

## The Corncrake (*Crex crex*) in the Czech Republic

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### 1. Introduction

At the beginning of the 20th Century the corncrake was considered a bird common to all Czech territory, breeding on meadows, clover fields and even on cereal fields. However, more accurate data on the distribution and numbers from then are unavailable.

### 2. Development of knowledge about the corncrake in The Czech Republic

A decrease in corncrake numbers was reported from various regions of the country from the second half of the 1940s. More precise data on the scale of decline are again unavailable. For the period 1970 - 1990 the decline was estimated at 20 - 50% of the population (ŠTASTNÝ & BEJĚEK 1993); population for the period 1985 - 1989 was

estimated at 200 - 400 calling males (ŠTASTNÝ & BEJĚEK l.c.).

More precise data on the distribution and numbers of corncrake were collected from 1995 when The Corncrake Research Group of the Czech Society for Ornithology started to operate.

### 3. Distribution and important areas of corncrake population

Distribution of corncrake in the period 1995-1997 is shown on the map (Fig. 1) in the attached paper (BURGER et al. 1998). Centres of current distribution are at higher altitudes (approx. higher than 500 m a.s.l.), i.e. in the Šumava Mts., Novohradské hory Mts., Krkonoše Mts., Orlické hory Mts., Jeseníky Mts., Beskydy Mts., Bílé Karpaty Mts. and in military training areas.

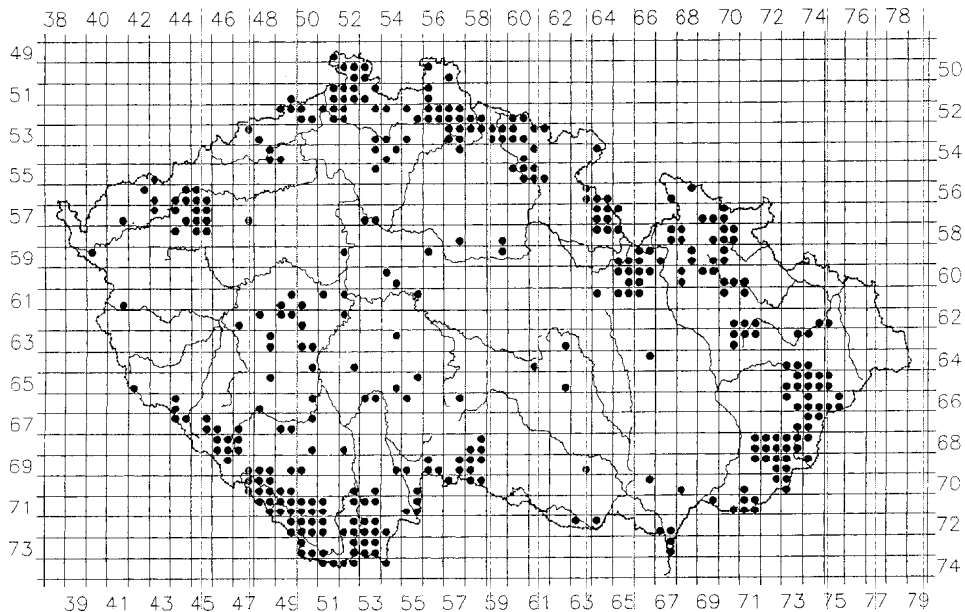


Figure 1: Distribution of corncrake in the period 1995-1997.

#### 4. Size and development of population

Current estimate, based on systematic field work of the corncrake Research Group members, is 1,500 calling males for the year 1997 (accuracy of estimate: 2 = night-time counts in most distribution centres).

These new data are probably more accurate than earlier estimates, because they are based on systematic night-time counts; however at the same time there was a real increase in corncrake numbers during the 1990s (see next paragraph). The current population trend was studied in detail in two regions during the period 1993 - 1998. Whereas numbers in the study area in the Šumava Mts. (altitude 730-950 m) were quite stable, numbers in lowland areas in southern Moravia (altitude ca 150 m) sharply increased (table 1).

Increases were reported also from some other regions at lower altitudes (hilly country), resulting in an overall increase of the Czech corncrake population in the period 1993-1998.

The reason for this increase is most probably due to the present situation of agriculture in the republic. Since the beginning of the 1990s great areas of agricultural land were abandoned or are managed less intensively than earlier. In 1995, almost 2% of arable land was not sown (58,000 ha). Also vast areas of meadows are not mown, or mown (mulched) only at the end of Summer or in Autumn. Application of agrochemicals (fertilizers and pesticides) decreased by 65% in the period 1990-1995. These facts resulted in greater areas of suitable habitats for corncrakes in the breeding season than earlier, perhaps even surplus suitable habitat - some apparently suitable sites were not used by corncrakes some years.

The future population trend for the next 5 (or 10) years will depend on the development (mainly a financial factor) of agriculture. If agriculture

stays unintensified (eg. at present intensity), then the future population trend will probably remain stable or increase slightly. If agriculture becomes more intensive (which would be associated with higher agricultural subsidies), then it is possible to expect a decreasing population trend for corncrakes.

#### 5. Threats to the corncrake population

There are no serious threats to the Czech corncrake population, because most corncrakes breed in non-managed or irregularly managed grasslands, and therefore losses caused by agricultural operations in breeding habitats are minimal. Provided the agricultural situation does not dramatically change, active conservation projects are not necessary.

#### 6. Conservation status

The corncrake is fully protected by law (Nature and Countryside Conservation Act No. 114/1992), and considered as seriously threatened according to decree No. 395/1992.) A substantial proportion of the population (ca 50%) occurs in protected areas, i.e. in National Parks and Landscape protected areas.

#### 7. Conservation projects

Since 1994 an intensive ringing programme for the corncrake has been in progress. The main aim of the programme is study of site fidelity and movement of corncrakes, obtaining biometrical data etc. The number of corncrakes ringed in the Czech Republic territory in the period 1994-1998 was 1,184. A substantial proportion of all males in the republic's territory was trapped and rin-

**Table 1:** Population trend of the Corncrake in two regions during the period 1993 - 1998.

	1993	1994	1995	1996	1997	1998
Šumava Mts.	32	24	28	26	17	38
confluence of rivers Morava and Dyje	0	1	3-5	15	21	10

ged: 20% in 1995, 30% in 1996, 37% in 1997 and 40% in 1998.

So far we had 32 recoveries in subsequent year(s) after ringing and 49 recoveries in the year of ringing (see reference paper for more detailed results - BURGER et al. 1998).

### 8. Ongoing or planned conservation or study projects

There are some indications that distribution of recovery distances and maximum recovery distances are influenced by relatively small controlled areas. Some corncrake males possibly cover longer distances than the Czech Republic. Therefore we propose to start parallel ringing throughout Europe (or at least throughout Central Europe) for possible recording of these long-distance movements.

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