

Avian remains from the Palace Center and the Citadel of the medieval capital Pliska of Bulgaria (10th century AD)

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Abstract. Seven species and domestic forms of birds have been reported through 155 bone remains from the medieval Bulgarian capital Pliska, collected in 2012 and 2018. It is assumed that the mute swan and the hooded crow were used for food.

Key-words: Human-bird interactions, Medieval, Utilization of birds.

Introduction

The town of Pliska was a well-known center of culture and power of Bulgaria. It was the capital (681–1018) of the First Bulgarian Empire. Archaeological excavations were carried out for about 150 years and many parts of the splendid town are still completely unexplored.

Several times some bird (and mammal) bone remains have been handed to author for studying and they have been published in the previous years (Boev, 1995, 1999, 2016).

Material and Methods

The examined material for present study comprises of 155 bones and bone fragments. The material from the Palace Center (65 finds) has been collected by a team of the Assoc. Prof. Valeri Grigorov (National Archaeological Institute with Museum, BAS), the leader of the archaeological excavations in 2012 from the eastern part of the Palace Centrum of the medieval town of Pliska. All finds originate from pit No 1 – XX-304. They have been handed for examination by Dr. Nadezhda Karastoyanova (National Museum of Natural History, BAS).

The material from the Citadel (90 finds) has been collected by a team of the Assoc. Prof. Yavor Dimitrov (National Archaeological Institute with Museum, BAS), the leader of the archaeological excavations of 21-24.09.2018. All finds originate from pit No 1 from a depth of 2,20-2,40 m. They have been handed for examination by Prof. Dr. Nikolay Natchev (Konstantin Preslavsky University of Shumen).

All finds are inventoried in the collections of the Vertebrates Department of the museum: Nos NMNHS 18415, 18419, 18421-18424, 18427-18466, 18468-18469, 18471-18473, 18475-18513 (Pliska, Citadel), and 18644-18690, 18692-18710 (Pliska, Palace Center).

Results

As mentioned above some wild and domestic animals have been recorded through previous studies: *Gallus gallus domestica*, *Anser anser*, *Anser anser domestica*, *Phasianus colchicus*, *Anas platyrhynchos*, *Anas platyrhynchos domestica*, *Corvus corax*, *Anser albifrons*, *Gypaetus barbatus* (Boev, 1995, 1999), *Bos taurus*, *Sus scrofa domestica*, *Equus ferus caballus*, *Equus africanus assinus* (Ninov, 1991), *Gallus gallus domestica*, *Anser anser*, *Otis*

tarda, *Falco peregrinus*, *Columba livia*, *Equus africanus asinus*, *Sus scrofa domestica*, *Capra aegagrus hircus*, Ovicaprinae gen. indet. (Boev, 2016). In addition a femur of camel (*Camelus bactrianus/dromedarius*) was found by Prof. N. Natchev (pers. data).

Species composition

Present study established a total of 7 avian species and forms of five orders:

Anseriformes

Mute swan *Cygnus olor* (Gmelin, 1789): tibiotarsus dex. prox. 18450; femur dex. 18423, phal. 1 dig. 2 pedis dex. 18455, costa 5 dex. 18458, tibiotarsus dex. dist. 18442, costa vert. 1 sin. 18461, costa vert. 1 dex. 18462, costa vert. 4 dex. 18459, costa vert. 2 dex. 18463, synsacrum 18422, sternum 18419, femur sin. 18435, vert. thor. 24 18415, vert. thor. 26 18428, vert. thor. 24 18433, vert. thor. 25 18429, vert. thor. 22 18432, humerus sin. dist. 18431, tmt sin. prox. 18439, fibula sin. prox. 18441, sternum (fragments) 18436, vert. thor. 29 18430, tbt dex. 18427, tmt sin. dist. 18421, phal. 1 dig. 3 pedis sin. 18424, femur dex. prox. 18440, fibula dex. prox. 18449, phal. 3 dig. 3 pedis sin. 18445, phal. 2 dig. 3 pedis sin. 18447, phal. 2 dig. 4 pedis sin. 18446, costa vert. 1 sin. 18451, os praemaxillariae 18464, costa vert. indet. 18453, phal. 1 dig. 4 pedis sin. 18454, costa vert. 6 sin. prox. 18443, costa vert. 7 sin. 18457, costa sternalis 7 dex. 18444, humerus sin. (diaphysis fragment) 18465, costa vert. 4 dex. 18452, coracoid dex. 18437, trachea (bone rings) 18456, humerus sin. prox. 18485, humerus dex. 18481, ulna sin. 18486, ulna dex. 18482, radius dex. 18483, radius sin. 18484, cmc dex. 18488, cmc sin. 18490, scapula dex. 18507, scapula sin. 18506, coracoid sin. 18489, tbt sin. 18487, phal. prox. dig. majoris sin. 18492, furcula 18513, vert. cerv. 22 18505, vert. cerv. 16 18491 vert. cerv. 18 18495, vert. cerv. 21 18493, vert. cerv. 17 18510, vert. cerv. 19 18509, vert. cerv. 18 18494, vert. cerv. 13 18496, radiale 18499, phal. dig. minoris sin. 18512, vert. cerv. 12 18502, vert. cerv. (?10-15) 18497, phal. 2 dig. 4 pedis dex. 18503, vert. cerv. 15 18501, radiale dex. 18498, ulnare sin. 18500, phal. dist. dig. maj. dex. 18511, vert. cerv. 14 18504, phal. prox. dig. majoris sin. 18477, humerus - diaphysis splinter 18475, vert. thor. 22 18469, phal. 3 dig. 2 pedis dex. 18479, phal. 1 dig. 4 pedis dex. 18478, phal. 2 dig. 3 pedis dex. 18471, phal. 3 dig. 4 pedis dex. 18466, phal. 3 dig. 3 pedis dex. 18476, phal. 2 dig. 2 pedis sin. 18460, phal. 2 dig. 2 pedis dex. 18448, phal. dist. dig. pedis. dex. 18480, vert. cerv. - splinter 18472, vert. cerv. ? 9-11 - splinter 18473;

Greylag goose *Anser anser* (Linnaeus, 1758): humerus sin. 18683, tbt sin. 18468;

?Domestic goose cf. *Anser anser domestica*: furcula 18434;

Galliformes

Common pheasant *Phasianus colchicus* Linnaeus, 1758: tbt sin. 18508;

Chicken *Gallus gallus domestica* (Linnaeus, 1758): tmt sin. 18649, sternum 18648, sternum 18646, tmt dex. prox. 18701, sternum 18650, synsacrum dex. 18645, tbt. dex. 18671, tbt. sin. 18675, tbt. dex. 18672, sternum sin. 18670, tbt dex. 18659, femur dex. 18674, furcula 18658, coracoid sin. 18662, femur sin. 18665, radius sin. 18667, corpora vertebrae 18666, synsacrum dex. 18664, ulna dex. 18699, scapula dex. 18685, furcular 18686, femur dex. prox. 18687, tmt dex. 18682, synsacrum sin. 18707, ulna sin. 18703, coracoid dex. 18705, costa sin. 18710, costa sin. 18698, fibula dex. 18694, radius sin. 18697, cmc sin. 18700, synsacrum sin. 18696, tmt dex. dist. 18692, synsacrum 18688, synsacrum 18702, coracoid dex. 18689, humerus sin. 18684;

Gruiformes

Common crane *Grus grus* (Linnaeus, 1758): sternum 18438;

Columbiformes

Common wood pigeon *Columba palumbus* Linnaeus, 1758: radius sin. 18693, femur sin. 18690;

Domestic pigeon *Columba livia ?domestica* Gmelin, 1789: synsacrum 18668, cmc sin. 18695, femur dex. 18709, femur sin. 18708, tmt sin. 18706, tmt dex. 18704;

Passeriformes

Hooded crow *Corvus cornix* Linnaeus, 1758: synsacrum 18647, sternum 18656, cranium 18657, mandibula 18660, ulna sin. 18653, ulna dex. 18654, humerus sin. 18651, humerus dex. 18652, tmt. dex. 18669, tmt sin. 18655, tbt sin. 18673, synsacrum sin. 18644, cmc dex. 18663, cranium 18676, ulna sin. 18677, humerus sin. 18678, synsacrum 18679, mandibula 18680, femur sin. 18661, tbt dex. 18681.

Discussion

The numerous finds of the mute swan and hooded crow from the wild birds could be explained by their value as source of meat in the diet of the medieval inhabitants of Pliska. It is possible that the mute swan was bred both for meat and as an ornamental bird.

The common crane, graylag goose, colchic (common) pheasant, and the common wood pigeon were a valuable game, although their remains are represented by single bones.

Numerous finds of crows suggests their utilization as source of meat, a kind of utilization that was supposed in the in practice of the inhabitants of other Bulgarian medieval capital in the same region of the NE Bulgaria, the town of Veliki Preslav (Boev & Iliev, 1989). The common crane and the mute swan were used for food until the late medieval or even until the recent times.

Obviously the poultry breeding was based mainly on the rearing of chickens, and/or domestic pigeons. Pigeons and chicken are represented by abundant bones on juvenile individuals, along with the bones of mature birds.

Gallus gallus domestica, *Anser anser*, *Anser anser domestica*, and *Phasianus colchicus* have been already recorded in Pliska (Boev, 1995, 1999). Two other disappeared species, the Bearded vulture *Gypaetus barbatus* (Boev, 1995, 1999) and the Great bustard *Otis tarda* (Boev, 2016) represent special interest, as well as the endangered Peregrine falcon *Falco peregrinus* (Boev, 2016). Their single bones do not allow definitive conclusions to be drawn about their origin among the archaeological material. There is no doubt that the ongoing archeological excavations will contribute to a more complete study of the importance of wild and domestic animals in the life of the population of the medieval Bulgarian capital.

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References

- Boev Z., Iliev, N. (1989) Les oiseaux dans la nourriture de la population de la ville intérieure de Veliki Preslav (IXe -Xe s.). *Arheolojiya*, BAS, 4: 40-43 (in Bulgarian, French summary).
- Boev, Z. (1995) Birds from some medieval settlements in Bulgaria. *Historia naturalis bulgarica*, 5: 61-67. (In Bulgarian, English Summary).
- Boev, Z. (1999) *Neogene and Quaternary birds (Aves) from Bulgaria*. National Museum of Natural History, Bulg. Acad. of Sci., Sofia. D. Sci. Thesis. Volume I. Basic Part. 1243; Volume II. Supplement 1 - Figures, 135 pp; Volume II. Supplement 2 - Tables, 108 pp.
- Boev, Z. (2016) New animal remains from Pliska, the medieval capital (10 c. AD) of Bulgaria, (Shumen Region, NE Bulgaria). *ZooNotes*, 87: 1-3.
- Ninov, L. (1991) Animal bones of early complexes in the region of Pliska. *Problems of Proto-Bulgarian history and culture*, 2: 239-246. (In Bulgarian, English Summary).