

## A NEW BREEDING SITE OF THE ROOK *Corvus frugilegus* IN SOUTH–EASTERN ANATOLIA (TURKEY)

### Novo gnezdišče poljske vrane *Corvus frugilegus* v JV Anatoliji (Turčija)

RECEP KARAKAŞ

University of Dicle, Science & Art Faculty, Department of Biology, 21280 Diyarbakır, Turkey,  
e-mail: rkarakas@dicle.edu.tr

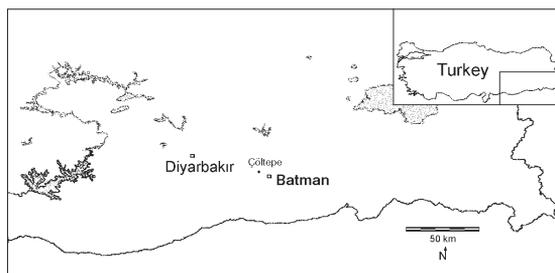
#### 1. Introduction

The Rook *Corvus frugilegus* is known as a breeding bird in some parts of Turkey, commonly in the east of the country and also in central Anatolia and Thrace (KASPAREK 1989). It is chiefly resident in Turkey, though some birds from north and inner Anatolia probably migrate to the south of the country, especially in colder winters, and gather into large groups (for example, thousands of individuals could be seen in Nizip, Halfeti, Şanlıurfa, Viranşehir, etc. during winter season according to my personal observations from 2000 onwards). The share of the immigration from other areas outside Turkey to this area is not known. south-eastern Anatolia has steppe vegetation but the use of steppe for arable farming, that is not a suitable habitat for breeding of Rook, is increasing. According to the available literature, there are no breeding records for the Rook from the south-east of Turkey (e.g. BEAMAN 1986, MARTINS 1989, EAMES 1990, AYVAZ 1993, KIRWAN & MARTINS 1994, BIRIÇIK 1996, KIRWAN & MARTINS 2000, KARAKAŞ & KILIÇ 2002, KIRWAN *et al.* 2003). The Rook has not been known to breed in south-eastern Anatolia, which was originally a steppe region, probably due to the region's greater aridity and extremely hot summers which give too short a period for breeding (KASPAREK 1989). KASPAREK & BILGIN (1996) did not include south-eastern Anatolia in the distribution area of the species.

#### 2. Study Area and Methods

Between 2002 and 2004 a breeding colony of Rook was found at Çöltepe, which is located 65 km east of Diyarbakır, in the Bismil district and Batman province (Figure 1). The area is a large plain with a dry and irrigated agricultural area with grain, tobacco and cotton crops. The colony is situated on trees in the garden of the railway station, which is located parallel to the Bismil – Batman main road (at the 20<sup>th</sup> km) at the north side, in the Çöltepe Village (UTM: 37S 658943 E / 4190687 N).

Ornithological trips to the Hasankeyf region were conducted from October 2002 to July 2004, regularly once a week, within the scope of an avifaunistic research project. During the project, observations were made of differing duration and using standard ornithological equipment and identification methodology (HARRISON 1975, HEINZEL *ET AL* 1998 & MULLARNEY *et al* 1999).



**Figure 1:** Location of the breeding site in south-eastern Anatolia

**Slika 1:** Položaj gnezdišča v jugovzhodni Anatoliji Turčije

#### 3. Results and Discussion

There were 29 occupied nests on two trees – a Honey Locust *Gleditsia triacanthos* and a White Mulberry *Morus alba*. Most of the nests (26) were built on the Honey Locust tree. The nests were constructed on high branches in rather isolated groups. The apparently well-built nests consisted mainly of branches and twigs and were as large as 50 – 60 centimetres in diameter, and in the shape of a hemisphere. Both pasture and agricultural areas were used for feeding. Also, the road was frequently visited for feeding on insects, birds, and small mammals killed by traffic. This feeding behaviour (collecting on roads) has been already described (CRAMP 1998). The main feeding grounds were the fields between Batman and Bismil. There are some seasonal scattered pools in the area that Rooks also visited. During the winter period

they use these areas together with Jackdaws *Corvus monedula*, in large groups, until the end of March. We noted that, during the breeding season, Rooks do not go over the mountain pass between Batman and Hasankeyf. Jackdaws also do not pass to the west of the mountain pass during the breeding season. The numbers of breeding Rooks remained constant over the two years. Non-breeding birds formed 15 – 35% of the population. The total number of birds was around 100. Breeding started in mid April. On 28 June 2003, young individuals were observed in a group, with adults, on the ground of pasture area near Çöltepe village. Young individuals were determined by a white fleck at the back of the bill and dark brownish feathers, and were also smaller than adults. The same colony was observed in the study area during 2004.

KASPAREK (1989), in his study, noted 60 – 65 known breeding sites of Rook in Turkey but did not mention any from south-eastern Anatolia. The breeding areas, eastern Anatolia, central Anatolia and Thrace, are isolated from one another. Turkey's Rook population is virtually restricted to steppe and open cultivated valleys. The assumed population size in Turkey is 10.000 – 50.000 pairs (KASPAREK & BILGIN 1996, CRAMP 1998). Due to the climatic changes that occur in south-eastern Turkey, suitable habitats and conditions for this species are appearing.

The region is undergoing climatic changes as a result of the developing South-east Anatolia Project (GAP) which is increasing the percentage of land under water. As a result, many parts of the steppe areas have been converted to arable land by irrigation, which presumably affects climate. There may thus be a relation between climatic change and breeding of the Rook in the region.

The population size of Rook has decreased in parts of central Europe due to changing land-use and agricultural methods, including use of pesticides and probably other factors such as climate and food availability, that are capable of affecting the breeding success of the species (CRAMP 1998).

**Acknowledgements:** This work is a part of a research study supported by the Research Fund of Dicle – University (DÜAPK-02-FF-24).

## Summary

The Rook *Corvus frugilegus* is known as a breeding species in Turkey, but the breeding area is not completely defined. The first known breeding site in south-eastern Anatolia is described in this paper and is situated at Çöltepe (UTM: 37S 658943 E / 4190687

N) near the city of Batman. The nests were located colonially on two trees. The size of colony was about 50 pairs (100 individuals). Some individuals were breeding (29 pairs) while others were non-breeding (approx. 15 – 35% of the population). A hypothesis is put forward that, due to climatic changes that are occurring in south-eastern Turkey, arising from the South-east Anatolia Project (GAP), suitable habitats and conditions are being created that account for the initiation of breeding of this species in the region.

## Povzetek

Poljska vrana *Corvus frugilegus* je gnezdilka Turčije, vendar njen areal ni popolnoma znan. Avtor opisuje prvo gnezdišče v JV Anatoliji blizu mesta Batman (UTM: 37S 658943 E / 4190687 N). Gnezdišče je bilo odkrito na dveh drevesih, kjer vrane gnezdiijo kolonijsko. Velikost kolonije je bila približno 50 parov (100 osebkov). Gneznilo je 29 parov, približno 15 – 35% opaženih ptic pa v koloniji ni gneznilo. Avtor je predstavil hipotezo, po kateri naj bi zaradi klimatskih sprememb v tem delu Turčije, nastalih zaradi namakanja obsežnih površin, nastale ustrezne razmere za gnezdenje poljske vrane.

## References

- AYVAZ, Y. (1993): The Birds of Elazığ Region. – Doğa – Tr. J. Zool. 17: 1–10.
- BEAMAN, M. (1986): Turkey Bird Report 1976 – 81. – Sandgrouse 8:1–41.
- BIRICIK, M. (1996): Birds of Kabaklı Reservoir, Diyarbakır. – Tr. J. Zool. 20: 155–160.
- CRAMP, S. (1998): The Complete Birds of the Western Palearctic, on CD – ROM. – Oxford University Press, Oxford.
- EAMES, J. (1990): Selected bird observations from Turkey: Spring and Summer 1987. – OSME Bulletin 23: 6–13.
- HARRISON, C. (1975): Jungvögel Eier und Nester aller Vögel Europas, Nordafrikas und des Mittleren Ostens. – Verlag Paul Parey, Hamburg & Berlin.
- HEINZEL, H., S. R. FITTER & J. PARSLow (1998): Birds of Britain & Europe, with North Africa & The Middle East. – Harper Collins Publishers, London.
- KARAKAŞ, R. & KILIÇ A. (2002): Birds of Göksu Dam (Diyarbakır) and new records in south-east Turkey. – Sandgrouse 24 (1): 38–43.
- KASPAREK, M. (1989) Breeding Distribution of the Rook (*Corvus frugilegus*) in Turkey. – Sandgrouse 11: 89–95.
- KASPAREK, M. & BILGIN C.C. (1996): Kuşlar (Aves). – In: KENCE, A. & BILGIN C.C. (eds.), Türkiye Omurgalılar Tür Listesi. – TÜBİTAK, Ankara.
- KIRWAN, G.M. & MARTINS R.P. (1994): Turkey Bird Report 1987 – 91. – Sandgrouse 16: 76–117.

- KIRWAN, G.M. & MARTINS R.P. (2000): Turkey Bird Report 1992 – 1996. – Sandgrouse 22: 13–35.
- KIRWAN, G.M., ÖZEN M., KURT B. & MARTINS R.P. (2003): Turkey Bird Report 1997 – 2001. – Sandgrouse 25: 8–31.
- R.P. MARTINS, (1989): Turkey Bird Report 1982 – 86. – Sandgrouse 11: 1–41.
- MULLARNEY, K., L.SVENSSON, P.J. GRANT & D.ZETTERSTRÖM. (1999): Collins Bird Guide. – HarperCollins, London.

Prispelo / Arrived: 20.4.2005

Sprejeto / Accepted: 19.9.2005