

Changes in Status of the Black Vulture *Aegypius monachus* in Bulgaria for the period 1980-1990

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INTRODUCTION

In spite of some recent publications on the Black Vulture in Bulgaria (Baumgart 1989; Simeonov *et al.* 1990; Nankinov *et al.* 1991) the present status in our country of this globally endangered species, as well as the trends in its population dynamics, are only tentatively known. At the same time the necessity for more and detailed information about the species is obvious. We need, above all, to determine specific preservation measures both in Bulgaria and in this particular part of the Balkan peninsula, as the birds in question are common to Bulgaria and Northern Greece. This information will certainly help action within the framework of the European Black Vulture Conservation Project too.

MATERIAL AND METHODS

This work is based on data gathered intentionally from 1 January 1980 to 31 December 1990 during regular visits to the Eastern Rhodope mountains during all seasons. After 1988 the same region has been visited for about a week at least once monthly. Special attention was paid to places for which there was information about former nests of the Black Vulture, as well as to those areas where there are suitable nesting conditions at present. The species was especially searched for in other parts of the country, too, during repeated visits to suitable places, particularly in the southern and eastern parts of Bulgaria. We also used all available information on this species in the literature, as well as unpublished data kindly placed at our disposal by other persons. Our observations were made considerably easier after the Bulgarian Society for the Protection of Birds built two special sites for feeding vultures in Eastern Rhodope mountains - the so-called "vulture restaurants". A total of 147 observations were made for the above period, detailed data of which are in safe-keeping with BSPB National Bank for ornithological information.

RESULTS

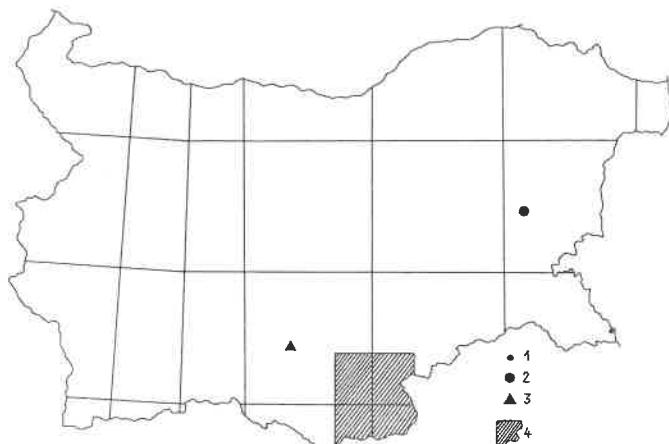
Distribution and general status

Among the information collected there was none to indicate confirmed breeding of the species in Bulgaria for the period of the research. Local people showed us three localities in the Eastern Rhodope mountains in the immediate vicinity of the state border with Greece (Fig. 2), where they

claimed there were Black Vultures nests until about 1980-1982. Two of these sites are northern slopes covered with oak forest (*Quercus* sp.) and nests were built on oak trees. During our visits to both sites we found them so radically changed because of felling of the trees that we could not tell for sure if the information about the vulture's nesting there was reliable.

During the period of the study there were only four observations of Black Vultures outside the confines of the Eastern Rhodope mountains (Fig. 1):

Figure 1. Distribution of the Black Vulture in Bulgaria during the period 1980 - 1990 (1 - possible breeding; 2 - probable breeding; 3 - observation outside the breeding season; 4 - area of permanent occurrence of the vultures).



1. On 15th April 1981 two birds were observed at a carcass of a sheep near the village of Yasenovo, district of Burgas, on the Eastern Stara Planina Mountain (UTM NH14) (Lubomir Profirov, pers. comm.);

2. On 25th April 1981 one Black Vulture was observed in flight near the same village of Yasenovo (L. Profirov, pers. comm.);

3. On 11th December 1983 two Black Vultures were seen in agricultural fields near the village of Topolovo, district of Plovdiv (UTM LG34) (Petrov 1990);

4. On 11th July 1989 one bird was observed at some dead pigs near the mouth of the river Silistar, in Strandzha Mountain (UTM NG85) (Boian Milchev, pers. comm.).

While observation No. 3 refers undoubtedly to wanderers, Black Vultures observed during the breeding season in Eastern Stara Planina and Strandzha Mountains could possibly have been birds from nearby breeding sites. Much closer attention should clearly be paid to these places, especially in the region of Strandzha Mountain, where we cannot rule out occupied nests in the border area with Turkey.

Distribution of the Black Vulture over the territory of the Eastern Rhodope mountains is shown in Figure 2, emphasising the two sectors with most observations of the species, although this might be due to the whole range being unevenly covered during the period of study. However, in these two sectors of the mountains Black Vultures can be observed all the year round, indicating that breeding conditions there most closely correspond to the ecological requirements of the species. It seems natural to assume that the probability is highest for the first nest to be built in one of these two sectors in the event of the Black Vulture breeding once again in Bulgaria. Interestingly, both sectors contain considerable areas where only a few ghost villages occur and which are very seldom visited by people. Thus conditions favouring nesting by vultures are present. Unfortunately, the most suitable breeding habitats, namely the forests in the border strip most closely situated to Greek breeding areas, have been subjected to mass felling during the last decade or so. This is most likely one of the most important negative factors preventing the Black Vulture from breeding in the Eastern Rhodope mountains for the last ten years.

Figure 2. Area of permanent occurrence of the Black Vulture in Bulgaria (1 = site of observation; 2 = former breeding site).

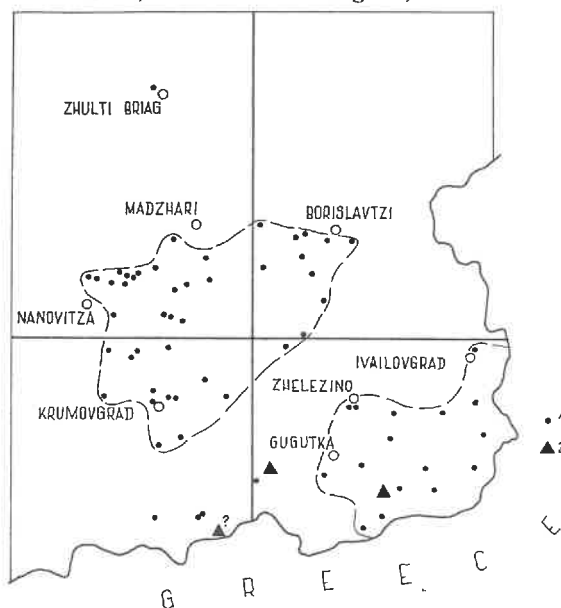


Figure 3 shows the distribution of all 147 observations by years. It can be seen that in spite of certain fluctuations the total number of observations has grown throughout the decade. This corresponds well to the overall trend of increasing populations of some other vultures and carrion-eating birds in Bulgaria (Raven *Corvus corax*; Griffon Vulture *Gyps fulvus* and others), established since the beginning of the 1970s after these species had nearly become extinct in the 1960s. Among the causes of this increase we should stress the apparent role played by the protective measures undertaken after 1960: a total ban on poisoned baits for controlling terrestrial predators, a ban on shooting all birds of prey (until 1986 all species were banned from shooting with the exception of the Goshawk *Accipiter gentilis*, Sparrowhawk *Accipiter nisus*, Marsh Harrier *Circus aeruginosus* and Rough-legged Buzzard *Buteo lagopus*; after 1986 these four species were also fully protected), and the creation of protected sites in some raptors' habitats. More recently, additional feeding in the Eastern Rhodope mountains has had a very positive effect on raptors in general and vultures in particular, especially for the period from 1989 to 1991, when cattle and sheep numbers sharply decreased following the forced emigration of native Turks to Turkey. There is no clearly shown tendency for increase in numbers on the curve reflecting the maximum numbers of Black Vulture observations made from a single spot, as is obvious for the Griffon Vulture in the Eastern Rhodope mountains (Iankov & Profirov 1991). This is probably due to the fact that the Black Vulture is not as markedly social and gregarious as the Griffon Vulture and searches for food in a solitary manner, the birds thus being more widely dispersed over a larger territory. Our observations since the end of the 1960s have shown that the Black Vulture is much slower in restoring its numbers than the Griffon Vulture, a probable explanation of this being that it was, in general, less numerous than the Griffon and that its breeding habitats - the forests - were subjected to much more severe human pressure than those of the Griffon. Nevertheless a series of observations testify to an overall increase in the Black Vulture's presence in the Bulgarian part of the Eastern Rhodope mountains. Increasingly often one can observe birds staying for the night on trees and rocks at a distance of 40 to 50km from the border with Greece, even without any available food nearby. Black Vultures can be seen the year round in areas where breeding conditions are suitable; in two such places the Working Group on Birds of Prey of BSPB built five artificial nests to attract them to breed. There are single observations of breeding behaviour (mutual preening of two adults). In our opinion all this indicates that it is quite possible to have breeding Black Vultures in our part of the Eastern Rhodope mountains in the near future. Factors favouring such a development are the recent revival of extensive cattle and sheep breeding, the additional feeding and building of artificial nests, the increased numbers of Griffon

Vultures, etc. Of course, it is hardly to be expected this will happen before the population in northern Greece reaches its optimum level.

Figure 3. Dynamics of the numbers of Black Vulture records in Bulgaria for the period 1981-1990 (thick line - total number of records for the year; broken line - maximum number of the Black Vultures seen together).



Mortality and threatening factors

We possess information about four cases of death of Black Vultures for the period of this study, all of which occurred in the Eastern Rhodope mountains. In every case the cause of death was illegal shooting: in 1980 one bird was killed and stuffed; in 1981 two birds were killed for their fatty tissues, used for medication; in 1984 one bird was killed. Along with felling of forests in the border zone, illegal use of poisoned and soporific baits for control of wolves was another major factor threatening the survival of the species in the region. In 1984 we rescued and later freed two Black Vultures taken by local people after consuming soporific baits. In our opinion, this danger will grow in the years to come, along with the liberalisation of private enterprise in stock raising and the presence of wolves in the same regions where vultures occur.

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REFERENCES

- BAUMGART, W. 1989. Verbreitung und existenzbedingungen von Gänse-, Kuten- und Bartgeier (*Gyps fulvus*, *Aegypius monachus*, *Gypaetus barbatus*) in Bulgarien in Vergangenheit und Gegenwart. *Acta ornithoecol.* 2 (1): 15-38.
- IANKOV, P. & L. PROFIROV 1991. Contemporary state of the Griffon Vulture (*Gyps fulvus* *Habitzl*) population in Bulgaria. *Ecology* 24: 44-52.
- NANKINOV, D., G. STOYANOV, G. KOUZMANOV & R. TODOROV 1991. Information sur la situation des rapaces diurnes en Bulgarie. In *Birds of Prey Bulletin* No. 4. WWGBB, Berlin.
- PETROV, Tz. 1989. The birds of Dobrostan Hill and its surroundings (Western Rhodopes). Part 1. *Bull. Mus. South Bulgaria* 15: 59-72.
- SIMEONOV, S., T. MICHEV & D. NANKINOV 1990. *Fauna Bulgarica*. 20 Aves Part 1. B.A.S. Publ., Sofia.

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