# Copenhagen Bird Ringing Centre, Denmark

## Short annual report for EURING GM, Malta October 2011

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#### **Summary**

In 2010, a total of 107,480 birds were ringed in Denmark. There were record number of birds ringed of gadwall, long-tailed duck, stock dove, icterine warbler, blackcap, chiffchaff, nuthatch, rook, tree sparrow and goldfinch. Two broods of Tengmalm's owl and three broods of peregrine were ringed. Many barn owls were recovered in 2010 and a tree sparrow from North Jutland flew 657 km to an oil platform near the English east coast. An oystercatcher recovered after 32 years and a mute Swan 42 ½ years, which is a world record. In 2010, the Ringing centre expanded its activities of mapping the migration and wintering area of Africa-migrating passerines. This involves the use of geo locators, satellite transmitters and radio transmitters. A new three-year financial contract with the Forest and Nature Agency was signed.

### Administration

All ringing of wild birds with metal rings in Denmark is done with rings from the Zoological Museum at the University of Copenhagen, and all recoveries of metal rings are handled by the museum (incl. those few regarding old Kalø rings).

The Zoological Museum (a part of The Natural History Museum of Denmark) and the Ministry of the Environment jointly finance the Copenhagen Bird Ringing Centre according to an agreement that runs in periods of three years (since 1998). At the moment we are running on a contract lasting until 31 July 2013 which also includes a new strategy for the Centre with more emphasis on research on threatened species, monitoring of changes in population, sizes and migratory behaviour, monitoring bird-borne diseases and research on bird migration. Part of the new strategy also includes a thorough revision of our instructions to ringers.

The positive cooperation with The Danish Bird Ringers Society continued in 2010, including organizing the annual meeting for Danish bird ringers, an introductory course for new rings, the CES project and the annual 'open house' event where bird ringing were demonstrated for the public six different places around Denmark. We continue to produce news-letters to the ringers (2 issues in 2010; 2 issue in 2011 so far).

### **Strategy**

On basis of the results from the Danish Bird Migration Atlas a strategy for the activities associated with the centre has been formulated. The focus is on (a) conservation, management, monitoring of changes and bird-borne diseases; (b) modernising the data handling procedures both in the centre and for individual ringers and allowing better access for the public to data; (c) revising guidelines for ringers and (d) gathering the ornithological research associated with the centre.

Furthermore, the ringing centre will continually revised the guidelines for ringers, including a detailed species-by-species list detailing the ringing status of each species, which specific projects allows the ringing of the species and the future ringing goal(s).

#### **Computerising**

In 2009 we introduce a web based interfaced license database, where ringers annually can apply for renewal of their ringing license etc. This web based database has save us for lot of administrative work.

From 2006 the ringers can use a computer interface (based on Access, FileMaker (from 2010) or Excel (from 2011)) supplied by the Ringing Centre to report their ringing data. All recovery data (incl. retraps, controls and readings of metal rings) are stored in databases, except older short-term retraps at the ringing site and recoveries of dead pullus. A beta-version of an electronic administration system is used to handle data on some species and this system is expected to be fully operational in the beginning of 2012. All ringing data (incl. ringing & recoveries) regarding the Faroe Island since 1912 are now stored in one database.

### The former Danish bird ringing centre Skovgaard

The former, private Danish bird ringing center, Skovgaard (1914-1975), was for many years managed and administered by Sigurd Rosendahl. In spring 2010, Sigurd and his wife Tove Rosendahl offer the Zoological Museum all their ringing archives. The museum is obviously grateful to receive this valuable material. This mean that Zoological Museum now store all previous major archives relating to the ringing of birds in Denmark, the Faroe Islands and Greenland.

## **Projects at the Ringing Centre**

Important research projects at the Centre include:

- a. The "Background Ringing Project". The aim of this project is to collect basic information on biology, phenology and natural history through general ringing on target species (c. 170 spp.) of which we still do not have sufficient ringing material. Additionally, ringing of a certain number of individuals annually allow for monitoring of changes in migratory behaviour.
- b. The "Rare breeding bird project". This overall project includes several smaller conservation projects including satellite and wing tagging of Montagu's harrier, radio tracking of little owls, 5 years ringing of sandwich terns, projects on white-tailed and golden eagles, spoon bills, peregrines, Mediterranean gull and wrynecks etc.
- c. Development of tracking system for smaller birds using satellites in collaboration with the Danish Technical University (DTU).
- d. Environmental Impact Assessment of the Fehmarn Belt Link, including satellite tracking of seaducks.
- e. CES five sites are in operation in 2011.
- f. Monitoring of Avian Influenza and West Nile Virus.
- g. Ringing of cured diseased and injured birds that are released back into nature.
- h. A Phd-project, mainly focus on individual migration patterns of small night-migrating birds wintering south of the Sahara, but also investigate patterns of dispersal and migration distances in relation to climate in large sets of ringing data., finished in 2013.
- i. The Faroe Bird Migration Atlas, 2010-2012.
- j. Monitoring colonial nesting shorebirds, in co-operation with DMU/Kalø.

#### **External ringing projects**

In addition to our own research projects, we have approved 22 external ringing projects under our license in 2009. These include 12 projects involving nationally red-listed species, 8 colour ringing projects and 2 experimental projects. All these projects are external projects managed by amateur ringers or professional researchers from Denmark as well as abroad. Each project is approved annually based on a status report.

#### Staff at the Copenhagen Bird Ringing Centre, Zoological Museum (October 2011)

Allocation of time by permanent Zoological Museum staff:

- Kasper Thorup, Dr., Head of the ringing scheme, part-time
- Jens Mikkel Lausten, Assistant Curator, full-time
- Christian Lange, IT-support, part-time

#### *Staff on external funding:*

- Jesper Johannes Madsen, M.Sc., Research and Project Co-ordinator, full-time
- Kjeld T. Pedersen, Assistant Curator (database), full-time

## Post-docs:

- Anders Tøttrup

#### Students:

- Mikkel Willemoes Kristensen, PhD student, 2010-2013
- Monika Chrenkova, visiting PhD student, 2011-2012
- Mathilde Lerche-Jørgensen, MSC student, 2011-2012.

### Numbers of ringers, ringing groups, and ringing stations

In 2010, the Copenhagen Bird Ringing Centre issued 188 individual bird ringing licenses (111 Alicense, 29 B-license, 16 C-license & 32 X-license). Seven ringing groups and 8 ringing stations were licensed to operate under our license. In 2011 (August) we have 186 ringers, 7 ringing groups and 8 ringing stations in operation. The number of ringers has been relatively stable for the last 15 years.

## Numbers of birds ringed and recovered in 2009 & 2010 (Copenhagen Bird Ringing Centre)

2009	Denmark	Faeroe Islands	Greenland
Birds ringed	86,562	1,035	793
Bird species ringed	181	37	25
Most numerous ringed	Robin 7,663	Arctic Tern 436	Little Auk 189
	Great Tit 5,937	House Sparrow 120	Canada Goose 151
	Barn Swallow 4,460	Puffin 107	Sanderling 134
	Willow Warbler 4,289		
	Greenfinch 3.805		
New ringing species		Red-flanked Bluetail	
		Subalpine Warbler	
Received and handled recoveries of DKC metal rings*	c. 1,950	32	105
Most numerous recovered species*	Cormorant 279	Northern Fulmar 8	Canada Goose 83
	Eider 200	Starling 4	
	Herring Gull 181		
	Barn Owl 170		

2010	Denmark	Faeroe Islands	Greenland
Birds ringed	107,480	3,179	914
Bird species ringed	190	27	28
Most numerous ringed	Robin 8,878	European Storm Petrel 2,527	Little Auk 327
	Great Tit 7,236	Starling 403	Eurasian Stonechat 132
	Blue Tit 6,051	Leach's Storm Petrel 89	Thick-billed Murre 103
	Willow Warbler 5,944		
	Goldcrest 5,777		
New ringing species			
Received and handled recoveries of	- 1.700	20	22
DKC metal rings*	c. 1,700	30	33
Most numerous recovered species*	Cormorant 240	Fulmar 7	Canada Goose 14
	Herring Gull 213	Lesser Black-backed Gull 7	
	Mute Swan 177		
	Barn Owl 150		

<sup>\*</sup> *Remarks:* The vast number of readings of rings in connection with very large colour-marking projects on Cormorant, Pink-footed Goose, Mute Swan and gulls are handled separately by project holders. Excluded are also all local controls.