New animal remains from Pliska, the medieval capital (10 c. AD) of Bulgaria, (Shumen Region, NE Bulgaria)

ZLATOZAR BOEV

National Museum of Natural History, Bulgarian Academy of Sciences, 1 Blvd. Tsar Osvoboditel, 1000 Sofia, Bulgaria, boev@nmnhs.com; zlatozarboev@gmail.com

Abstract. A total of 9 taxa (5 birds and 4 mammals) have been identified, among them two endangered avian species - Otis tarda and Falco peregrinus.

Key words: Subfossil birds, Holocene fauna, Great Bustard, Peregrine falcon, Medieval hunting birds, Falconry.

Introduction

Pliska is the first capital of the (Trans-Danubian) Bulgarian state. It has been a subject of intensive archeological researches since 19th century (Angelov, 1981; Mladjov, 1998). Unfortunately, the archeozoological explorations are still at its beginning. A research of Boev (1995) reports on the material, collected in 1984-1987 by a team led by Assoc. Prof. Dr. Pavlina Petrova. He established 7 avian taxa (29 collected bones of MNI 13): Gallus gallus domestica, Anser anser (incl. A. anser domestica), Phasianus colchicus, Anas platyrhynchos (incl. A. pl. domestica), Corvus corax, Anser albifrons, and Gypaetus barbatus.

Materials and Methods

Recently (February, 2016) a new sample of animal finds been handed for examination by Assoc. Prof. Dr. Nikolay Nachev (Shumen University "Konstantin Preslavski"). This material originates from the pits of kitchen debris around the Capital Palace, from a depth of 0.40-1.20 m. It has been collected during the excavations in 2015 by a team, led by the archeologist Assoc. Prof., Dr. Konstantin Konstanitinov (Shumen University "Konstantin Preslavski"). All finds are dated 10th century A. D.

The animal remains have been identified through the comparative osteological collections of the Vertebrate Animals Department of the National Museum of Natural History, Bulgarian Academy of Sciences. They are kept at the same department.

Results

A total of 9 taxa have been established, 3 (4) of them domestic mammals (Table 1). Two of the wild bird species deserve to be mentioned, the Peregrine falcon, and the Great bustard. Both species are rare at recent fauna of Bulgaria and are listed in the Bulgarian Red Data Book. F. peregrinus is endangered (Stoyanov et al., 2011), while O. tarda is critically endangered (Zehtindzhiev et al., 2011).

Table 1. Composition and representation of the examined animal remains from Pliska (10th c. Ad. D.).

Nº	Таха	English name	Number of bones	MNI
Birds (Aves)				
1	Gallus gallus domestica (Linnaeus, 1758)	Domestic	10	2 ad.;
		chicken		1 juv.
2	Anser anser (Linnaeus, 1758)	Graylag goose	2	1 ad.
3	Otis tarda Linnaeus, 1758	Great bustard	1	1 ad.
4	Falco peregrinus Tunstall, 1771	Peregrine	1	1 ad.
		falcon		
5	Columba livia Gmelin, 1789	Rock Dove/	1	1 ad.
		feral pigeon		
Mammals (Mammalia)				
6	Equus africanus asinus Linnaeus, 1758	Donkey	1	1 ad.
7	cf. Sus scrofa domestica Linnaeus, 1758	Pig	2	1 juv.
8	cf. Capra aegagrus hircus Linnaeus, 1758)	goat	4	1
9	Ovicaprinae gen. indet.	sheep/goat	1	1
	Total		23	11

Domestic chickens belonged to two breed at least. The majority of them could be referred to the s. c. bantam fowl – small non-meat sooner decorative (?) breeds, slightly larger (0.450-0.900 kg; Boev, 1986) than large domestic pigeons. The other one was much larger, similar to most of the modern widely spread meat breeds.

The only find (a complete carpometacarpus) of an adult (?) male individual of Peregrine falcon may belong to a bird used for falconry. It is the first species' subfossil record in Bulgaria.

Although almost disappeared in Bulgaria today, the Great Bustard, always was among the most valuable hunting birds for meat (Boev, 2003). Even in the middle of the 20th century it has been considered a hunting species (game) (Petrov, 1950): "The hunting [of bustard] is very difficult because it is extremely cautious and timid bird. Its hearing and vision are well-developed and the birds lift and fly away long before landing again.".

The finds of *Anser anser* (a complete ulna and proximal tarsometatarsus) completely fit to the compared bones of wild birds of that species. Usually the bones of the domestic geese are slightly larger than these of the wild birds.

Conclusions

In spite of the limited material, the obtained data complete the scanty available information on the wildlife in Bulgaria 1000 years ago. To a certain extent, they also enlighten the everyday mode of life of the inhabitants of the town.

Acknowledgments. The author thanks to Assoc. Prof., Dr. Konstantin Konstanitinov and Assoc. Prof. Dr. Nikolay Nachev for the handed material for examination.

References

Angelov, D. (Ed.). (1981). Istoriya na Balgariya (History of Bulgaria), Vol 2. First Bulgarian State. Sofia, 505 pp. (In Bulgarian).

Boev, N. (1986). *Dekorativni ptitsi* (*Decorative birds*). Zemizdat Publ. House, Sofia, 344 pp. (In Bulgarian).

- Boev, Z. (2003). Distribution of the Little Bustard (*Tetrax tetrax* /Linnaeus, 1758/) and the Great Bustard (*Otis tarda* Linnaeus, 1758) (Aves: Otididae Gray, 1845) in Bulgaria during the Late Pleistocene and the Holocene. *Annual of Sofia University "St. Kliment Ohridski"*, *Faculty of Biology*, *Book 1 Zoology*, 93/94: 41-47.
- Boev, Z. (1995). Birds from some medieval settlements in Bulgaria. *Historia naturalis bulgarica*, 5: 61-67. (In Bulgarian, English Summary).
- Boev, Z. (1996). The Holocene avifauna of Bulgaria (A review of the ornitho-archaeological studies). *Historia naturalis bulgarica*, 6: 59-81.
- Mladjov, I. (1998). Trans-Danubian Bulgaria: Reality and Fiction. *Byzantine Studies/Etudes Byzantines*, n.s., 3: 85-128.
- Petrov, A. (1950). *Nashi lovni ptitsi (Our hunting birds)*. Fizkultura Publ. House, Sofia, 64 pp. (In Bulgarian).
- Stoyanov, G., Borisov, B., Antonov, A., Domuschiev, D., Petrov, T. (2011). Peregrine Falcon Falco peregrinus Tunstall, 1771. *In*: Golemanski, V. (Editor-in-Chief) 2011. *Red Data book of the Republic of Bulgaria*. Volume 2. Animals. IBER-BAS & MOEW, Sofia. p. 173.
- Zehtindzhiev, P., Boev, Z., Georgiev, D., Karaivanov, N. (2011). Great Bustard *Otis tarda* L., 1758. *In*: Golemanski, V. (Editor-in-Chief) 2011. *Red Data book of the Republic of Bulgaria. Volume 2. Animals.* IBER-BAS & MOEW, Sofia. p. 86.