collared Flycatcher (2)						
CS29550	Sweden, Stockholm	26.08.2012	I	3	Russia, Rybachy	55.09N, 20.52E & VN 35668
CS34936	Sweden, Stockholm	26.08.2012	I	3	Russia, Rybachy	55.09N, 20.52E & VN 35669
14370. <i>Aegithalos caudatus</i>, Long-tailed Tit (3)						
106409	Latvia, Riga	17.10.2012	I	2	Russia, Fringilla	55.05N, 20.44E & VN 58217
106424	Latvia, Riga	17.10.2012	I	2	Russia, Fringilla	55.05N, 20.44E & VN 58207
106502	Latvia, Riga	17.10.2012	I	2	Russia, Fringilla	55.05N, 20.44E & VN 58206
14610. <i>Parus ater</i>, Coal Tit (2)						
J171241	Latvia, Riga	10.09.2012	I	3	Russia, Fringilla	55.05N, 20.44E & XH 82977
J171999	Latvia, Riga	24.09.2012	F	3	Russia, Fringilla	55.05N, 20.44E & XH 88025
14640. <i>Parus major</i>, Great Tit (2)						
VL49393	Lithuania, Kaunas	12.10.2012	M	3	Russia, Fringilla	55.05N, 20.44 & XZ 06991
MC3391	Spain, Madrid (ICONA)	05.05.2012	F	5	Russia, Rybachy	55.09N, 20.52E & XH 77637

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