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Results of bird trapping and ringing by the Biological Station "Rybacy" on the Courish Spit in 2007

Casimir V. Bolshakov, Anatoly P. Shapoval & Nadejda P. Zelenova

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In 2007, a grand total of 26,875 birds of 99 species were trapped and ringed by the Biological Station "Rybacy" in the framework of long- and short-term research projects. A total of 1,586 ringed birds of 54 species produced 2,662 recaptures. In 2007, 343 birds of 37 species ringed on the Courish Spit in previous years were retrapped. Between 15.03.2007 and 15.03.2008, 60 birds of 19 species ringed on the Courish Spit were reported as recovered more than 20 km from the ringing site. In 2007, 61 birds of 14 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

Address: Biological Station "Rybacy", Zoological Institute, Rybachy 238535, Kaliningrad Region, Russia. E-mail: bolshakov@bioryb.koenig.ru, nzelenova@hotmail.ru

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This annual report is the 10th one in the series of ringing reports published by the Biological Station Rybacy (Bolshakov et al. 1999; 2000; 2002a, b; 2003; 2004; 2005; 2008; 2009) 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” ($55^{\circ}05'$ N, $20^{\circ}44'$ E). Birds are trapped in specially designed, large permanent traps (the so-called “Rybachi-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 passerine species in the second half of the 20th century. These data have also allowed us to discover the main factors that affect the underlying trends (Sokolov 1999; Sokolov et al. 1998a, b; 1999; 2000; 2001a, b; 2002a, b; 2003a, b; Sokolov & Payevsky 1998). Within the framework of this project two traps were operated at the field site “Fringilla” in 2007: trap 4 (NE orientation of entrance) – from April 12 until September 17; trap 5 (SW orientation of entrance) – from April 13 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 “Rybachi”)

A joint 15-year research programme of Max Planck Institute for Ornithology (Germany) and Biological Station “Rybachi” was launched in 1993 at the field site “Rybachi” on Rossitten Cape ($55^{\circ}09'$ N, $20^{\circ}51'$ 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 2007, 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 Rybachi-type traps (field site “Fringilla”) and mist nets (field site “Rybachi”). Additional mist nets were used near water pools at field site “Fringilla” and the surrounding area. Pulli and adult birds 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 "Rybachi" in 2007.

EUR- ING code	Species*	Rybachi- type traps ("Frin- gilla")	Mist- nets ("Ryba- chi")	Nests nest- lings	nest- adults	Other research projects and methods	Total ringed in 2007	Grand total 1956– 2007
00030	<i>Gavia arctica</i> Arctic Loon	—	—	—	—	—	—	1
00090	<i>Podiceps cristatus</i> Great Crested Grebe	—	—	—	—	—	—	1
00720	<i>Phalacrocorax carbo</i> Cormorant	—	—	—	—	—	—	4
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	—	—	—	—	—	—	2
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	—	—	—	—	—	—	43
02690	<i>Accipiter nisus</i> Sparrowhawk	55	1	—	—	—	56	7,025
02870	<i>Buteo buteo</i> Buzzard	—	—	—	—	—	—	21

Table 1. *Continued*

EUR- ING code	Species*	Rybachi- type traps ("Frin- gilla")	Mist- nets ("Ryba- chy")	Nests nest- lings	Nests adults	Other research projects and methods	Total ringed in 2007	Grand total 1956– 2007
02900	<i>Buteo lagopus</i> Rough-legged Buzzard	—	—	—	—	—	—	2
03040	<i>Falco tinnunculus</i> Kestrel	2	—	—	—	—	2	15
03070	<i>Falco vespertinus</i> Red-footed Falcon	—	—	—	—	—	—	4
03090	<i>Falco columbarius</i> Merlin	—	—	—	—	—	—	36
03100	<i>Falco subbuteo</i> Hobby	1	—	—	—	—	1	14
03200	<i>Falco peregrinus</i> Peregrine	—	—	—	—	—	—	1
03700	<i>Coturnix coturnix</i> Quail	—	—	—	—	—	—	2
04070	<i>Rallus aquaticus</i> Water Rail	—	—	—	—	1	1	21
04080	<i>Porzana porzana</i> Spotted Crake	—	—	—	—	—	—	9
04210	<i>Crex crex</i> Corncrake	—	—	—	—	—	—	14
04240	<i>Gallinula chloropus</i> Moorhen	—	—	—	—	—	—	3
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
05010	<i>Calidris minuta</i> Little Stint	—	—	—	—	—	—	1
05120	<i>Calidris alpina</i> Dunlin	—	—	—	—	—	—	7
05170	<i>Philomachus pugnax</i> Ruff	—	—	—	—	—	—	7

Table 1. *Continued*

EUR- ING code	Species*	Rybachi- type traps ("Frin- gilla")	Mist- nets ("Ryba- chy")	Nests nest- lings	Other research projects and methods	Total ringed in 2007	Grand total 1956– 2007
05180	<i>Lymnocryptes minima</i> Jack Snipe	—	—	—	—	—	17
05190	<i>Gallinago gallinago</i> Snipe	—	—	—	—	—	32
05290	<i>Scolopax rusticola</i> Woodcock	—	—	—	—	—	205
05410	<i>Numenius arquata</i> Curlew	—	—	—	—	—	1
05530	<i>Tringa ochropus</i> Green Sandpiper	—	—	—	1	1	16
05540	<i>Tringa glareola</i> Wood Sandpiper	—	—	—	—	—	18
05560	<i>Actitis hypoleucos</i> Common Sandpiper	—	—	—	—	—	40
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
06150	<i>Sterna hirundo</i> Common Tern	—	—	—	—	—	1
06340	<i>Uria aalge</i> Guillemot	—	—	—	—	—	1
06650	<i>Columba livia</i> Rock Dove	—	—	—	—	—	14
06680	<i>Columba oenas</i> Stock Dove	—	—	—	—	—	17
06700	<i>Columba palumbus</i> Woodpigeon	1	1	—	—	2	65
06840	<i>Streptopelia decaocto</i> Collared Dove	1	—	—	1	2	34
06870	<i>Streptopelia turtur</i> Turtle Dove	—	—	—	—	—	123
07240	<i>Cuculus canorus</i> Cuckoo	19	—	—	—	19	1,425

Table 1. *Continued*

EUR- ING code	Species*	Rybachi- type traps ("Frin- gilla")	Mist- nets ("Ryba- chy")	Nests nest- lings	adults	Other research projects and methods	Total ringed in 2007	Grand total 1956– 2007
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	—	—	—	—	1	1	54
07670	<i>Asio otus</i> Long-eared Owl	10	—	—	—	—	10	3,314
07680	<i>Asio flammeus</i> Short-eared Owl	1	—	—	—	—	1	55
07700	<i>Aegolius funereus</i> Tengmalm's Owl	—	—	—	—	—	—	334
07780	<i>Caprimulgus europaeus</i> Nightjar	1	—	—	—	—	1	420
07950	<i>Apus apus</i> Swift	6	—	—	—	—	6	646
08310	<i>Alcedo atthis</i> Kingfisher	—	3	—	—	1	4	199
08410	<i>Coracias garrulus</i> Roller	—	—	—	—	—	—	3
08460	<i>Upupa epops</i> Hoopoe	2	—	—	—	—	2	168
08480	<i>Jynx torquilla</i> Wryneck	3	3	—	—	2	8	1,160
08550	<i>Picus canus</i> Grey-headed Woodpecker	—	—	—	—	—	—	6
08560	<i>Picus viridis</i> Green Woodpecker	—	—	—	—	—	—	2
08630	<i>Dryocopus martius</i> Black Woodpecker	—	—	—	—	—	—	12
08760	<i>Dendrocopos major</i> Great Spotted Woodpecker	3	11	—	—	2	16	2,827
08830	<i>Dendrocopos medius</i> Middle Spotted Woodpecker	1	1	—	—	—	2	54
08840	<i>Dendrocopos leucotos</i> White-backed Woodpecker	—	—	—	—	—	—	4
08870	<i>Dendrocopos minor</i> Lesser Spotted Woodpecker	7	6	—	—	—	13	420

Table 1. *Continued*

EUR- ING code	Species*	Rybachi- type traps ("Frin- gilla")	Mist- nets ("Ryba- chy")	Nests nest- lings	adults	Other research projects and methods	Total ringed in 2007	Grand total 1956– 2007
09740	<i>Lullula arborea</i> Woodlark	8	—	—	—	1	9	4,750
09760	<i>Alauda arvensis</i> Skylark	—	—	—	—	1	1	487
09780	<i>Eremophila alpestris</i> Shore Lark	—	—	—	—	—	—	5
09810	<i>Riparia riparia</i> Sand Martin	1	—	—	—	—	1	4,992
09920	<i>Hirundo rustica</i> Swallow	43	88	17	4	24	176	10,810
10010	<i>Delichon urbica</i> House Martin	15	66	—	—	11	92	8,488
10020	<i>Anthus novaseelandiae</i> Richard's Pipit	—	—	—	—	—	—	3
10050	<i>Anthus campestris</i> Tawny Pipit	—	—	—	—	—	—	135
10090	<i>Anthus trivialis</i> Tree Pipit	38	1	—	—	6	45	5,876
10110	<i>Anthus pratensis</i> Meadow Pipit	3	—	—	—	—	3	11,007
10140	<i>Anthus spinoletta</i> Water Pipit	—	—	—	—	—	—	3
10142	<i>Anthus petrosus</i> Rock Pipit	—	—	—	—	—	—	1
10170	<i>Motacilla flava</i> Yellow Wagtail	6	15	—	—	1	22	2,803
10180	<i>Motacilla citreola</i> Citrine Wagtail	—	—	—	—	—	—	1
10190	<i>Motacilla cinerea</i> Grey Wagtail	—	—	—	—	—	—	10
10200	<i>Motacilla alba</i> Pied Wagtail	146	126	9	—	40	321	11,378
10480	<i>Bombycilla garrulus</i> Waxwing	—	1	—	—	—	1	1,280
10500	<i>Cinclus cinclus</i> Dipper	—	—	—	—	—	—	1
10660	<i>Troglodytes troglodytes</i> Wren	34	279	—	—	18	331	11,792

Table 1. *Continued*

EUR- ING code	Species*	Rybachi- type traps ("Fring- gilla")	Mist- nets ("Ryba- chy")	Nests nest- lings	adults	Other research projects and methods	Total ringed in 2007	Grand total 1956– 2007
10840	<i>Prunella modularis</i> Dunnock	2	99	—	—	2	103	5,804
10990	<i>Erythacus rubecula</i> Robin	769	3,625	8	—	174	4,576	163,322
11030	<i>Luscinia luscinia</i> Thrush Nightingale	4	117	—	—	10	131	2,184
11060	<i>Luscinia svecica</i> Bluethroat	1	2	—	—	—	3	212
11130	<i>Tarsiger cyanurus</i> Red-flanked Bluetail	—	—	—	—	—	—	1
11210	<i>Phoenicurus ochruros</i> Black Redstart	46	3	—	—	3	52	1,438
11220	<i>Phoenicurus phoenicurus</i> Redstart	54	124	24	1	16	219	13,044
11370	<i>Saxicola rubetra</i> Whinchat	27	26	—	—	3	56	3,198
11390	<i>Saxicola torquata</i> Stonechat	—	—	—	—	—	—	3
11460	<i>Oenanthe oenanthe</i> Northern Wheatear	5	—	—	—	—	5	845
11860	<i>Turdus torquatus</i> Ring Ouzel	—	—	—	—	—	—	14
11870	<i>Turdus merula</i> Blackbird	34	253	5	—	47	339	12,093
11980	<i>Turdus pilaris</i> Fieldfare	5	4	—	—	—	9	2,497
12000	<i>Turdus philomelos</i> Song Thrush	93	325	—	—	3	421	26,607
12010	<i>Turdus iliacus</i> Redwing	3	53	—	—	1	57	6,025
12020	<i>Turdus viscivorus</i> Mistle Thrush	—	—	—	—	—	—	295
12360	<i>Locustella naevia</i> Grasshopper Warbler	4	8	—	—	16	28	697
12370	<i>Locustella fluviatilis</i> River Warbler	—	9	—	—	—	9	154
12380	<i>Locustella lusciniooides</i> Savi's Warbler	—	1	—	—	—	1	80
12430	<i>Acrocephalus schoenobaenus</i> Sedge Warbler	4	191	—	—	35	230	9,279

Table 1. *Continued*

EUR- ING code	Species*	Rybachi- type traps ("Fring- gilla")	Mist- nets ("Ryba- chy")	Nests		Other research projects and methods	Total ringed in 2007	Grand total 1956– 2007
12470	<i>Acrocephalus agricola</i> Paddyfield Warbler	—	—	—	—	—	—	5
12480	<i>Acrocephalus dumetorum</i> Blyth's Reed Warbler	—	—	—	—	—	—	89
12500	<i>Acrocephalus palustris</i> Marsh Warbler	11	208	—	—	7	226	5,438
12510	<i>Acrocephalus scirpaceus</i> Reed Warbler	—	286	82	42	47	457	18,877
12530	<i>Acrocephalus arundinaceus</i> Great Reed Warbler	—	45	4	—	13	62	2,834
12560	<i>Hippolais caligata</i> Booted Warbler	—	—	—	—	—	—	6
12590	<i>Hippolais icterina</i> Icterine Warbler	56	97	12	—	18	183	10,898
12650	<i>Sylvia cantillans</i> Subalpine Warbler	—	—	—	—	—	—	4
12730	<i>Sylvia nisoria</i> Barred Warbler	1	7	—	—	—	8	3,932
12740	<i>Sylvia curruca</i> Lesser Whitethroat	47	217	47	—	27	338	18,308
12750	<i>Sylvia communis</i> Whitethroat	82	306	—	—	19	407	12,488
12760	<i>Sylvia borin</i> Garden Warbler	46	505	6	—	48	605	22,077
12770	<i>Sylvia atricapilla</i> Blackcap	82	929	28	—	41	1,080	22,569
12930	<i>Phylloscopus trochiloides</i> Greenish Warbler	—	3	—	—	2	5	93
12980	<i>Phylloscopus proregulus</i> Pallas' Warbler	1	—	—	—	—	1	24
13000	<i>Phylloscopus inornatus</i> Yellow-browed Warbler	—	—	—	—	—	—	100
13010	<i>Phylloscopus schwarzi</i> Radde's Warbler	—	—	—	—	—	—	3
13030	<i>Phylloscopus fuscatus</i> Dusky Warbler	—	—	—	—	—	—	2
13080	<i>Phylloscopus sibilatrix</i> Wood Warbler	100	144	—	—	16	260	15,494
13110	<i>Phylloscopus collybitus</i> Chiffchaff	57	169	—	—	9	235	11,009

Table 1. *Continued*

EUR- ING code	Species*	Rybachi- type traps ("Fring- gilla")	Mist- nets ("Ryba- chy")	Nests nest- lings	adults	Other research projects and methods	Total ringed in 2007	Grand total 1956– 2007
13120	<i>Phylloscopus trochilus</i> Willow Warbler	684	798	12	—	55	1,549	152,858
13140	<i>Regulus regulus</i> Goldcrest	229	1,582	—	—	59	1,870	355,972
13150	<i>Regulus ignicapillus</i> Firecrest	—	3	—	—	1	4	72
13350	<i>Muscicapa striata</i> Spotted Flycatcher	52	159	10	—	16	237	9,896
13430	<i>Ficedula parva</i> Red-breasted Flycatcher	3	6	—	—	—	9	1,158
13480	<i>Ficedula albicollis</i> Collared Flycatcher	1	—	—	—	—	1	23
13490	<i>Ficedula hypoleuca</i> Pied Flycatcher	56	228	354	60	38	736	26,638
13640	<i>Panurus biarmicus</i> Bearded Tit	—	2	—	—	—	2	412
14370	<i>Aegithalos caudatus</i> Long-tailed Tit	8	5	—	—	54	67	52,856
14400	<i>Parus palustris</i> Marsh Tit	3	17	31	—	20	71	2,036
14420	<i>Parus montanus</i> Willow Tit	2	2	—	—	2	6	2,217
14540	<i>Parus cristatus</i> Crested Tit	—	—	—	—	5	5	733
14610	<i>Parus ater</i> Coal Tit	28	1	41	3	1	74	55,032
14620	<i>Parus caeruleus</i> Blue Tit	700	460	222	14	74	1,470	86,919
14640	<i>Parus major</i> Great Tit	1,474	797	1,312	48	223	3,854	219,783
14790	<i>Sitta europaea</i> Nuthatch	—	1	5	—	3	9	349
14860	<i>Certhia familiaris</i> Treecreeper	2	50	—	—	12	64	6,246
14870	<i>Certhia brachydactyla</i> Short-toed Treecreeper	—	—	—	—	—	—	16
14900	<i>Remiz pendulinus</i> Penduline Tit	—	15	—	—	—	15	1,064
15080	<i>Oriolus oriolus</i> Golden Oriole	1	—	—	—	—	1	284

Table 1. *Continued*

EUR- ING code	Species*	Rybachi- type traps ("Fring- gilla")	Mist- nets ("Ryba- chy")	Nests nest- lings	Other research projects and methods	Total ringed in 2007	Grand total 1956– 2007
15150	<i>Lanius collurio</i> Red-backed Shrike	19	32	4	—	55	3,277
15200	<i>Lanius excubitor</i> Great Grey Shrike	—	1	—	—	1	112
15390	<i>Garrulus glandarius</i> Jay	6	—	—	—	6	6,262
15490	<i>Pica pica</i> Magpie	—	1	—	—	1	85
15570	<i>Nucifraga caryocatactes</i> Nuttcracker	—	—	—	—	—	457
15600	<i>Corvus monedula</i> Jackdaw	—	—	—	—	—	77
15630	<i>Corvus frugilegus</i> Rook	—	—	—	—	—	60
15672	<i>Corvus corone cornix</i> Hooded Crow	—	—	—	—	—	70
15720	<i>Corvus corax</i> Raven	—	—	—	—	—	4
15820	<i>Sturnus vulgaris</i> Starling	561	116	—	16	693	104,859
15910	<i>Passer domesticus</i> House Sparrow	—	5	—	81	86	911
15980	<i>Passer montanus</i> Tree Sparrow	2	2	—	13	17	252
16360	<i>Fringilla coelebs</i> Chaffinch	2,355	350	69	2	97	2,873
16380	<i>Fringilla montifringilla</i> Brambling	66	5	—	—	1	72
16400	<i>Serinus serinus</i> Serin	11	—	—	—	—	11
16490	<i>Carduelis chloris</i> Greenfinch	10	15	4	—	85	114
16530	<i>Carduelis carduelis</i> Goldfinch	3	14	—	—	2	19
16540	<i>Carduelis spinus</i> Siskin	1,048	152	—	—	117	1,317
16600	<i>Carduelis cannabina</i> Linnet	3	1	—	—	—	4
16620	<i>Carduelis flavirostris</i> Twite	—	—	—	—	—	32

Table 1. *Continued*

EUR- ING code	Species*	Rybachi- type traps ("Fring- gilla")	Mist- nets ("Ryb- chy")	Nests		Other research projects and methods	Total ringed in 2007	Grand total 1956– 2007
				nest- lings	adults			
16630	<i>Carduelis flammea</i> Redpoll	1	5	—	—	4	10	13,229
16640	<i>Carduelis hornemannii</i> Arctic Redpoll	—	—	—	—	—	—	18
16650	<i>Loxia leucoptera</i> Two-barred Crossbill	—	—	—	—	—	—	18
16660	<i>Loxia curvirostra</i> Crossbill	—	—	—	—	8	8	12,796
16680	<i>Loxia pytyopsittacus</i> Parrot Crossbill	—	—	—	—	—	—	7
16790	<i>Carpodacus erythrinus</i> Scarlet Rosefinch	15	31	3	—	10	59	6,727
16990	<i>Pinicola enucleator</i> Pine Grosbeak	—	—	—	—	—	—	1
17100	<i>Pyrrhula pyrrhula</i> Bullfinch	13	86	—	—	6	105	13,859
17170	<i>Coccothraustes cocco- thraustes</i> Hawfinch	23	17	—	—	6	46	1,656
18470	<i>Calcarius lapponicus</i> Lapland Bunting	—	—	—	—	—	—	3
18500	<i>Plectrophenax nivalis</i> Snow Bunting	—	—	—	—	—	—	1
18570	<i>Emberiza citrinella</i> Yellowhammer	14	1	—	—	10	25	4,584
18660	<i>Emberiza hortulana</i> Ortolan Bunting	—	—	—	—	—	—	515
18730	<i>Emberiza rustica</i> Rustic Bunting	—	—	—	—	—	—	10
18740	<i>Emberiza pusilla</i> Little Bunting	—	—	—	—	—	—	10
18770	<i>Emberiza schoeniclus</i> Reed Bunting	3	46	—	—	4	53	2,471
18810	<i>Emberiza melanocephala</i> Black-headed Bunting	—	—	—	—	—	—	1
18820	<i>Miliaria calandra</i> Corn Bunting	—	—	—	—	—	—	8
Total birds		9,337	13,364	2,309	174	1,691	26,875	2,665,555
Total species		79	75	23	8	66	99	197

Note: * – English common names follow Jonsson (1992).

2. Results of bird ringing in 2007

Overall, 26,875 birds of 99 species were trapped and ringed by the Biological Station Rybacyh in the framework of research projects. A total of 9,337 birds of 79 species were trapped and ringed in Rybacyh-type traps at the field site "Fringilla", and 13,364 birds of 75 species were trapped and ringed in mist nets at the field site "Rybacyh". In 2007, 2,309 pulli of 23 species and 174 adults of 8 species were ringed at nests. Finally, 1,690 birds of 66 species were trapped and ringed by other methods in the framework of short-term research projects in 2007, 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 Rybacyh-type traps; (2) trapping figures at "Rybacyh" 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 current research projects (incl. a small number of birds captured and ringed incidentally); (5) overall ringing figures for 2007. Additionally, the grand ringing totals for 1956-2007 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 1,586 individuals of 54 species ringed in 2007 produced 2,662 retraps. In addition, 343 controls (37 species) were obtained from birds ringed in previous years.

3. List of long-distance recoveries reported in 2007

The number of recoveries for each species is presented in Table 2 (columns 4 and 5). The data include: birds ringed by the station on the Courish Spit and subsequently recovered more than 20 km from the ringing site; controls of birds ringed outside the Russian part of the Courish Spit. The sequence of species follows EURING (1979).

In total, between 15.03.2007 and 15.03.2008, we received from the Ringing Centre in Moscow information on 60 recoveries of birds of 19 species ringed on the Courish Spit (see 3.1, the list of long-distance recoveries of birds ringed on the Courish Spit).

In 2007, the station controlled a total of 61 birds of 14 species ringed outside the Courish Spit (see 3.2, controls of birds ringed outside of the Courish Spit). For 6 birds of 5 species ringed outside the Courish Spit and controlled by the Biological Station Rybacyh in 2007, ringing information is still not available from the national Ringing Centre (see 3.3, data with ringing information not yet available).

In the lists (3.1; 3.2; 3.3.) 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

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

EURING code	Species	Retraps of birds ringed in 2007		Controls of birds ringed earlier than 2007	Recoveries of our birds outside the Courish Spit	Recoveries of birds ringed outside the Courish Spit
		birds	retraps			
02690	<i>Accipiter nisus</i> Sparrowhawk	1	1	—	2	—
07240	<i>Cuculus canorus</i> Cuckoo	—	—	—	1	—
08760	<i>Dendrocopos major</i> Great Spotted Woodpecker	1	1	2	—	—
08830	<i>Dendrocopos medius</i> Middle Spotted Woodpecker	1	2	—	—	—
08870	<i>Dendrocopos minor</i> Lesser Spotted Woodpecker	4	7	3	—	—
09740	<i>Lullula arborea</i> Woodlark	1	2	—	—	—
09920	<i>Hirundo rustica</i> Swallow	14	19	8	1	1
10010	<i>Delichon urbica</i> House Martin	3	3	1	—	—
10090	<i>Anthus trivialis</i> Tree Pipit	3	3	2	—	1
10170	<i>Motacilla flava</i> Yellow Wagtail	2	2	1	—	—
10200	<i>Motacilla alba</i> White Wagtail	46	85	11	1	1
10660	<i>Troglodytes troglodytes</i> Wren	54	88	1	—	—
10840	<i>Prunella modularis</i> Dunnock	6	6	—	—	—
10990	<i>Erythacus rubecula</i> Robin	244	405	1	2	5
11030	<i>Luscinia luscinia</i> Thrush Nightingale	45	100	5	—	—
11210	<i>Phoenicurus ochruros</i> Black Redstart	2	2	—	—	—
11220	<i>Phoenicurus phoenicurus</i> Redstart	16	25	1	—	—
11870	<i>Turdus merula</i> Blackbird	31	46	6	3	—
12000	<i>Turdus philomelos</i> Song Thrush	6	6	—	1	—
12010	<i>Turdus iliacus</i> Redwing	3	3	—	—	—

Table 2. *Continued*

EURING code	Species	Retraps of birds ringed in 2007		Controls of birds ringed earlier than 2007	Recoveries of our birds outside the Courish Spit	Recoveries of birds ringed outside the Courish Spit
		birds	retraps			
12370	<i>Locustella fluviatilis</i> River Warbler	2	8	—	—	—
12430	<i>Acrocephalus schoenobaenus</i> Sedge Warbler	25	42	5	—	—
12500	<i>Acrocephalus palustris</i> Marsh Warbler	31	46	7	—	1
12510	<i>Acrocephalus scirpaceus</i> Reed Warbler	63	97	13	4	2
12530	<i>Acrocephalus arundinaceus</i> Great Reed Warbler	13	34	17	—	4
12590	<i>Hippolais icterina</i> Icterine Warbler	8	8	10	—	—
12740	<i>Sylvia curruca</i> Lesser Whitethroat	28	57	8	—	—
12750	<i>Sylvia communis</i> Whitethroat	42	91	12	1	—
12760	<i>Sylvia borin</i> Garden Warbler	32	53	3	—	—
12770	<i>Sylvia atricapilla</i> Blackcap	134	223	10	—	1
12930	<i>Phylloscopus trochiloides</i> Greenish Warbler	2	2	—	—	—
13080	<i>Phylloscopus sibilatrix</i> Wood Warbler	8	8	—	—	—
13110	<i>Phylloscopus collybitus</i> Chiffchaff	27	33	2	—	—
13120	<i>Phylloscopus trochilus</i> Willow Warbler	122	179	33	—	—
13140	<i>Regulus regulus</i> Goldcrest	108	136	—	—	—
13350	<i>Muscicapa striata</i> Spotted Flycatcher	11	15	1	—	—
13430	<i>Ficedula parva</i> Red-breasted Flycatcher	—	—	—	1	—
13490	<i>Ficedula hypoleuca</i> Pied Flycatcher	15	18	11	—	2
14370	<i>Aegithalos caudatus</i> Long-tailed Tit	—	—	1	6	1
14400	<i>Parus palustris</i> Marsh Tit	9	36	3	—	—

Table 2. *Continued*

EURING code	Species	Retraps of birds ringed in 2007		Controls of birds ringed earlier than 2007	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	—	—	1	2	—
14620	<i>Parus caeruleus</i> Blue Tit	96	188	14	2	12
14640	<i>Parus major</i> Great Tit	185	320	34	20	15
14860	<i>Certhia familiaris</i> Treecreeper	8	13	—	—	—
14900	<i>Remiz pendulinus</i> Penduline Tit	3	3	—	1	—
15150	<i>Lanius collurio</i> Red-backed Shrike	3	3	—	—	—
15820	<i>Sturnus vulgaris</i> Starling	9	10	1	—	13
15910	<i>Passer domesticus</i> House Sparrow	11	12	5	—	—
16360	<i>Fringilla coelebs</i> Chaffinch	69	169	103	4	—
16380	<i>Fringilla montifringilla</i> Brambling	1	1	—	—	—
16490	<i>Carduelis chloris</i> Greenfinch	15	20	—	—	—
16530	<i>Carduelis carduelis</i> Goldfinch	1	1	—	—	—
16540	<i>Carduelis spinus</i> Siskin	6	8	1	7	—
16630	<i>Carduelis flammea</i> Redpoll	—	—	—	1	—
16660	<i>Loxia curvirostra</i> Crossbill	1	1	—	—	—
16790	<i>Carpodacus erythrinus</i> Scarlet Rosefinch	—	—	4	—	—
17100	<i>Pyrrhula pyrrhula</i> Bullfinch	4	5	—	—	—
17170	<i>Coccothraustes coccothraustes</i> Hawfinch	1	1	—	—	—
18570	<i>Emberiza citrinella</i> Yellowhammer	2	2	1	—	—
18770	<i>Emberiza schoeniclus</i> Reed Bunting	8	13	1	—	2
Total birds		1,586	2,662	343	60	61
Total species		54	54	37	19	14

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; 2009) rings with series “C”, “E”, “M”, “O”, “P”, “R”, “S”, “FS”, “KS”, “MB”, “N”, “PB”, “RZ”, “VD”, “VK”, “VS”, “VT”, “TA”, “XA”, “XB”, “XC”, “XD”, “XF”, “XK”, “XL”, “XN”, “XS”, “XT” and “XY” 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.
- 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
- 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.

4. Participants

The following members of the Biological Station, students, colleagues and amateur bird ringers participated in bird trapping and ringing in 2007 (listed by alphabetical order):

N. Chernetsov, V. Grinkevich, V. Kosarev, P. Ktitorov, D. Kishkinev, D. Leoke, M. Markovets, A. Mukhin, M. Paranicheva, A. Sinelschikova, A. Schapoval, L. Sokolov, E. Tronikova, A. Tsvey, V. Yefremov.

3.1. List of long-distance recoveries of bird, ringed on the Courish Spit

02690. <i>Accipiter nisus</i>, Sparrowhawk (2)							
M 754605	06.09.2001	F	3	Russia, Fringilla	55.05N, 20.44E		
	23.02.2006	F	6	France, Marne, Cloyes-sur-Marne	48.39N, 4.38E	xG	1631 days, 1316 km, 237°
PB 141772	07.09.2005	M	3	Russia, Fringilla	55.05N, 20.44E		
	20.11.2005	M	3	France, Rhone-Alpes, Loire, Marlyes 45.17N, 4.23E		x	74 days, 1593 km, 227°
07240. <i>Cuculus canorus</i>, Cuckoo (1)							
P 977240	24.07.2006	F	3	Russia, Rybachy	55.09N, 20.51E	V	
	14.05.2007	F	2	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		294 days, 32 km, 46°
09920. <i>Hirundo rustica</i>, Swallow (1)							
VD 47437	24.07.2005	I	3	Russia, Fringilla	55.05N, 20.44E		
	11.05.2007	F	2	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E	V	656 days, 43 km, 46°
10200. <i>Motacilla alba</i>, White Wagtail (1)							
XN 75815	30.06.2007	I	3	Russia, Rybachy	55.09N, 20.51E		
	26.09.2007	I	2	Russia, Kaliningrad, Zelenogradsk, Sosnovka	54.57N, 20.29E	+T	88 days, 32 km, 226°
10990. <i>Eriothacus rubecula</i>, Robin (2)							
XF7 3167	05.04.2005	I	5	Russia, Fringilla	55.05N, 20.44E		
	01.04.2007	I	2	France, Aquitaine, Dordogne, Thiviers	45.24N, 0.55E	+K	726 days, 1772 km, 232°
XN 79123	12.09.2007	I	3	Russia, Rybachy	55.09N, 20.51E		
	30.09.2007	I	2	Germany, Rheinland-Pfalz, Ludwigshafen am Rhein-Oppau	49.31N, 8.24E	V	18 days, 1052 km, 233°
11870. <i>Turdus merula</i>, Blackbird (3)							
TA 18631	18.03.2007	M	5	Russia, Rybachy	55.09N, 20.51E		
	13.04.2007	M	5	Poland, Biala Podlaska, Narewka, Maruszka	52.54N, 23.51E	V	26 days, 318 km, 142°
TA 20726	01.04.2006	M	6	Russia, Fringilla	55.05N, 20.44E		
	07.07.2006	I	2	Latvia, Valka, Launkalne	57.17N, 25.53E	V	97 days, 401 km, 52°

TA 20759 02.04.2006 M 6 Russia, Fringilla
 12.11.2007 1 2 France, Bretagne, Finistere, Scær 55.05N, 20.44E

12000. *Turdus philomelos*, Song Thrush (1)

TA 17880 12.10.2004 I 3 Russia, Rybachy
 09.01.2005 1 2 France, Charente-Maritime, Allas-
 Bocage 45.23N, 0.29W 55.09N, 20.51E

12510. *Acrocephalus scirpaceus*, Reed Warbler (4)

XN 23858 17.05.2007 I 2 Russia, Rybachy
 18.07.2007 1 4 France, Aquitaine, Lot-et-Garonne,
 Villetton 44.21N, 0.16E 55.09N, 20.51E

XN 75462 29.05.2007 I 2 Russia, Rybachy
 18.08.2007 1 4 Belgium, Brabant, Lembeek
 22.05.2000 I 2 Russia, Rybachy
 20.07.2007 1 2 Latvia, Liepaja, Pape
 23.06.2005 F 2 Russia, Kaliningrad, Courush Spit
 15.05.2007 1 2 Germany, Mecklenburg-Vorpommern,
 Greifswalder Oie 54.15N, 13.55E 55.03N, 20.41E

XY 08763 23.06.2005 F 2 Russia, Kaliningrad, Courush Spit
 15.05.2007 1 2 Germany, Mecklenburg-Vorpommern,
 Greifswalder Oie 54.15N, 13.55E 55.03N, 20.41E

12750. *Sylvia communis*, Whitethroat (1)

XY 36350 15.09.2006 I 3 Russia, Fringilla
 14.07.2007 1 5 Finland, Åland, Lemland, Lågskär 55.05N, 20.44E

14370. *Aegithalos caudatus*, Long-tailed Tit (6)

VD 80949 20.10.2006 I 2 Russia, Fringilla
 08.11.2006 1 2 Poland, Koszalin, Bukowo-Kopan 55.05N, 20.44E

VD 80991 20.10.2006 I 2 Russia, Fringilla
 23.10.2006 1 3 Poland, Gdańsk, Mierzeja Wiślana 54.27N, 16.25

VD 89043 21.10.2006 I 2 Russia, Fringilla
 27.10.2006 1 2 Poland, Gdańsk, Mierzeja Wiślana 55.05N, 20.44E

VD 89300 25.10.2006 I 2 Russia, Fringilla
 08.11.2006 1 2 Poland, Koszalin, Bukowo-Kopan 54.22N, 19.24E

VD 89317	25.10.2006 08.11.2006	I I	2 3	Russia, Fringilla Poland, Kozalin, Bukowo-Kopan	55.05N, 20.44E 54.27N, 16.25E	V	14 days, 285 km, 25°
VT 85981	01.10.2003 25.04.2004	I I	2 2	Russia, Fringilla Belarus, Vitebsk, Shumilinsk, Obol	55.05N, 20.44E 55.22N, 29.17E	+Ac	207 days, 543 km, 87°
14610 <i>Parus ater</i>, Coal Tit (2)							
XY 46835	19.10.2006 23.10.2006	F F	3 3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E 54.22N, 19.24E	V	4 days, 117 km, 227°
XY 46839	19.10.2006 27.10.2006	F I	3 3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E 54.22N, 19.24E	V	8 days, 117 km, 227°
14620. <i>Parus caeruleus</i>, Blue Tit (2)							
XL 54423	07.07.2004 04.12.2005	I M	3 4	Russia, Rybachy France, Alpes-Maritimes, Roussillon, 43.56N, 7.11E La Tour	55.09N, 20.51E 56.31N, 23.30E	V	515 days, 1589 km, 218°
XY 39835	29.09.2006 20.11.2007	M I	3 2	Russia, Fringilla Latvia, Jelgava, Zalenieki	55.05N, 20.44E 56.31N, 23.30E	x	417 days, 235 km, 47°
14640. <i>Parus major</i>, Great Tit (20)							
AX 020880	09.10.2003 28.03.2006	M M	3 6	Russia, Fringilla Poland, Gdańsk, Gdynia-Witomino	55.05N, 20.44E 54.30N, 18.30E	V	901 days, 157 km, 246°
XF 75192	04.06.2005 05.06.2007	I I	1 2	Russia, Kaliningrad, Courish Spit Lithuania, Kaisiadorys, Rumšiskės	54.59N, 20.33E 54.52N, 24.12E	+K	731 days, 233 km, 93°
XN 18955	11.04.2007 11.09.2007	M M	24	Russia, Rybachy Lithuania, Šilute, Ventes Ragas	55.09N, 20.51E 55.21N, 21.13E	V	153 days, 32 km, 46°
XN 25782	26.10.2007 02.11.2007	M M	3 3	Russia, Rybachy Lithuania, Šilute, Ventes Ragas	55.09N, 20.51E 55.21N, 21.13E	V	7 days, 32 km, 46°
XN 65525	30.05.2007 06.08.2007	I F	1 3	Russia, Courish Spit Russia, Fringilla	55.04N, 20.42E 55.05N, 20.44E	V	69 days, 1135 km, 247°
XN 68202	14.10.2007 23.09.2007	F F	3 3	Belgium, Limburg, Tessenderlo Russia, Fringilla	51.04N, 5.06E 55.05N, 20.44E	x	36 days, 996 km, 254°
	29.10.2007	I	2	Netherlands, Overijssel, Steenwijk	52.37N, 6.07E	x	

XY 21685	28.09.2005	M	3	Russia, Fringilla Belgium, Antwerpen, Beerse	55.05N, 20.44E	V	143 days, 1136 km, 248°
	18.02.2006	M	5	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	51.19N, 4.52E	V	
XY 39722	28.09.2006	F	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E	V	5 days, 117 km, 227°
	03.10.2006	F	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	54.22N, 19.24E	V	
XY 39767	29.09.2006	F	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E	V	2 days, 117 km, 227°
	01.10.2006	F	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	54.22N, 19.24E	V	
XY 39961	30.09.2006	F	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E	V	21 days, 117 km, 227°
	21.10.2006	F	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	54.22N, 19.24E	V	
XY 40981	02.10.2006	M	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E	V	5 days, 117 km, 227°
	07.10.2006	M	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	54.22N, 19.24E	V	
XY 41289	03.10.2006	M	3	Russia, Fringilla Latvia, Jelgava	55.05N, 20.44E	V	432 days, 255 km, 47°
	09.12.2007	F	4	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	56.39N, 23.44E	V	
XY 41387	03.10.2006	F	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E	V	16 days, 117 km, 227°
	19.10.2006	F	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	54.22N, 19.24E	V	
XY 41391	03.10.2006	F	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E	V	4 days, 117 km, 227°
	07.10.2006	F	3	Russia, Fringilla Latvia, Tukums	54.22N, 19.24E	V	
XY 44618	10.10.2006	M	3	Russia, Fringilla Latvia, Tukums	55.05N, 20.44E	V	484 days, 257 km, 36°
	06.02.2008	M	6	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	56.58N, 23.09E	V	
XY 46133	13.10.2006	F	2	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E	V	4 days, 117 km, 227°
	17.10.2006	F	4	Russia, Fringilla Latvia, Liepāja, Pape	54.22N, 19.24E	V	
XY 46577	17.10.2006	M	4	Russia, Fringilla Latvia, Liepāja, Pape	55.05N, 20.44E	V	365 days, 120 km, 9°
	17.10.2007	M	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	56.09N, 21.01E	V	
XY 46828	19.10.2006	F	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E	V	8 days, 117 km, 227°
	27.10.2006	F	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	54.22N, 19.24E	V	
XY 47211	20.10.2006	M	4	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E	V	8 days, 117 km, 227°
	28.10.2006	M	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	54.22N, 19.24E	V	
XY 47359	21.10.2006	M	3	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	55.05N, 20.44E	V	6 days, 117 km, 227°
	27.10.2006	I	2	Russia, Fringilla Poland, Gdańsk, Mierzeja Wiślana	54.22N, 19.24E	V	

14900. *Remiz pendulinus*, Penduline Tit (1)

XL 19346	17.07.2003	M	1	3	Russia, Rybachy	55.09N, 20.51E	V
	06.12.2005	M	4	4	France, Vaucluse, Courthezon, Etang Sale	44.05N, 4.53E	

16360. *Fringilla coelebs*, Chaffinch (4)

AX 019601	02.10.2003	F	4	Russia, Fringilla	55.05N, 20.44E	V	
	14.04.2007	F	6	Finland, Turku-Pori, Korppoo, Jurmo	59.50N, 21.37E		1290 days, 530 km, 6°
O 493608	22.09.1989	M	3	Russia, Fringilla	55.05N, 20.44E	C?	
	20.10.1989	I	2	Spain, Valencia, Castellon, La Pica, Onda	39.59N, 0.17W		28 days, 2302 km, 223°
O 936849	26.09.1999	M	3	Russia, Fringilla	55.05N, 20.44E		
	17.02.2007	I	2	Germany, Niedersachsen, Burgdorf	52.27N, 10.00E	xG	
XL 13430	23.06.2003	M	2	Russia, Fringilla	55.05N, 20.44E		2701 days, 763 km, 247°
	06.01.2006	I	2	France, Charante, Rouillac	45.46N, 0.03W	+K	
V 018779	14.09.2001	M	3	Russia, Fringilla	55.05N, 20.44E		
	02.05.2002	M	2	Norway, Hedmark, Elverum, Hernes	60.55N, 11.40E	V	928 days, 1799 km, 235°
XF 50666	30.08.2004	M	3	Russia, Fringilla	55.05N, 20.44E		
	09.04.2006	M	6	Poland, Szczecin, Miedzyzdroje	53.56N, 14.27E	V	230 days, 840 km, 321°
XF 51716	14.09.2004	M	3	Russia, Fringilla	55.05N, 20.44E		
	22.02.2007	M	2	Germany, Sachsen, Lobau	51.06N, 14.40E	V	587 days, 425 km, 253°
XF 63014	29.03.2005	M	6	Russia, Fringilla	55.05N, 20.44E		
	12.02.2007	I	2	Great Britain, Dumfries, Richorn	54.55N, 3.49W	V	891 days, 600 km, 222°
XL 59566	07.05.2004	M	5	Russia, Fringilla	55.05N, 20.44E		
	19.11.2007	M	4	Slovenia, Ljubljana, Jarše	46.05N, 14.32E	V	690 days, 1565 km, 269°
XN 67565	20.09.2007	M	3	Russia, Fringilla	55.05N, 20.44E		
	24.01.2008	M	2	Poland, Bydgoszcz, Wąbrzeźno	53.17N, 18.57E	xG	126 days, 231 km, 240°

XY 46271	14.10.2006	F	4	Russia, Fringilla	55.05N, 20.44E		
	16.02.2008	F	6	Hungary, Baranya, Pece	46.06N, 18.11E	V	490 days, 1014 km, 190°
16630. <i>Carduelisflammea</i>, Redpoll (1)							
XY 28643	01.11.2005	M	3	Russia, Fringilla	55.05N, 20.44E		
	25.03.2007	I	2	Finland, Uusimaa, Helsinki, Pihlheina	60.15N, 24.56E	xG	509 days, 626 km, 23°

3.2. Controls of birds, ringed outside the Courish Spit

09920. <i>Hirundo rustica</i>, Swallow (1)							
VT77258 Lithuania, Kaunas	24.07.2006	I	3	Lithuania, Šilutė, Ventes Ragas	55.21N, 21.13E		
10090. <i>Anthus trivialis</i> , Tree Pipit (1)	15.05.2007	F	2	Russia, Rybachy	55.09N, 20.51E	& VD 94693	295 days, 32 km, 226°
LA44773 Italy, Bologna	23.04.2006	I	2	Italy, Ancona&Pesaro&Urbino, M. Brisighella	43.57N, 12.50E		
	27.04.2007	I	2	Russia, Fringilla	55.05N, 20.44E	& XN 20348	369 days, 1362 km, 25°
10200. <i>Motacilla alba</i>, White Wagtail (1)							
VZ13828 Lithuania, Kaunas	10.07.2007	I	3	Lithuania, Šilutė, Ventes Ragas	55.21N, 21.13E		
	26.08.2007	I	3	Russia, Fringilla	55.05N, 20.44E	V	47 days, 43 km, 226°
10990. <i>Eriothacus rubecula</i>, Robin (4)							
9758557 Belgium, Bruxelles	15.10.2006	M	4	Belgium, Liege, Heuseux	50.40N, 5.43E		
	23.04.2007	I	6	Russia, Fringilla	55.05N, 20.44E	& XN 20220	190 days, 1120 km, 64°
AN37869 Netherlands, Arnhem	25.12.2006	I	2	Netherlands, Friesland, Eastermar	53.41N, 6.05E		
	18.03.2007	I	5	Heechsan Russia, Rybachy	55.09N, 20.51E	V	83 days, 985 km, 77°
N330215 Spain, Madrid (Icona)	06.10.2006	I	3	Spain, Murcia, Isla Grosa, San Javier	37.49N, 0.50W		
	04.05.2007	I	5	Russia, Rybachy	55.09N, 20.51E	& XN 22849	210 days, 2542 km, 40°
CE30785 Sweden, Stockholm	28.04.2007	I	5	Sweden, Öland, Ottenby	56.12N, 16.24E		
	06.05.2007	I	5	Russia, Fringilla	55.05N, 20.44E	& XN 20441	8 days, 299 km, 115°

12500. *Acrocephalus palustris*, Marsh Warbler (1)
 VP88662 Lithuania, Kaunas 27.06.2004 F 2 Lithuania, Šilute, Ventes Ragas
 21.05.2007 1 2 Russia, Rybachy 55.21N, 21.13E
 55.09N, 20.51E & XN 75023 1058 days, 32 km, 226°

12510. *Acrocephalus scirpaceus*, Reed Warbler (2)

9487821 Belgium, Bruxelles 03.09.2005 1 3 Belgium, Limburg, Neerpelt	51.14N, 5.25E
08.06.2007 1 2 Russia, Rybachy	55.09N, 20.51E
VX55877 Lithuania, Kaunas 14.08.2005 1 4 Lithuania, Neringa, Juodkrante	55.31N, 21.07E
13.05.2007 1 2 Russia, Kaliningrad, Courish Spit	55.09N, 20.49E

12530. *Acrocephalus arundinaceus*, Great Reed Warbler (4)

XA055567 Hungary, Budapest 12.08.2005 1 3 Hungary, Pest, Osca	47.19N, 19.13E
29.05.2007 1 2 Russia, Rybachy	55.09N, 20.51E
TV06518 Lithuania, Kaunas 30.03.2003 F 4 Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E
30.06.2007 F 4 Russia, Rybachy	55.09N, 20.51E
TV08468 Lithuania, Kaunas 18.06.2006 F 2 Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E
14.07.2007 M 2 Russia, Rybachy	55.09N, 20.51E
TV08730 Lithuania, Kaunas 08.07.2006 I 3 Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E
30.06.2007 F 2 Russia, Rybachy	55.09N, 20.51E

12770. *Sylvia atricapilla*, Blackcap (1)

J991801 Finland, Helsinki 10.09.2006 M 3 Finland, Uusimaa, Vantaa	60.17N, 24.48E
26.04.2007 M 5 Russia, Rybachy	55.09N, 20.51E

13490. *Ficedula hypoleuca*, Pied Flycatcher (2)

080336H Finland, Helsinki 10.06.2006 F 2 Finland, Turku-Pori, Ikaalinen	61.42N, 22.58E
10.05.2007 F 2 Russia, Rybachy	55.09N, 20.51E
EH8137 Spain, Madrid (Icona) 21.08.2006 I 3 Spain, Tarragona, Deltetbre, Canal Vell	40.47N, 0.44E
09.05.2007 F 6 Russia, Rybachy	55.09N, 20.51E

14370. *Aegithalos caudatus*, Long-tailed Tit (6)

87890 Latvia, Riga 19.10.2004 I 2 Latvia, Liepaja, Pape	56.09N, 21.01E
27.03.2005 I 2 Russia, Rybachy	55.09N, 20.51E

89137 Latvia, Riga	05.10.2005 07.10.2005	1 1	2 2	Latvia, Liepaja, Pape Russia, Fringilla	56.09N, 21.01E 55.05N, 20.44E	& VD 54101 2 days, 124 km, 189°
89140 Latvia, Riga	05.10.2005 07.10.2005	1 1	2 2	Latvia, Liepaja, Pape Russia, Fringilla	56.09N, 21.01E 55.05N, 20.44E	& VD 54102 2 days, 124 km, 189°
89175 Latvia, Riga	05.10.2005 08.10.2005	1 1	2 2	Latvia, Liepaja, Pape Russia, Fringilla	56.09N, 21.01E 55.05N, 20.44E	& VD 54977 3 days, 124 km, 189°
90594 Latvia, Riga	15.10.2005 17.10.2005	1 1	2 3	Latvia, Liepaja, Pape Russia, Rybachy	56.09N, 21.01E 55.09N, 20.51E	& VD 74168 2 days, 115 km, 186°
LH59322 Poland, Gdansk	14.11.2006 13.03.2007	1 1	2 2	Poland, Koszalin, Bulkowo-Kopan Russia, Rybachy	54.27N, 16.25E 55.09N, 20.51E	& VK 10127 119 days, 294 km, 75°
14620. <i>Parus caeruleus</i>, Blue Tit (11)						
VZ17244 Lithuania, Kaunas	12.09.2007 14.09.2007	M M	4 4	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XN 66576 2 days, 43 km, 226°
VZ29348 Lithuania, Kaunas	22.09.2007 25.09.2007	F F	3 3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	V 3 days, 43 km, 226°
VZ31490 Lithuania, Kaunas	22.09.2007 24.09.2007	M M	2 3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XN 68305 2 days, 43 km, 226°
VZ34836 Lithuania, Kaunas	23.09.2007 30.09.2007	F F	3 3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XN 69374 7 days, 43 km, 226°
VZ35093 Lithuania, Kaunas	23.09.2007 28.10.2007	F F	4 4	Lithuania, Šilute, Ventes Ragas Russia, Rybachy	55.21N, 21.13E 55.09N, 20.51E	& XN 81623 35 days, 32 km, 226°
VZ39262 Lithuania, Kaunas	29.09.2007 30.09.2007	F F	3 3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XN 69376 1 day, 43 km, 226°
VZ41581 Lithuania, Kaunas	09.10.2007 15.10.2007	M M	3 3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XN 70853 6 days, 43 km, 226°
VZ43116 Lithuania, Kaunas	10.10.2007 15.10.2007	M M	3 3	Lithuania, Šilute, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& XN 70918 5 days, 43 km, 226°

VZ43371 Lithuania, Kaunas	14.10.2007	M	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
	26.10.2007	M	3	Russia, Rybachy	55.09N, 20.51E	& XN 25793	12 days, 32 km, 226°
VZ43374 Lithuania, Kaunas	14.10.2007	M	2	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
	15.10.2007	M	3	Russia, Fringilla	55.05N, 20.44E	& XN 71079	1 day, 43 km, 226°
XA468832 Russia, Moskow	27.09.2007	I	2	Russia, Pskov, Gdov, Pnevo	58.41N, 27.56E		
	14.10.2007	M	3	Russia, Fringilla	55.05N, 20.44E	V	17 days, 592 km, 228°
14640. <i>Parus major</i>, Great Tit (13)							
81751390 Germany, Helgoland	18.02.2007	F	2	Germany, Niedersachsen, Peine	52.19N, 10.14E		
	13.03.2007	F	6	Russia, Rybachy	55.09N, 20.51E	& XN 18053	23 days, 765 km, 66°
VT66091 Lithuania, Kaunas	03.10.2005	M	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
	12.03.2007	M	6	Russia, Rybachy	55.09N, 20.51E	& XN 18007	525 days, 32 km, 226°
VT91280 Lithuania, Kaunas	26.10.2006	F	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
	22.03.2007	F	5	Russia, Rybachy	55.09N, 20.51E	& XN 18410	147 days, 32 km, 226°
VT95078 Lithuania, Kaunas	06.10.2006	M	4	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
	14.03.2007	M	6	Russia, Rybachy	55.09N, 20.51E	& XN 18071	159 days, 32 km, 226°
VX64982 Lithuania, Kaunas	16.10.2007	M	4	Lithuania, Neringa, Juodkrante	55.31N, 21.07E		
	18.10.2007	M	4	Russia, Fringilla	55.05N, 20.44E	& XN 71621	2 days, 54 km, 207°
VX65011 Lithuania, Kaunas	16.10.2007	M	2	Lithuania, Neringa, Juodkrante	55.31N, 21.07E		
	18.10.2007	M	3	Russia, Fringilla	55.05N, 20.44E	& XN 71387	2 days, 54 km, 207°
VX65562 Lithuania, Kaunas	22.10.2007	F	3	Lithuania, Neringa, Juodkrante	55.31N, 21.07E		
	26.10.2007	F	3	Russia, Rybachy	55.09N, 20.51E	& XN 25759	4 days, 44 km, 202°
VZ10985 Lithuania, Kaunas	26.10.2006	M	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
	10.03.2007	M	5	Russia, Rybachy	55.09N, 20.51E	& XN 18001	135 days, 32 km, 226°
VZ25489 Lithuania, Kaunas	21.09.2007	M	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
	24.09.2007	M	3	Russia, Rybachy	55.09N, 20.51E	& XN 79863	3 days, 32 km, 226°
VZ42487 Lithuania, Kaunas	15.10.2007	F	2	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E		
	16.10.2007	F	3	Russia, Fringilla	55.05N, 20.44E	V	1 day, 43 km, 226°

K2A1757 Poland Gdansk	16.11.2006	M	3	Poland.Koszalin, Bulkowo-Kopan Russia, Rybachy	54.27N, 16.25E 55.09N, 20.51E	& XN 18408	126 days, 294 km, 75°
K4A9781 Poland Gdansk	22.03.2007	M	5	Poland, Gdańsk, Mierzeja Wiślana Russia, Rybachy	54.21N, 19.19E 55.09N, 20.51E	& XN 19303	168 days, 133 km, 48°
XY 85319 Russia Moskow	27.10.2006	M	3	Russia, Leningrad, Gumbartsy	60.41N, 32.57E		
	13.04.2007	M	5	Russia, Fringilla	55.05N, 20.44E	V	22 days, 953 km, 229°
15820. <i>Sturnus vulgaris</i>, Starling (12)							
KV32996 Lithuania, Kaunas	21.07.2007	I	3	Lithuania, Šilutė, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	V	4 days, 43 km, 226°
KV41380 Lithuania, Kaunas	08.06.2007	I	3	Lithuania, Šilutė, Ventes Ragas Russia, Rybachy	55.21N, 21.13E 55.09N, 20.51E	& TA 31411	45 days, 32 km, 226°
KV46841 Lithuania, Kaunas	23.07.2007	F	3	Lithuania, Šilutė, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& TA 32555	5 days, 43 km, 226°
KV47672 Lithuania, Kaunas	18.06.2007	I	3	Lithuania, Šilutė, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& TA 32562	3 days, 43 km, 226°
KV47980 Lithuania, Kaunas	23.06.2007	F	3	Lithuania, Šilutė, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& TA 33043	21 days, 43 km, 226°
KV48416 Lithuania, Kaunas	01.07.2007	I	3	Lithuania, Šilutė, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& TA 32837	9 days, 43 km, 226°
KV48954 Lithuania, Kaunas	10.07.2007	F	3	Lithuania, Šilutė, Ventes Ragas Russia, Fringilla	55.21N, 21.13E 55.05N, 20.44E	& TA 33044	10 days, 43 km, 226°
KV49643 Lithuania, Kaunas	03.07.2007	I	3	Lithuania, Šilutė, Ventes Ragas Russia, Rybachy	55.21N, 21.13E 55.09N, 20.51E	& TA 18998	3 days, 32 km, 226°
KV50002 Lithuania, Kaunas	19.07.2007	I	3	Lithuania, Šilutė, Ventes Ragas Russia, Rybachy	55.21N, 21.13E 55.09N, 20.51E		
	22.07.2007	F	3	Lithuania, Šilutė, Ventes Ragas Russia, Rybachy	55.21N, 21.13E 55.09N, 20.51E		
KV51044 Lithuania, Kaunas	21.07.2007	I	3	Lithuania, Šilutė, Ventes Ragas Russia, Rybachy	55.21N, 21.13E 55.09N, 20.51E	& TA 18976	1 day, 32 km, 226°
	23.07.2007	F	3	Lithuania, Šilutė, Ventes Ragas Russia, Rybachy	55.21N, 21.13E 55.09N, 20.51E		

KV51060 Lithuania, Kaunas	21.07.2007	1	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E
KV51099 Lithuania, Kaunas	22.07.2007	M	3	Russia, Rybachy	55.09N, 20.51E & TA18974 1 day, 32 km, 226°
KV51099 Lithuania, Kaunas	21.07.2007	1	3	Lithuania, Šilute, Ventes Ragas	55.21N, 21.13E
KV51099 Lithuania, Kaunas	22.07.2007	M	3	Russia, Rybachy	55.09N, 20.51E & TA31401 1 day, 32 km, 226°
16790. <i>Carpodacus erythrinus</i>, Scarlet Rosefinch (1)					
2KK73866 Sweden, Stockholm	01.06.2004	M	5	Sweden, Blekinge, Utiklippa	55.57N, 15.42E
	03.07.2004	M	4	Russia, Rybachy	55.09N, 20.51E & XL54180 32 days, 336 km, 105°
18770. <i>Emberiza schoeniclus</i>, Reed Bunting (2)					
PC18557 Germany, Hiddensee	18.10.2005	M	3	Germany, Sachsen Anhalt, Eckardsberg	51.14N, 13.23E
	18.05.2007	M	6	Russia, Rybachy	55.09N, 20.51E & XN23955 577 days, 661 km, 49°
J144993 Latvia, Riga	15.09.2006	M	3	Latvia, Liepaja, Pape	56.09N, 21.03E
	04.04.2007	M	2	Russia, Rybachy	55.09N, 20.51E & XN18824 201 days, 112 km, 186°

3.3. Data with ringing information still not available

10990. <i>Erythacus rubecula</i>, Robin (1)					
TC90752 Czech Republic, Prague	27.04.2007	1	5	Russia, Rybachy	55.09N, 20.51E & XN22626
12510. <i>Acrocephalus scirpaceus</i>, Reed Warbler (1)					
VX42736 Lithuania, Kaunas	30.08.2007	F	4	Russia, Rybachy	55.09N, 20.51E & XL97299
14620. <i>Parus caeruleus</i>, Blue Tit (1)					
KX52300 Poland, Gdansk	14.03.2007	I	6	Russia, Rybachy	55.09N, 20.51E & XN18076
14640. <i>Parus major</i>, Great Tit (2)					
VA21487 Estonia, Matsalu	01.10.2007	F	3	Russia, Fringilla	55.05N, 20.44E & XN69987
VX64845 Lithuania, Kaunas	15.10.2007	F	3	Russia, Fringilla	55.05N, 20.44E & XN70773
15820. <i>Sturnus vulgaris</i>, Starling (1)					
H267524 Estonia, Matsalu	22.07.2007	F	3	Russia, Rybachy	55.09N, 20.51E & TA18996

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