

13 Threatened Birds Register

Zoological Museum, Finnish Museum of Natural History
Threatened Birds Register / Zoological Museum
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1. BACKGROUND AND AIMS. The Committee for the Conservation of Threatened Animals and Plants in Finland classified 38 bird species as threatened in Finland in 1985 (Rassi et al. 1986, Rassi & Väisänen 1987). Current occurrence and latest population fluctuations of several threatened species are documented in special studies, but data on many other species are still poor. All the threatened species are in need of monitoring if we want to save them. Often the only means for monitoring these species is to collect all observations made by birdwatchers, because general monitoring data remains inadequate due to the rarity and habits of these species (habitat specialists, poor detectability, special census methods needed etc.).

The aim of the survey is to monitor occurrence and population fluctuations of threatened species. The results can be used in planning and organizing species-specific conservation programmes, and in re-estimating the species' status by the Ministry of the Environment. For these purposes the Museum places all data on threatened species obtained in different monitoring projects at the disposal of the Ministry. There is another reason for the close connection between the special survey of threatened species and general bird monitoring: species that are not threatened at present may be included in this category in the future. The Register of Faunistically Valuable Records and the Bird Site Register are projects closely related to the monitoring of threatened species. Observations of all threatened species have been summarized in a special publication since 1985, but records of many of them have been included in the annual faunistical reports in "Lintumies" since 1976.

2. THREATENED SPECIES. A list of threatened species from 1985 is in Sect. 5. The species have been divided into four categories according to their status: disappeared, endan-

gered, vulnerable, and in need of monitoring. Endangered and vulnerable species should be monitored most intensively.

3. SPECIES-SPECIFIC STUDIES. Special studies of threatened species listed in Sect. 5 are designed to help in preserving these birds. Birdwatchers may participate in many of the projects, although special instructions and requirements are often necessary. Those interested in some of the projects should contact any of the organizations involved directly (in addition to the Zoological Museum: World Wild Fund (WWF), Uudenmaankatu 44, SF-00120 Helsinki; Ministry of the Environment, Ratakatu 3, SF-00120 Helsinki; Finnish Game and Fisheries Research Institute, Game Division, Turunlinnantie 8, SF-00930 Helsinki). All general monitoring projects of the Museum, in which significant additional data on the threatened bird species are collected, are listed in Sect. 5. The Bird Atlas is not mentioned separately, however, because it is related to all species.

4. COLLECTING OBSERVATIONS AND KEEPING THEM SECRET. The following instructions deal with "occasional" observations outside special studies. Observations of each species are collected so that they serve monitoring and preserving of the species as much as possible (see Sect. 5). – Note that observations made in other monitoring projects should also be reported on Threatened Bird Species Form 13A in order to get all observations in a standard manner.

All observations of threatened species are collected at the Museum, which has been responsible for raptor and other monitoring for many years. Observations can be sent to the Museum directly or through a local ornithological society. The Museum keeps all the observations confidential and forwards them to the register of endangered species at the Ministry of the Environment.

To save threatened birds, each responsible birdwatcher should place all observations of species at the disposal of the environmental authorities. This way and with only a little work one can be of real help in preserving birds. Monitoring threatened species (or any species at all) will succeed only with the help of voluntary birdwatchers. The local societies of the Association of Ornithological Societies in Finland (address: Box 17, SF-18101 Heinola, Finland) can greatly help in this task by organizing systematic searching and observing for threatened species and their breeding sites; there is no compensation for local knowledge. It is recommended that the local societies and amateur teams who wish to organize special studies of threatened species should contact the Museum and the Association of Ornithological Societies in Finland in order to create effective local projects.

For reasons of protection observers have an opportunity to send their observations of threatened species directly to the Museum. This way only one person in the Museum will know about the observation. The information is secret in order to prevent, for example, egg robbing and disturbance. Alternatively, the observer may also send his/her observations to the local society of the region where the observation was made. Local societies collect all the observations together and send them to the Museum. The Ministry of the Environment judges if the observations collected directly to the Museum can be placed at the disposal of the respective local society without loss of security.

Great care is needed in handling observations of threatened species, especially if they are endangered or vulnerable. On each level of data treatment it has to be made sure that the data do not slip into wrong hands. Thus, at local level only one person should handle the data and keep them confidential. Local birdwatchers seldom cause any threat but they may unwittingly disturb nesting. Observers responsible for local monitoring of threatened species should take care that the data are only used for research and conservation, and even then one has to avoid unnecessary spread of information (especially about nesting sites). Sect. 5 gives species-specific information on these matters.

5. SPECIES-SPECIFIC INSTRUCTIONS FOR OBSERVING. Species are listed according to their threatened status. In points A, B, C and D,

different aspects in observing are emphasized as follows:

- A. Type of observations collected.
- B. Subjects that are of special importance for monitoring and preserving the species but which are still possible for an ordinary birdwatcher to study.
- C. Special studies and monitoring projects providing useful information on the species.
- D. Recommendations concerning confidentiality.

Remember that in addition to bird numbers observations on nesting (preferably reported on Nest Record Cards) and other aspects of population ecology are also very valuable. Ringing of most of the threatened species should be intensified, obviously without causing any extra threat to the populations. In order to successfully protect the species it is important to know their habitat requirements and present breeding distribution (see Sect. 6, Form 13A and the Nest Record Card, Form 7A-B). The reliability of the data is ensured by monitoring the same species and breeding sites for many years in a comparable way (see also Sect. 4 in the instructions for registering faunistically valuable records in Ch. 12 of this Manual).

The following list includes the species of the first Conservation Committee Report (1985). It will be updated after 1990 when the present committee is to publish a revised version of the list.

Disappeared species

All observations of disappeared species are collected. It is recommended that at sites where these species are observed during the breeding season, evidence of nesting be searched for.

Quail *Coturnix coturnix*

- A. All observations (not those concerning introduced *C. japonica*).
- B. Checking possible nesting from the behaviour of males (playback of song may help in this).
- D. Keep possible nesting sites secret.

Great Snipe *Gallinago media*

- A. All observations.
- B. Searching for possible nesting sites in northern Lapland and on the coast of the Gulf of Bothnia. Ringing of migrants in autumn. (Breeding has been confirmed in Finland again in the late 1980s.)
- D. Keep possible nesting sites secret.

Endangered species

All observations of endangered species are collected. Special studies are being conducted on most of these species. In addition to reporting observations to the Museum or a local ornithological society, one may contact special study organizations and ask for experts to inspect a site (especially if breeding is suspected).

Lesser White-fronted Goose *Anser erythropus*

- A. All observations.
- B. Searching for breeding sites. Censuses of resting birds.
- C. Lesser White-fronted Goose Project / WWF.
- D. Keep possible nesting sites secret.

White-tailed Sea Eagle *Haliaeetus albicilla*

- A. All observations.
- C. White-tailed Sea Eagle Project / WWF.
- D. Keep nesting sites secret.

Spotted Eagle *Aquila clanga*

- A. All observations.
- B. Searching for possible nesting sites.
- D. Keep all sites where birds are seen during the breeding season secret.

Peregrine *Falco peregrinus*

- A. All observations.
- B. Searching for nesting sites.
- C. Peregrine Project / WWF.
- D. Keep all nesting sites secret.

Snowy Owl *Nyctea scandiaca*

- A. All observations.
- B. Searching for breeding areas.
- D. Keep all breeding sites secret.

White-backed Woodpecker *Dendrocopos leucotos*

- A. All observations.
- B. Searching for breeding areas.
- C. White-backed Woodpecker Project / WWF.
- D. Keep all breeding sites secret.

Shore Lark *Eremophila alpestris*

- A. All observations.
- B. Searching for breeding areas.

Vulnerable species

Some of the vulnerable species are the subjects of special studies; their nesting sites are checked annually. Of the other species, the accuracy of collecting occasional observations depends on how much data are obtained from general bird monitoring projects and on the usefulness of single observations. In principle, all breeding sites and their pair numbers

should be reported; give the counted or estimated numbers in an area which has been covered at least adequately (describe also census method used and boundaries of the area, preferably on a map). Observations which can be used in estimating breeding success are especially valuable: fill in a Nest Record Card of each nest found and give a summary of the number of young per pair in Form 13A (also estimate the age of the young). It is also important to report breeding attempts that were unsuccessful (= "0-broods"). More detailed information on the species-specific census and study methods is available from the Museum if needed.

Scaup *Aythya marila*

- A. Breeding areas and pair numbers.
- B. Monitoring breeding success.
- C. Archipelago Birds Census / Zoological Museum.

Golden Eagle *Aquila chrysaetos*

- A. All observations.
- C. Golden Eagle Project / Ministry of the Environment.
- D. Keep all breeding sites secret.

Gyr Falcon *Falco rusticolus*

- A. All observations.
- B. Searching for possible nesting sites.
- D. Keep all breeding sites secret.

Corncrake *Crex crex*

- A. All observations.
- B. Monitoring the proportion of breeding males (with the aid of song playback) and percentage of successful pairs.
- C. Night-Singing Birds Census / Zoological Museum.

Dunlin *Calidris alpina schinzii*

- A. Breeding areas and pair numbers of the southern subspecies.
- B. Monitoring breeding success.
- C. Archipelago Birds Census / Zoological Museum.

Terek Sandpiper *Xenus cinereus*

- A. All observations.
- D. Keep all breeding sites secret.

Caspian Tern *Sterna caspia*

- A. Breeding areas and pair numbers (to avoid disturbance do not visit nests in May).
- C. Caspian Tern Project / Zoological Museum.
- D. Keep all breeding areas secret.

Species in need of monitoring

Most of the species in need of monitoring are common enough to eliminate the need to collect all occasional observations of them for the Museum. Much more useful are breeding season records, especially information on the size of a breeding population and its breeding success in a thoroughly studied area (report the counted or estimated number of pairs and study area; fill in Nest Record Cards and give the total number of young on Threatened Species Form 13A). However, single observations are also valuable and worth reporting to local societies. Observations on raptors should be phoned directly to the nearest raptor ringer, who reports them to the Ringing Office of the Museum.

Red-throated Diver *Gavia stellata*

- A. Breeding ponds and pair numbers. Breeding success (number of young per pair).
- C. Waterfowl Census / Zoological Museum.
- D. Keep breeding areas secret.

Black-throated Diver *G. arctica*

- A. Breeding areas and pair numbers. Breeding success.
- C. Waterfowl Census / Zoological Museum.

Common Scoter *Melanitta nigra*

- A. All observations during the breeding season. Breeding success.
- C. Waterfowl Census / Zoological Museum.
- D. Keep all breeding areas secret.

Velvet Scoter *M. fusca*

- A. All inland observations during the breeding season. Breeding success.
- C. Waterfowl Census / Zoological Museum.
- D. Keep all breeding areas secret.

Smew *Mergus albellus*

- A. Breeding areas and pair numbers. Breeding success.
- C. Waterfowl Census / Zoological Museum.
- D. Keep all breeding areas secret.

Osprey *Pandion haliaetus*

- A. Report the nest trees without an official protection sign to the nearest raptor ringer (or Ringing Office) as quickly as possible!
- C. Osprey Project / Zoological Museum.

Kestrel *Falco tinnunculus*

- A. Report all nests and territories to a ringer (if unknown, contact the Ringing Office).
- C. Raptor Project / Zoological Museum.

Merlin *F. columbarius*

- A. Report all nests and territories to a ringer (if unknown, contact the Ringing Office).
- C. Raptor Project / Zoological Museum.

Hobby *F. subbuteo*

- A. Report all nests and territories to a ringer (if unknown, contact the Ringing Office).
- C. Raptor Project / Zoological Museum.

Partridge *Perdix perdix*

- A. Breeding areas and pair numbers. Winter observations: flock size, survival rate (based on several censuses during winter).
- C. Game inquiry / Game and Fisheries Research Institute; Winter Bird Census / Zoological Museum.

Ringed Plover *Charadrius hiaticula*

- A. Breeding areas and pair numbers of the coastal population.
- B. Monitoring breeding success.
- C. Archipelago Birds Census / Zoological Museum.

Temminck's Stint *Calidris temminckii*

- A. Breeding areas and pair numbers of the coastal population.
- B. Monitoring breeding success.
- C. Archipelago Birds Census / Zoological Museum.

Bar-tailed Godwit *Limosa lapponica*

- A. All observations during breeding season.
- D. Keep all breeding areas secret.

Lesser Black-backed Gull *Larus fuscus*

- A. Breeding areas and pair numbers; breeding success: number of young per number of nesting pairs in a thoroughly monitored area.
- C. Archipelago Birds Census and Waterfowl Census / Zoological Museum.

Stock Dove *Columba oenas*

- A. Breeding areas and pair numbers outside the provinces no 2 and 3.
- B. Monitoring breeding success.
- C. Box-nesting Birds Scheme / Zoological Museum.

Pygmy Owl *Glaucidium passerinum*

- A. Report all nests and territories to a ringer (if unknown, contact the Ringing Office).
- C. Raptor Project / Zoological Museum.

Nightjar *Caprimulgus europaeus*

- A. Breeding areas and pair numbers.
- C. Night-Singing Birds Census / Zoological Museum.

- Grey-headed Woodpecker *Picus canus*
 A. Breeding areas and pair numbers outside the provinces no 2 and 3.
 B. Monitoring breeding success.
 C. Point Count, Line Transect and Winter Bird Census / Zoological Museum.

- Lesser Spotted Woodpecker *Dendrocopos minor*
 A. Breeding areas and pair numbers.
 B. Monitoring breeding success.
 C. Point Count, Line Transect and Winter Bird Census / Zoological Museum.

- Woodlark *Lullula arborea*
 A. All observations during the breeding season.
 B. Monitoring breeding success. Migratory counts.
 C. Point Count and Line Transect / Zoological Museum.

- Red-breasted Flycatcher *Ficedula parva*
 A. All observations during the breeding season.
 B. Monitoring breeding success.
 C. Point Count and Line Transect / Zoological Museum.

- Nutcracker *Nucifraga caryocatactes caryocatactes*
 A. All observations during the breeding season.
 B. Monitoring Breeding success.
 C. Point Count, Line Transect and Winter Bird Census / Zoological Museum.

6. WHAT SHOULD BE REPORTED? FILLING IN THE FORMS. The following basic information should be recorded of each observation: (1) species, (2) date, (3) municipality, village, exact place (national grid coordinates suggested), (4) number of individuals, sex and age (if possible), (5) habitat and (6) data on behaviour, nesting etc. (see Sect. 5; remember to report the census method or how the number of birds was estimated as well as boundaries of the area).

It is important that original data are as accurate and detailed as possible (e.g., list all days of observing or the first and last one). Generalizing and summarizing, if carried too far, decrease the value of data.

The data are preferably collected on Threatened Bird Species Form 13A (instructions for filling in the form on page 13B) and with Nest

Record Cards (Form 7A–B, instructions for filling in Ch. 7 of this Manual).

Return the Threatened Species Forms to the Museum or to the local society before the end of year! Report your data on Ospreys, Kestrels, Merlins, Hobbies and Pygmy Owls directly to the nearest raptor ringer!

SELECTED REFERENCES

- Koskimies, P. 1987: Faunistical report 1985 (in Finnish with English summary). – *Lintumies* 22:24–35.
- Koskimies, P. 1989: The occurrence of threatened bird species in Finland in 1987 (in Finnish with English summary). – *Lintumies* 24:81–87.
- Pakarinen, R. 1989: A survey of the Black-throated Diver population in 1985–86 in Finland (in Finnish with English summary). – *Lintumies* 24:2–11.
- Rassi, P., Alanen, A., Kemppainen, E., Vickholm, M. & Väisänen, R. 1986: Threatened animals and plants in Finland. II Threatened animals in Finland (in Finnish with Swedish abstract). – Committee Report 1985, 43:1–466.
- Rassi, P. & Väisänen, R. (eds.) 1987: Threatened animals and plants in Finland. English summary of the report of the Committee for the Conservation of Threatened Animals and Plants in Finland. – Committee Report 1985, 43:1–82.
- Saurola, P. 1990: The Osprey – symbol of bird protection and monitoring (in Finnish with English summary). – *Lintumies* 25:80–86.
- Stjernberg, T., Koivusaari, J. & Nuuja, I. 1990: Population trends and nesting success of the White-tailed Eagle in Finland in 1970–89 (in Finnish with English summary). – *Lintumies* 25:65–75.
- Tiainen, J. & Alanko, T. 1989: Occurrence and breeding result of *Dendrocopos leucotos* in Finland in 1989 (in Finnish with English summary). – *Lintumies* 24:268–273.
- Virolainen, E. & Rassi, P. 1990: Population trends of Finnish Golden Eagles in 1970–89 (in Finnish with English summary). – *Lintumies* 25:59–64.
- Wikman, M. 1990: The Peregrine Falcon in Finland 1980–89 (in Finnish with English summary). – *Lintumies* 25:54–58.

13B HOW TO FILL IN A THREATENED SPECIES FORM

The form is filled in with clear handwriting, in pencil using BLOCK LETTERS. All numbers are written so that they end at the right margin (e.g. date, area). All letter data are started from the left margin (e.g. municipality).

On Form 13A one may report both single observations and census results of threatened bird species. The SPECIES is written with a 3+3-letter code (see Appendix 1 in the Manual). Few observers get a personal OBSERVER NUMBER from the museum. The MUNICIPALITY is abbreviated according to Appendix 2 in the Manual. NATIONAL GRID means a 1x1 km square; when censusing larger areas mark a centrally placed square.

SINGLE OBSERVATIONS

DATE and PLACE of each single observation is written down. Give at least the village and a place-name which can be found on a survey map; also direction and distance from a specified point when necessary. HABITAT type coded by numbers 01-99 (preferably described also in detail; e.g., rich, barren), AREA SIZE by numbers 1-6 as on a Nest Record Card (see Form 7A-B). After the NUMBER OF INDIVIDUALS write the CATEGORY FOR BREEDING EVIDENCE codes 1-9, see Appendix 4 in the Manual) and in which grounds it was determined. One may give more detailed information on the habitat or other subjects on a Nest Card (mark a cross, if you have filled it in for the particular observation). Remember also to inform whether you have reported the observation to the local ornithological society or not, and if the data may be surrendered to others except the personnel at the Museum and the Ministry.

BREEDING AREAS AND PAIR NUMBERS

Census data on threatened species are reported on the lower part of the form. The OBSERVATION AREA may be easiest to describe with a copy of a map or a sketch. Estimate the SIZE OF THE AREA with an accuracy of at least 10 ha. List the main HABITAT TYPES in the area, giving special weight to sites which might be important for the species (use habitat types 01-99 given in the Nest Record Card). If some of the CENSUS METHODS described in this Manual have been used, mention the method and its possible applications; in all other cases give an accurate description of the method used. The method is coded at the Museum according to given information. The PAIR NUMBER means the total number of pairs or territories of the species in the area.

A Nest Record Card should be filled in for all the nests of the threatened bird species (mark the number of filled cards; remember also to enclose OBSERVER FORM 7C-D). If BROODS are counted, their NUMBER is written in for every census day: write down both the TOTAL NUMBER OF YOUNG and the NUMBER OF BROODS IN BROOD SIZE CLASSES (it is especially important to report "0"-broods, meaning unsuccessful breeding efforts of a pair!). In ADDITIONAL INFORMATION one can, for example, write the estimated age of the young. Remember that the results of brood counts are supposed to apply to the same study area as the number of breeding pairs; the aim is to monitor how many young are produced by a population of certain size.