

ACTUAL STATUS OF THE CORNCRAKE (*CREX CREX*) IN THE NORTHEASTERN PART OF ROMANIA

BY

CARMEN GACHE¹, S. TRELEA²

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The corncrake (*Crex crex*) is a globally threatened bird; the information about the real situation of corncrake in Romania were not sure before the year 1997 when the Romanian Ornithological Society organised a national survey for this species. The estimated population of corncrake in Romania is about 20000 – 22000 males (pairs). This is the first special study regarding this bird species realised in the north - eastern part of Romania. We give here information about the birds' distribution, the habitats and the trend of population, based on our observations beginning from 1997.

Introduction

The corncrake (*Crex crex*) is a globally threatened bird species; in the Western Europe, the corncrake' populations are very small (France, United Kingdom) or are near disappeared (Spain, Switzerland). In France, the corncrake's population decreased with 40% during only 8 years. The principal reasons of this dramatically decrease are the loss of suitable habitat (humid meadows and wetlands) and the earlier mechanisation mowing (destroy the nests and kill the chicken, too young to fly and escape in the nearest territories).

The information about the actual situation of corncrake in Romania was not enough because it does not exist one study especially for this species. In 1997, the Romanian Ornithological Society organised a national census of the corncrake's population, with the financial support of the Royal Society for the Protection of Birds (RSPB) from the United Kingdom. In this project, thirty-nine volunteers worked; we tried to cover the most part of our country, but, unfortunately, the volunteers' number was not enough in the southern part of Romania. This program had three important aims: to estimate the Romanian corncrake's population; to identify the suitable habitats in our country; to achieve the distribution of the corncrake on the Romanian map.

There were organised field observations in May and June 1997, using the standard field counting methods. The volunteers visited 69 study areas (5 x 5 km², selected in the U.T.M. system); the corncrake was found in 59 areas: from these, in 46 areas, the

¹ „A.I. Cuza” University of Iași

² „Bucovina” Rădăuți Center of Studies

corncrake was present in May and June, in 5 areas was counted only in May and in one study area was found only in June.

The Romanian corncrake's population was estimated between 10000 – 20000 pairs (2). Meadows, hay fields and grassland represent the suitable habitat (3). The corncrake was present in very different habitats, but the maximum of abundance was in those territories where the vegetation was a mosaic of meadows, grassland and cereals cultivated band (wheat, barley). We did not find the corncrake on large surfaces with suitable habitats and, sometimes, these areas without corncrakes are nearly to territories where this species are breeding (1). In the Danube Delta, the corncrake was present also in areas cultivated with potatoes (PK59 and PK28, D. Hulea, 1997) – unusually habitat for corncrake, Further studies (D. Munteanu, 1998, F. Feneru, 1998 - 1999) found this species in the mountain meadows also.

In fact, the corncrake distribution is point-like and lineal following the riverine meadows.

Methods of study

The corncrake (*Crex crex*) counting use the males' calling – is a dissyllabic sound – which is more strongly during the night (between 23 h – 03 h). In June, the males call during the day also. The climatic conditions influence calling activity – it is reduced in the windy nights.

We did nocturnal field trip to estimate the corncrake breeding populations; the nocturnal counting give very good results because the corncrake males are territorial birds. We did, also, day - time field trip to identify the suitable habitat and to observe the corncrake's biology.

Our field observations began in 1995 and we covered different areas in the north – eastern of Romania (Suceava county, Botoșani, Iași). The field trips were organised between 10 – 15 May and 25 June. We visited the next areas (in U.T.M. system, we give a locality's name for each area): MN19 (Rădăuți), MP10 (Măneuți), MP00 (Gălănești), MP20 (Dornești), LP90 (Putna), LN86 (Câmpulung Moldovenesc), MP84 (Rădăuți-Prut), MP83 (Viișoara), MP63 (Hudești), MP92 (Ichimeni), MP80 (Hănești), NN09 (Dângeni), NN19 (Stâncă), NN25 (Vlădeni), NN34 (Țigănași), NN03 (Belcești), NN52 (Holboca), NN11 (Osoi), NN60 (Costuleni), NM89 (Gorban).

Results and discussions

The corncrake male (*Crex crex*) was identified in the breeding season in different investigated areas: Rădăuți (Suceava), Dornești, Măneuți, Gălănești, Câmpulung Moldovenesc, Rădăuți-Prut, Stâncă-Ștefănești, Gorban, Miorcani, Viișoara, Ichimeni, Calu Alb – Havârna, Dângeni, Hălțeni, Vlădeni, Borșa, Larga Jijia, Țigănași-Vânători, Bosia, Chicerea, Osoi, Costuleni, Belcești-Tansa.

Usually, the male's counted number was more great in May than in June. This is possible because part of birds go away to others territories (in May the corncrake is in the migration period) or because the climatic conditions were unfavourable (in 1997 and

1999, in some villages, we did not cover the all counting points because part of the roads were covered by the rainfalls in June).

In May, the males conquer the breeding territories, so, part of them will go in the nearest areas. We observed a change of place from the cereals fields to the meadows and grasslands. Exceptionally, we found the same males' number in May and June (in 1997, we counted six corncrake males in the area MP20) or a biggest number in June than in May (in 1997, in May, three males were present in the area MP92 and in June we found for males).

We saw that the corncrake has a high fidelity for the breeding territory and the changes of place are very short – no more than 300 m; this fact give a great accuracy to corncrake' s census. Only few times we met more large changes of place – for example, between 8 - 12.06.2001, a male go away on a distance about 500 m along the Sucevița River's meadow, without any visible reason.

In the visited areas, the corncrake (*Crex crex*) was present in areas covered with suitable habitat (humid meadows and grasslands, dry meadows and grasslands, cereals fields), but in unusually habitats, also. In 1999, between 8 – 16 Mai, we listened daily two males, with a very strong calling activity, in the racecourse perimeter from Rădăuți. In 2001, we counted one male during the whole breeding season in a potatoes field, in the south – eastern part of „Ochiuri” pounds; in 2003, we found once again the corncrake in an cultivated area with potatoes, maize and wheat, following the Sucevița River's meadow (three males in May and only one in June). Also an exception is the presence of three males in June 2002, in a meadow forest with high herbs between the trees, in the MP20 area – we are thinking that, in May, these birds were present in a nearest dry meadow (the distance is around 500 m).

In some visited areas – MP80, NN03 and NN52 – the suitable habitat covers more or less large surfaces, but the corncrake is absent. In the areas NN03 and NN52, the corncrake absence is due the small suitable habitat surfaces, but in the area MP80, the humid grassland is very large on the tail of Hănești Lake. In some areas, the small number of the corncrake's males is due to the point – like distribution of the suitable habitats – in the areas MP92 and NN25, there are only very small surfaces of humid meadows and grasslands. In other areas, the territories with good habitats where we did not found the corncrake are adjacently occupied territories. We are thinking that the intensive grazing is a possible reason for this absence, because there the corncrake's habitat was humid grassland and dry meadows. We cannot exclude, also, like stress – factor the great number of turned wild cats and dogs, which could eat the corncrake's eggs and kill the juveniles.

The changing of habitat forces the birds to look for new breeding territories. For example in the area MP20, the counted number of corncrake males' decrease constantly from the study's beginning. In 1997, we found six males on a surface about 1,5 km² covered by dry meadows, with high herbs (25 – 30 cm); in 1999, on the same surface, we counted only three males. In May 2002, a middle part of this area was plough and we saw three turned wild cats there; on 12th – 13th May, we listened four males with very

strong calls, including during the day (on 12th May, at 12h05' o'clock). On 20th May, we identified only two males at 300 m distance from initial territory and in June, we found three males, but one humid meadow, between the trees of a riverine forest. We are thinking that those were the same birds, which change slowly the place, searching suitable and safety territories. In 2003, the ploughed area was extending to 23 hectares and we listened two corncrake males in a small nearest territory with humid meadow.

The biggest corncrake's effectives were recording in the areas where the habitat was a mosaic of meadows, grasslands and cereals fields (wheat, barley, oat and rye) and which were situate on the riverine meadows, on humid territories, frequently near swampy or floodable areas. In 1997, we counted a very big number of corncrake males in two areas with different aspect. The biggest number was finding in the area NN09, on the floodable Jijia River's valley, in a swampy region. There, 17 males were counting in May, on a surface of 780 de hectares covered with bands of humid meadow and wheat fields. In June, we listened only 12 males, but this decreasing could be apparently because the access on the villages' roads was reducing due the abundant and prolonged rainfalls. In the second area, MP83, we found a more high density despite the presence of a more small number of birds. In May, we listened 14 males: nine males were counted on a humid meadow with a surface of 105 hectares, another four males were present on a surface of 5 hectares, covered by humid grassland and one male was singing in wheat field of 50 hectares. In June, we recorded only 10 males (in the humid meadow we found five males, the others numbers remaining the same).

We cannot see often the corncrake (*Crex crex*) but not because this birds is really a rare species. The corncrake has a hidden life and a cryptic plumage, which give it a very good camouflage in its suitable habitats. We saw the corncrake only two times belong our studies. A first observation is from the autumn migration period (15.10.1995) – two birds were flying just at 8 – 10 m, in front of us, from the small herbs of the humid grassland on the tail of Belcești-Tansa Lake. The second observation is from June 2001, when we heard the corncrake male calling in a humid meadow, near the Câmpulung Moldovenesc town. The male permit us to approach at 5 m, when he took it flying. The bird goes down at 45 m distance and, going through the herbs, come back in 15 – 20 minutes and began his calling. We disturb once again the male and he was flying to 20 m distance. We can saw his approaching through the herbs to the initial point, but the birds did not call again.

Our studies pointed out the lineal and point – like distribution of the corncrake in this part of Romania, following also the riverine meadows. It is obviously that the corncrake (*Crex crex*) has a negative trend of its population, with a slowly decrease belong the years. In this moment, this species is not in a immediately dangerous in Romania. If we take care about the dramatically regress in the Western Europe, it is usefully to protect the corncrake (*Crex crex*) now and no more late.

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