WORLD CONFERENCE ON BIRDS OF PREY

REPORT OF PROCEEDINGS
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International Council for Bird Preservation

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The Status of Breeding Birds of Prey in Denmark 1975

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The Danish breeding population of birds of prey includes 14 species of which only 9 breed annually; 7 of these have undergone a great decline in this century but 5 seem now to be holding their own.

The Danish game legislation from 1967 preserves all birds of prey but leaves a possibility for killing Buzzard, Goshawk and Sparrow Hawk at pheasant rearing sites. This persecution is, from an ornithological point of view, unfortunate and has resulted in an unacceptable level of shooting, especially of Goshawks and Buzzards. Regrettably, some birds of prey are still shot illegally, of which many are stuffed, and the control of the taxidermists' activities is considered to be inadequate.

Egg-collecting might still be a threat for the rarer birds of prey, i.e. Osprey and Hobby.

Falconry is prohibited.

The content of pesticides has been monitored during the last five years. Thanks are due to I. Kraul. O. Karlog and S. Dalgaard-Mikkelsen, the Institute of Pharmacology and Toxicology, Royal Veterinary and Agricultural University, Copenhagen, for placing the analysis figures at our disposal.

In general the concentration of pesticides (chlorinated hydrocarbons) seems to have decreased within the last 2–3 years, whereas the PCB-level remains constant. The use of DDT in Denmark was prohibited in 1970. Probably the breeding success has been improved in the last 2–3 years.

In the future, disturbance by the public in the breeding season and a continued cultivation of habitat should prove the most serious threats for the remaining populations.

Species

Buzzard (*Buteo buteo*)

Breeding status
Breeding population estimated at 1,500–2,000 pairs. Country-wide distribution.

Trends
Population stable. Perhaps a small increase in this century due to afforestation in Jutland and reduction of persecution.

Pesticides and breeding production
During the period 1956–73 egg-laying pairs on the average produced 1·7 fledglings (n=228). No definite trends during this period are discernible. Five unhatched eggs averaged (ppm in lipid) DDE: 12, PCB: 107 (1970–73).

Threats
Disturbance as a result of increasing recreational activities and development of the countryside. Urban development on feeding areas. (Legal) persecution at pheasant rearing-sites.

Red Kite (*Milvus milvus*)

Breeding status
Irregular and very rare breeder, 0–2 pairs.

Trends
Population extinct 1910–20. Single pairs nested 1947–49, 1961 and again 1970–74.

Threats
Egg-collecting and incidental persecution as well as shooting for stuffed trophies.

White-tailed Eagle (*Haliaeetus albicilla*)

Breeding status
Two pairs nested 1952–60, but not since. Up to 10 individuals still winter regularly.

Greenland White-tailed Eagle (*H.a. groenlandicus*)
(*See special report on pp.* 73–74).

Honey Buzzard (*Pernis apivorus*)

Breeding status
200–400 pairs. Countrywide except for the western part of Jutland.

Trends
Apparently stable.

Pesticides and breeding production
Eight egg-laying pairs in 1972–73 produced on the average 1·75 fledglings. Concentrations of pollutants unknown.

Threats
Urban development near to breeding sites and drainage and cultivation of foraging areas. Intensified recreational use of the forests by the public in the breeding season.

Marsh Harrier (*Circus aeruginosus*)

Breeding status
75–100 pairs in western and southern Jutland and on the islands in south-east Denmark.

Trends
A decline in the last 10–20 years although a stabilization (perhaps a slight increase) seems to have occurred in the last 2–3 years.

Pesticides and breeding production
Fourteen egg-laying pairs in 1972–73 produced on average 3·35 fledglings. Three unhatched eggs averaged (ppm in liquid): DDE, 184; PCB, 251 (1970+1972). It is doubtful whether the population is at present adversely influenced by environmental pollutants on the breeding grounds.

Threats
Draining of optimal areas and probably changes in the climate.

Hen Harrier (*Circus cyaneus*)

Occasionally breeding. Besides the published records from 1892 and 1943 there are reports of the species breeding 2 to 3 times since 1960.

Montagu's Harrier (*Circus pygargus*)

Breeding status
Fluctuated between 20 and 50 pairs in the 1970s.

Trends
Started to breed in the country by the beginning of this century, increased to about 200 pairs in the mid-1950s but decreased suddenly at the end of the 1950s and the early 1960s. The low population seems, however, to have been maintained from 1965.

Pesticides and breeding production
During the years 1971–73 egg-laying pairs on the average produced 3·5 fledglings (n=37), this is slightly more than during the years 1967–69: 3·2 fledglings (n=17). Concentrations of environmental pollutants in unhatched eggs are low (ppm in lipid): DDE, 57; PCB, 45 (n=17, 1972+73), and it is doubtful whether they strongly influence the breeding success.

Threats
This species is in Denmark on the northern limit of its distribution—therefore it is easily influenced by such factors as climate-changes, drainage of bogs, cultivation of the moors, sudden changes in climate under migration, etc.

Goshawk (*Accipiter gentilis*)

Breeding status
150–250 pairs, countrywide distribution

Trends
Decline in eastern Denmark (Zealand, Funen), i.e. North Zealand 15–20 pairs in the 1940s, 4–5 pairs 1970–75. Increase in Jutland in the last decades (partly as a consequence of afforestation).

Pesticides and breeding production
21 egg-laying pairs on the average produced 2·5 fledglings (1970–73). Mean concentrations in 4 unhatched eggs (ppm in lipid) were: DDE, 53; PCB, 77 (1970–73). These rather low values are in keeping with the impression that the population is now comparatively little influenced by environmental pollutants. It is

supposed, however, that the decline of the Danish population in the 1960s was largely due to the effects of environmental pollutants (Dyck 1972).

Threats
Persecution—illegal since 1967, however still legal at pheasant rearing-sites. Egg- and skin-collecting.

Sparrow Hawk (*Accipiter nisus*)

Breeding status
Estimated 1,000–1,500 pairs, countrywide distribution.

Trends
Marked decline 1960–70, the population being reduced by 50–70%, but from 1970 the population has stabilized and begun to recover slowly. The decline has been ascertained in study-areas in Jutland and on Zealand.

Pesticides and breeding production
During the period 1956–73 egg-laying pairs on the average produced 2·6 fledglings (n = 234), this is a lower average than was observed earlier in this century, 1936–49: 2·8 fledglings (n = 74, Holstein, 1950), 1914–23: 3·0 fledglings (n = 37, Skovgaard, 1925). This lowered productivity is related to a reduced hatching rate, probably caused by environmental pollutants. Mean concentrations of pollutants in unhatched eggs from 1970–73 was (ppm in lipid): DDE, 307; PCB, 219. This makes the Sparrow Hawk the most contaminated of the regular Danish breeding birds of prey. Hawks from eastern Denmark, which are more migratory than those from the western parts, also contain higher concentrations of pollutants. It is supposed that the recent decline of the Danish Sparrow Hawk population has to a large extent been due to effects of environmental pollutants (Dyck, 1972). Productivity has not increased in recent years (1970–73; 2·6 fledglings per egg-laying pair).

Threats
Pesticides and PCB. Furthermore, still intensive persecution following total protection in 1967.

Osprey (*Pandion haliaetus*)

Breeding status
Irregular and scarce breeder, 0–2 pairs.

Trends
Extinct 1916 due to persecution and intensive egg-collecting; 1965–74 1–2 pairs breeding irregularly.

Threats
Illegal persecution, especially at fish-ponds, and egg-collecting. Re-establishment of a breeding population might be hindered by disturbance following intensive use of the forests for recreational purposes by the public.

Peregrine Falcon (*Falco peregrinus*)

Breeding status
Disappeared as a Danish breeding bird.

Trends
It has never been common and under 5 pairs have bred in the last 20–30 years. The last pair appeared at Möns Klint where the nestlings were stolen by German falconers in 1969. In 1970, 71 and 72 a pair laid eggs but they never hatched.

Pesticides
One unhatched egg from 1970 contained (ppm in lipid): DDE, 399; PCB, 545, indicating that pesticides have been a major factor in the extinction of the Peregrine in Denmark.

Hobby (*Falco subbuteo*)

Breeding status
5–10 pairs, in some years even less.

Trends
A great decline since the beginning of the century.

Threats
Although data on reproductive success and pollutants are not available, pesticides together with changes in climate have been the main reasons for the decline. But the fact that the species in Denmark is on the limit of its range means that it is easily affected by factors such as change in the structure of woods, human disturbance, etc.

Kestrel (*Falco tinnunculus*)

Breeding status
Estimated 2,000–2,500 pairs, countrywide distribution.

Trends
Fluctuates but has probably decreased considerably during the last 20 years.

Pesticides and breeding production
In the period 1957–73 egg-laying pairs on the average produced 3·8 fledglings (n=91). No definite trends during this period are discernible. Concentrations of environmental pollutants in unhatched eggs are low (ppm in lipid): DDE, 14; PCB, 27 (1970–73, n=27). It has been suggested, however, that other types of pollutants (e.g. fungicides, thallium) may have been responsible for the decline observed during the 1960s (Dyck 1972).

Threats
Change in agricultural methods, loss of suitable nest-sites and possibly pollutants.

References

Dyck, J. 1972. Environmental pollutants and population changes in birds. *In* Status of the Danish Animal World, pp. 198–218. Issued by the Zoological Museum of Copenhagen (in Danish).

Holstein, V. 1950. The Sparrow Hawk. Copenhagen (in Danish with an English summary).

Skovgaard, P. 1925. Fifty Sparrow Hawk Broods. *Danske Fugle* 2 : 1–14 (in Danish).

DISCUSSION

D. Bird: Do you have Snowy Owls? Are they in taxidermists' collections?

Jan Dyck: We have them in Greenland, which is part of Denmark, and we found several Snowy Owls at Danish taxidermists; in fact one of them said they used to have a close contact with Greenland and had stuffed a number of Snowy Owls.

R. Kenward: Were the taxidermists' birds imported?

Jan Dyck: Most of the birds were of Danish origin but some were certainly imported, as can be seen from the species: Snowy Owls, Gyrfalcons, White-tailed Eagles from Greenland, Red-footed Falcons and also some owls from Hungary. Further, we found out that the Black-shouldered Kite and Lapland Owl had been exported to Germany from Denmark, and the presence of the Golden Eagle, which does not breed in Denmark, and other species of owls shows there is some importation of birds.

Dr. Wattel: Has mounting of birds of prey been made illegal and would a Resolution help?

Jan Dyck: I think it would be a very good idea to pass some sort of Resolution on this problem. It is not forbidden to stuff birds of prey in Denmark but there should be more control, in the sense that a taxidermist has to state where he has got the bird from. It has been found that taxidermists do not know what the Order requires of them. We think it would be very useful if it was forbidden to stuff any birds of prey at all.

Prof. Hickey: Taxidermists cannot accept birds of prey in the United States; it is illegal.

R. Fyfe: There is the same law in Canada; taxidermists have been prosecuted for possessing Snowy Owls, and all such activity has stopped.

J. L. Ruos: All birds of prey have been under federal protection in the U.S.A. since 1972, and may not be possessed without a scientific permit.

M. Segnestam: Since recent game legislation in Sweden all birds of prey found dead belong to the Crown and go to museums.