

# STATUS OF THE COMMON CRANE (GRUS GRUS) IN WEST GERMANY

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As far as one knows, the Common Crane has never existed as a breeding bird in large numbers in West Germany.

By 1900 the maximum population appeared not to have exceeded 50 pairs; by 1950 there were about 35 and in 1972, following thorough research investigations, only 16 pairs.

The main breeding area existed as it does today, in the north-eastern part of West Germany, namely in the federal States of Schleswig-Holstein and Lower Saxonia, and was always closely connected to the most densely populated area of East Germany (GDR).

There are indications that around 1850 single pairs existed in Bavaria. In the north of Germany there was one breeding place near the border to Denmark up to 1949. These birds probably communicated with 2—3 breeding pairs in Denmark which possibly belonged to a former population in the south of Scandinavia.

## WWF's conservation programme

In 1972 WWF started a programme with the following aims:

1. to stabilise the remaining breeding places;
2. to increase the number of fledged young birds;
3. to restore old breeding habitats and prepare new ones to enable the extension of population reserves;
4. to use the attractive crane as a means of publicity and of achieving political influence for nature conservation in a densely populated and polluted environment.

In the course of the project, the following protective measures have been taken:

### *Scientific research:*

- studies of breeding habitat and nesting places;
- studies of breeding biology, laying of eggs, rearing of the young, moulting;
- studies of individual traditions;
- studies of influence of negative factors.

### *Practical conservation work:*

- informing landowners and authorities;
- organising an honorary group of collaborators, such as ornithologists, foresters, hunters;

- discussing and counselling with certain bodies connected with water management, agriculture, forestry;
- safe-guarding the water levels in the breeding places by:
  - a) damning of old trenches;
  - b) thinning out of trees and bushes in overgrown swamps and moors;
  - c) laying-out of new swamp areas (with the aid of digging machines and by blasting of dry pest);
- laying-out and preservation of feeding areas for the migrating crane family (mainly to increase the stock of animal food for the nestlings in the first 6 weeks of life):
  - a) by leasing or buying agricultural areas near the nesting places, in order to keep them free of pesticides;
  - b) by development of moist meadows;
- protecting the cranes from enemies, for example by increasing the shooting of Wild Boars (*Sus scrofa*); the latter have increased in numbers considerably due to the increased amount of maize being sown in recent years;
- constant supervision of the breeding places from mobile look-out vans:
  - a) against egg thieves and other crane-disturbing persons;
  - b) observation of non-hunting season (1. 3.—15. 6.);
  - c) guiding and informing tourists;
  - d) collecting of scientific data.

*Public relations:*

- publicity in newspapers and television;
- printing of a WWF crane conservation leaflet;
- producing a WWF film;
- fund raising.

## Results

The following points resulting from our research formed the basis for the drawing up of our conservation programme.

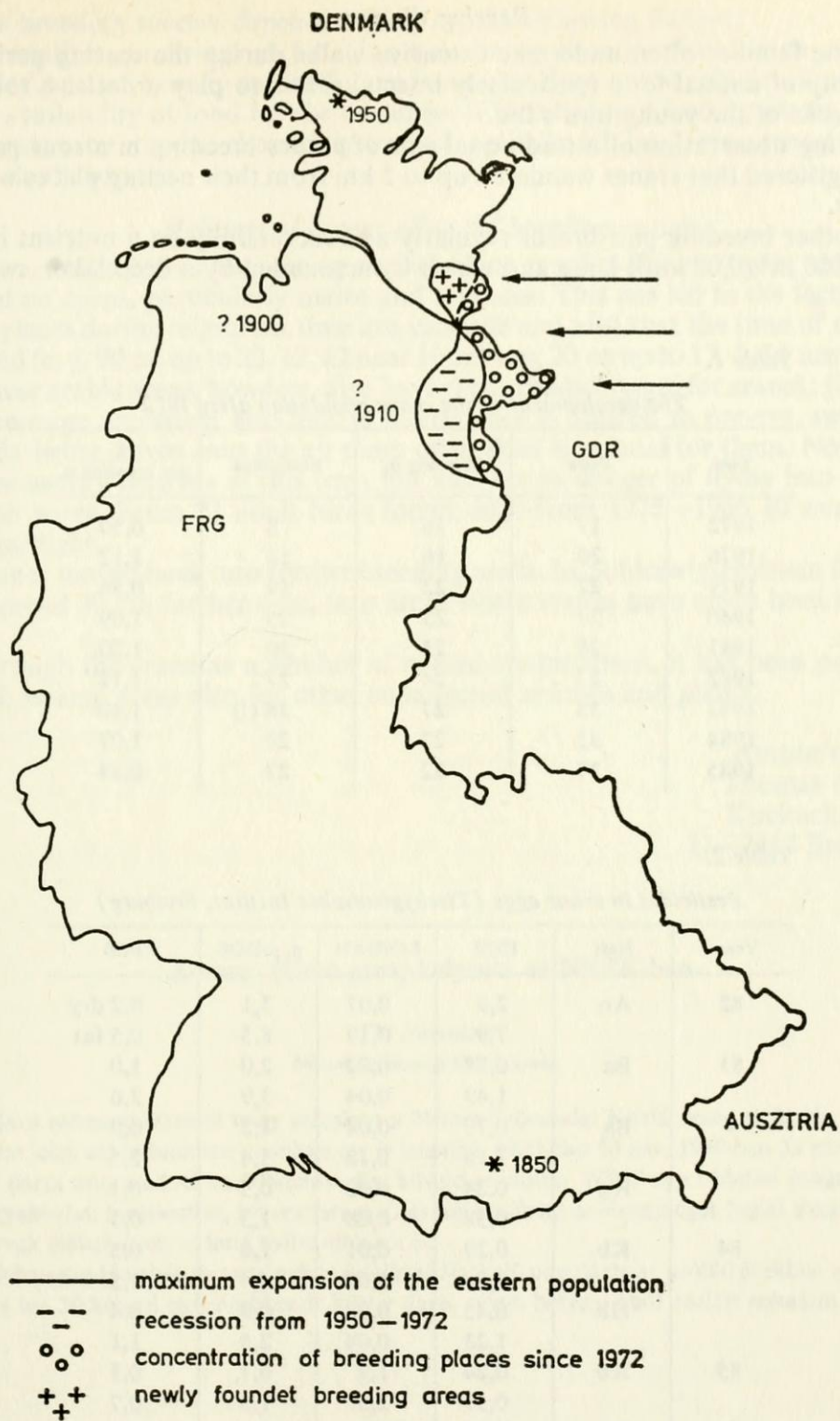
### *Nesting places*

As far as the nesting places are concerned, the crane in West Germany is very versatile. One can divide them into three groups:

1. reed-beds of shallow lakes; about 20% of breeding pairs; the nests are made of plants (*Phragmites*, *Typha*, *Carex*);
2. swampy woodlands: about 60% of breeding pairs; the birds often do not build nests but simply lay their eggs on tree roots (especially in *Alnus glutinosa*);
3. peat sphagnum moss: about 20% of breeding pairs; the nest is built on swampy sphagnum plants.

A decisive factor in the choice of nesting place is the water level (ca. 50 cm). It must provide protection against enemies on the ground and have good all-round viewing.

Sometimes eggs are laid at the end of March (the earliest observance was on 21. 3. on frozen swamp land!). One assumes that disturbed clutches (broken eggs) are often due to Spring frosts. But cranes are able to lay a second clutch (normally also consisting of two eggs) and even a third (consisting of one egg only).



Figure|1. The distribution of the Common Crane in W-Germany

### *Rearing the young*

Crane families often undertake extensive walks during the rearing period. The availability of animal food (particularly insects) seems to play a decisive role in the first 6 weeks of the young bird's life.

During observation of a traditional pair of cranes breeding in a sour peat area, it was registered that cranes wandered up to 5 km from their nesting places with their nestlings.

Another breeding pair breeds regularly and successfully on a nutrient island of only 20.000 m<sup>2</sup> (0,02 km<sup>2</sup>) large and which is surrounded by a deep lake.

*Table 1.*

*The development of the crane population after 1972*

Year	Pairs	Breeding p.	Fledglings	% per breeding p.
1972	17	16	8	0,50
1976	20	16	18	1,12
1979	27	22	19	0,86
1980	27	23	25	1,09
1981	28	25	30	1,20
1982	27	24	27	1,12
1983	33	27	38 (!)	1,40
1984	33	27	29	1,07
1985	37	32	27	0,84

*Table 2.*

*Pesticides in crane eggs (Tierhygienisches Institut, Freiburg)*

Year	Nest	HCB	LINDAN	p, p-DDE	PCB
82	An	2,9	0,07	3,1	0,2 dry
		7,9	0,19	8,5	0,5 fat
83	Ba	0,78	0,02	2,0	1,0
		1,49	0,04	3,9	2,0
	Ba	0,79	0,04	1,2	0,9
	Rg	2,18	0,12	3,4	2,5
		0,24	0,02	0,5	0,1
84	Kb	0,58	0,06	1,3	0,3
		0,29	0,01	1,6	0,5
	Hh	0,78	0,03	4,4	1,5
	Hh	0,45	0,02	0,9	0,4
85	Kb	1,23	0,04	2,5	1,1
		0,24	1,2	0,7	0,3
	Kb	0,51	2,5	1,5	0,7
	Kb	0,22	0,8	0,6	0,2
		0,51	1,8	1,5	0,6

The situation is not dangerous compared to other birds (b. of prey)

The breeding success depends mainly on the following factors:

- weather conditions at hatching time (early broods which hatch at the end of April are rarely successful, as fauna and flora are hardly developed);
- availability of food for the nestlings. If breeding and feeding places are separated by roads, chemically-treated agricultural land, etc., many nestlings don't survive.

#### *Habitats of cranes after the breeding season*

Towards the end of the rearing period, crane families like to stay in arable areas and feed on crops, particularly maize and potatoes. This has led to the fact that gathering places during migration time are versatile and also that the time of migration is delayed (e. g. 90 ex. up to 22. 12. 82 near Hamburg, 20 ex up to 17. 1. 84 near Hannover). These arable areas, however, also have their disadvantages for cranes: these open areas are more accessible and human interference is difficult to prevent, resulting in the birds being driven into the air more often than is normal for them. Not only do they lose energy reserves in this way, but also are in danger of flying into electrical telegraph wires. From 21 adult birds found dead from 1975—1985 10 were certain deaths in flight.

Cranes moved back into former breeding areas. In Schleswig-Holstein the population spread 30 km further west, into areas where cranes have never been known to breed.

Through the crane as a symbol of nature conservation, it has been possible to establish swamp areas also for other endangered animals and plants.

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### **A daru (*Grus grus*) helyzete az NSZK-ban**

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Német Szövetségi Köztársaság

A daru sohasem fészkelte nagy számban a Német Szövetségi Köztársaság területén, állomány-csökkenése jelen századunkban azonban így is jelentős. 1900-ban 50 pár, 1950-ben 35 pár, 1972-ben pedig 16 párra zsugorodott az állomány. Ezt követően indít a WWF egy védelmi programot, ami számos gyakorlati intézkedést, ismeretterjesztő és népszerűsítő tevékenységet foglal magába. Kiterjed a darvak élőhelyének védetté nyilvánítására is.

A Schleswig-Holstein tartományban található fészkelő populáció az utóbbi években terjeszkedni kezdett, s ma 30 km-rel nyugatabbra is költ a daru, olyan helyen, ahol azelőtt sohasem fészkelte.