

## The Corncrake (*Crex crex*) in Poland

Maciej Gromadzki

### 1. Introduction

Until the early 1970s, the corncrake was widespread and fairly numerous in the whole country, particularly in the southern part (TOMIALOJC 1990). However, there is not much published material on the corncrake in Poland and the first more detailed estimation of its number for the whole country was made only in 1997 (CHYLARECKI et al. 1998).

### 2. Development of knowledge about the corncrake in Poland

Interest in the corncrake in Poland has increased recently as a result of more data collection of this species in other European countries. In the 1980s, DYRCZ et al. (1984) found that there were about 2,100 calling males in 300 km<sup>2</sup> of optimal habitat by the Narew and Biebrza rivers (i.e. 7 males/km<sup>2</sup>). TUCKER & HEATH (1994) predicted the number of males in the whole country at between 6,600 and 7,800. Recently very high densities (up to 12 males/km<sup>2</sup>) were recorded in some parts of the Kampinowski National Park in Central Poland (JUSZCZAK & OLECH 1997). The corncrake also appears on mountains: e.g. in the Bieszczady mountains (south eastern edge of Poland). An estimated 100-200 males were recorded (GLOWACINSKI et al. 1995), and the highest recorded site was found in Zakopane (southern Poland) at 880 m asl [above sea level] (WALASZ & MIELCZAREK 1992). A great deal of information about behaviour, habitat selection, breeding biology etc. can be obtained from Schäffer's studies in Poland (e.g. SCHÄFFER & ZUB 1994). The total count of the Polish population of the corncrake was only made in 1997 (CHYLARECKI et al. 1998) and then repeated in 1998 (CHYLARECKI, GROMADZKA, GROMADZKI, ZIELINSKI in prep.).

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

From general analysis of the data about the species, gathered for the Polish Ornithological Atlas (in preparation and to be published by the team of the Gdansk Ornithological Station), one learns that the corncrake breeds in a more of the country, and particularly densely in its eastern and north-eastern part (CHYLARECKI et al. 1998).

### 4. Size and development of national corncrake population

#### 4.1. Size of national corncrake population

In 1997 it was estimated that the size of the national corncrake population was about 30,000 calling males (CHYLARECKI et al. 1998), i.e. much more than was estimated earlier (TUCKER & HEATH 1994). The actual census was conducted over 3.22 % of Poland and the whole calculation was made following statistical methods by BARNETT (1974) and BRACHA (1996). Results from the corncrake survey in 1998 seem to be similar (a rather higher number than lower - CHYLARECKI, GROMADZKA, GROMADZKI, ZIELINSKI in prep.).

#### 4.2. Development of population

In many parts of Poland at the beginning of 20th Century the corncrake was very numerous, but already by first half of the century its number had started to decrease (TOMIALOJC 1990). Generally, it is obvious that in recent decades the number of breeding corncrakes in Poland has decreased, but nobody knows by how many because there were no exact past data. WINIECKI et al. (1997) estimates that the corncrake population in the area of the middle Warta river valley in the past decade

seems to be fairly stable. Interesting findings to this problem are given in a short publication by DOMBROWSKI et al. (1998). Changes of the corncrake numbers were estimated on three plots in eastern Poland. In the upper Liwiec river valley (Siedlce province) the number decreased between 1982 and 1995 and then increased (surveys made in 1982, 1994, 1995 and 1998); near Przemyśl (Przemyśl province) the number decreased between the years 1988, 1993, 1994, 1995, 1997 and 1998, and at the Treblinka river mouth to the Bug river (Ostroleka province) the number in the years 1984, 1995 and 1997 was similar. During the study period no important changes in vegetation structure were observed. Between 1994-1998 the meadows were very wet due to intense rainfall in May and June.

### 5. Threats to the corncrake population

Main threats to corncrake population are the growing intensity of agriculture and the decline in areas of preferred habitats.

### 6. Conservation status

The corncrake was one of a few bird species not included on the list of protected birds, according to the law on nature protection of 7 April 1949 (then completed in the 1950s and 1960s - SZCZESNY 1971), which indicates that it was supposed to be a common breeder in Poland. The species has been protected by law all year from 30 December 1983 (DZIENNIK & USTAW 1984). It is not included in the Polish Red Data Book (GŁOWACINSKI 1992).

### 7. Conservation projects

Not known at the moment.

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

- The corncrake survey for the country was repeated in 1998, by similar methods as in 1997.

The paper, including two years' studies, will be prepared in 1999 (team of the Gdansk Ornithological Station);

- Distribution and movement of corncrakes between broods in open areas of the Kampinowski National Park and its surroundings (B. Olech with team).

Prof. Dr. Maciej Gromadzki  
Ornithological Station  
Nadwisłansko 108  
PL - 80-680 Gdansk 40  
Poland

### References

- BARNETT, V. (1974): Elements of sampling theory. - The English Univ. Press, London.
- BRACHA, C. (1996): Teoretyczne podstawy metody reprezentacyjnej. - PWN, Warszawa.
- CHYLARECKI, P., GROMADZKA, J. & ZIELINSKI, P. (1998): Corncrake survey in Poland. Part 1. Final report of the survey in 1997. - OTOP/Gdansk Ornithological Station, Gdansk.
- DOMBROWSKI, A., HORDOWSKI, J., KASPRZYKOWSKI, Z., GOLAWSKI, A., RZEPALA, M. & CHMIELEWSKI, S. (1998): O zmianach liczebności derkacza *Crex crex* we wschodniej Polsce. [Changes in numbers of corncrake *Crex crex* in eastern Poland]. - *Kulon* 3 (2): 205-211.
- DYRCZ, A., OKULEWICZ, J., WITKOWSKI, J., JESIONOWSKI, J., NAWROCKI, P. & WINIECKI, A., (1984): Ptaki torfowisk niskich w Kotlinie Biebrzanskiej. Opracowanie faunistyczne. [Birds of fens in Biebrza Marshes. Faunistic approach]. - *Acta orn.* 20: 1-8.
- DZIENNIK USTAW PRL. (1994): Nr 2: 22-24. [official gazette announcing current legislation].
- GŁOWACINSKI, Z. (ed.) (1992): Polska czerwona księga zwierząt. [Polish Red Data Book of Animals]. - PWRiL, Warszawa.
- GŁOWACINSKI, Z., PROFUS, P. & WUCZYNSKI, A. (1995): Zarys awifauny Bieszczadzkiego Parku Narodowego i problemy jej ochrony.

- 
- [Avifauna of Bieszczady National Park and problems of its conservation]. - Rocz. Bieszczad. **4**: 259-263.
- JUSZCZAK K. & OLECH B. (1997): Liczebność i rozmieszczenie derkacza *Crex crex* na terenach otwartych Kampinoskiego Parku Narodowego i jego okolic w latach 1996-1997. [Numbers and distribution of the Corncrake *Crex crex* in the open areas of the Kampinoski National Park and its surroundings in 1996-1997.]. - Not. orn. **38** (3): 197-213.
- SCHÄFFER, N. & ZUB, K. (1994): Tam derkacz wrzasnął z łąki. [There the corncrake called from the meadow]. - *Lowicz Polski* **7**: 14.
- SZCZESNY, T. (1971): Ochrona przyrody i krajobrazu. [The conservation of nature and landscape]. - PWN, Warszawa.
- TOMIALOJC, L. (1990): Ptaki Polski. Rozmieszczenie i liczebność. [The birds of Poland. Their distribution and abundance]. - PWN, Warszawa.
- TUCKER, G. M. & HEATH, M. F. (1994): Birds in Europe. Their conservation status. - BirdLife International.
- WALASZ, K. & MIELCZAREK, P. (eds.) (1992): Atlas ptaków lęgowych Małopolski 1985-1991. [The atlas of breeding birds in Malopolska 1985-1991]. - Biologica Silesiae, Wrocław.
- WINIECKI, A., GRZYBEK, J., KRUPA, A. & MIELCZAREK, S. (1997): Awifauna lęgowa doliny środkowej Warty - stan aktualny i kierunki zmian. [Breeding avifauna of the middle Warta River valley - present condition and trends of changes]. - Not. orn. **38** (2): 87-120.