

OSTEOMETRIC ANALYSIS OF THE PELVIC BONES AND SACRUM OF THE RED FOX AND RACCOON DOG

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Abstract. Researchers of the forensic veterinary medicine and osteoarcheologists lack osteological parameters for case analysis or for identification purposes of bone remains on archeological sites. The goal of the current research was to measure the parameters of pelvic and sacral bones in the red fox and raccoon dog and to determine the differences between sex and species. The research was based on the examination of 85 skeleton collections of adult raccoon dogs (*Nyctereutes procyonoides*) and red foxes (*Vulpes vulpes*) compiled in 2003–2006 by the Department of Anatomy and Physiology of the Veterinary Academy, Lithuanian University of Health Sciences (LUHS). The osteometric analysis was performed by A. von den Driesch (1976) method. The comparison of osteometric data of sexes showed that pelvic bones of the male red foxes are longer and broader than those of females ($P<0.001$). The breadth of the sacrum and the breadth and height of the cranial articular surface ($P<0.01$) also are greater. Comparison of species showed that pelvic bones of the male red foxes are longer and broader across the body of the ischia than those of male raccoon dogs ($P<0.001$). The same is true about the length and breadth ($P<0.001$) of the cranial articular surface of sacrum. The pelvic bones of female raccoon dogs are longer ($P<0.01$) and broader between the ilium than those of female red foxes ($P<0.001$). The sacrum in the female raccoon dogs also is longer and broader ($P<0.001$) than in the female red foxes.

Keywords: Red fox, raccoon dog, pelvic bones, sacrum