

Morphological Examination of Forelimb Skeletons of Korean Water Deer and Siberian Roe Deer

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Two species of deer, Korean water deer (*Hydropotes inermis argyropus*) and Siberian roe deer (*Capreolus pygargus*), are the most popular wild deer in South Korea. Recently, it was reported that the Siberian roe deer living in Jeju island (Jeju roe deer) differed with the roe deer living in Korean peninsula (Inland roe deer) in morphology of body and mitochondrial gene. This study examined the morphological differences of forelimb skeletons among the 3 species of deer in South Korea. The skeletons were obtained from 23 carcasses of adult Korean water deer, 14 of Inland roe deer, and 13 of Jeju roe deer during last 10 years. The bone shapes were very similar each other. However, the skeleton of Inland roe deer were biggest among those of 3 species and the cranial border line scapula of Jeju roe deer was curved like 'S' while straight line in the other species. Sometimes the first carpal bone was not observed in the both of Siberian roe deer. Very tiny sesamoid bone in the second and the fifth metacarpophalangeal joints were observed in two subspecies of Siberian roe deer. The number of proximal sesamoid bone in the joints were 1 or 2 in Inland roe deer while 1 in Jeju deer. These results suggest that the morphology of skeletons of forelimb was different in among 3 species deer, and, in addition, supported the argument that the Jeju roe deer is different subspecies with Inland deer.

Key words: Korean Water Deer, Siberian Roe Deer, Forelimb Skeleton

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