

The Corncrake (*Crex crex*) in Belarus

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1. Introduction

No special studies of corncrakes were conducted in Belarus. Therefore, as quite a common species, it was counted during routine censuses in various regions (Table 1). All data were collected during the peak of the breeding season in early morning except for one special census in 1995 (*).

2. Development of knowledge about the corncrake in Belarus

Estimates of corncrake numbers were made in the early and late 1990s by scientists from The National Academy of Science of Belarus (TUKKER & HEATH 1994; NIKIFOROV et al. 1997). The situation appears quite healthy in Belarus compared with the majority of Western European countries.

Table 1: Density of calling males in different habitats in Belarus. *- census after sunset

Year	Site, location	Density of birds, calling males/ha	Square of investigated area, ha
1988	Floodplain of Berezina River, Minsk district	0,64	15,7
1988	Floodplain of Berezina River, Minsk district	5,95	3,36
1988	Drained floodplain of Berezina River, Minsk district	0,35	28,3
1989	Perennial grass field in drained floodplain of Pripiat River, Stolin district	0,19	53,3
1990	Meadow in natural Floodplain of Pripiat River, Zhitkovichy district	3,18	6,3
1990	Meadow in natural Floodplain of Pripiat River, Zhitkovichy district	1,27	7,8
1990	Meadow in natural Floodplain of Pripiat River, Zhitkovichy district	0,29	34,5
1988	Deserted drained hay-making meadows, Khoyniky district	0,33	Mean density for investigated area
1990	Deserted drained hay-making meadows, Khoyniky district	1,5	Mean density for investigated area
1992	Deserted drained hay-making meadows, Khoyniky district	0,71	Mean density for investigated area
1992	Deserted drained hay-making meadows in one year after fires, Khoyniky district	1,28	Mean density for investigated area
1992	Deserted arable land, Khoyniky district	0,4	Mean density for investigated area
1992	Deserted drained hay-making meadows, Khoyniky district	0,7	Mean density for investigated area
1995*	Deserted drained hay-making meadows, Khoyniky district	0,7	Mean density for investigated area
1995	Natural stepped meadows in the floodplain of Pripiat River, Khoyniky district	0,2	Mean density for investigated area

3. Distribution and important areas of corncrake population

Corncrakes are present in high numbers in Belarus (Table 1). There are extensive habitats suitable for the species - for example, the wide floodplains of plain rivers such as the Pripiat, Dniepr, Berezina, Nieman and Sozh and their numerous tributaries.

Maximal densities of corncrakes were recorded in natural meadows in floodplains usually flooded in Spring (Table 1). These meadows have mosaic structures with bushes, lakes in old beds and low marshy areas. The mosaic structure of meadows counteracts human pressure...during haymaking some grass always remains and provides a shelter for corncrake.

The second important habitat for corncrake is in agricultural meadows on drained mires. The density of corncrake on these can be quite high. But due to the increased intensity of haymaking, losses of birds, and especially of clutches, are higher. Monitoring between 1984-1990 on artificial meadows in the Pruzhany and Smolevichy districts (Brest and Minsk regions respectively)

shows that the highest density of calling males was registered between 1-3 years after drainage works. Afterwards the numbers of corncrake dropped significantly. Numerous shells of corncrake eggs eaten by crows during haymaking were found in such habitats.

Besides these two main habitats, corncrakes are found on old clearings of wet or marshy woods, on edges of mires, on grassy banks of lakes, reservoirs, ponds, winter cornfields, especially near floodplains, and on drained land. Between 1995-98 in the Grodno region, calling corncrakes were recorded mainly on fields with perennial grass, winter rye and marshy meadows. Significantly fewer birds were recorded on Spring cornfields and sedge meadows.

The importance of sites with usually low density of calling males can rise significantly in the years whenever main habitats can't be occupied by corncrakes. They provide a shelter for the birds. We observe this especially in recent years with extremely hot summers. After warm winters with little snow cover, rivers do not flood in Spring. The following droughts prevent growth of high and dense vegetation in meadows. The

Figure 1

actually not available

Figure 1: Dynamics of temperature and precipitation in Belarus (according to Loginov 1996).

numbers of corncrakes in floodplains drop. In extremely dry years artificial fires in meadows in Spring are more widespread. Afterwards wide areas become unsuitable for corncrake until the next breeding season. But the presence of other habitats permits them to breed.

4. Size of national corncrake population

The population of corncrakes in Belarus is estimated at between 25,000-40,000 calling males or breeding pairs. Between 1980-1990s negative trends were recorded both in Europe and Belarus. Birds disappeared from some sites where they had been seen regularly - for example in small meadows in the Minsk Botanical garden and in the surroundings of Minsk airport etc. Monitoring of corncrakes breeding in the floodplain of the small river Ratomka in the Minsk district shows that numbers of birds dropped fivefold between 1990 and 1999. In sites with high density of corncrake, negative trends were not seen, except in extremely dry years. In recent decades droughts and the absence of flooding are more common. It is probably connected with global warming and xerotization (Fig. 1).

5. Threats to the corncrake population

Negative trends in numbers of corncrake can be affected by global climatic changes as well as through deterioration of habitat structure.

6. Conservation status.

Not applicable.

7. Conservation projects

None.

8. Ongoing or planned conservation or study projects

The corncrake situation needs to be addressed even in regions with high numbers as the species

has sharply declined in Western Europe. Insufficient knowledge of why, at what speed and what causes the fluctuations in the population of the corncrake make any prognosis of its survival in Belarus impossible.

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