

POSTCRANIAL MORPHOLOGY AND SYSTEMATICS OF BIGHORN SHEEP (*OVIS  
CANADENSIS*) FROM THE LATE PLEISTOCENE OF WYOMING

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ABSTRACT

Eight postcranial elements (humerus, radius, metacarpal, femur, tibia, metatarsal, astragalus, calcaneum) of late Pleistocene (Rancholabrean Land Mammal Age) bighorn sheep *Ovis canadensis* from Natural Trap Cave, north-central Wyoming were measured. The sample ranges in age from 110,000 to 12,000 yr B.P., encompassing nearly 100,000 years of faunal history. Variation observed in the postcranial skeleton is discussed and compared with samples of modern bighorn sheep from Wyoming and Montana. The bighorn sheep from Natural Trap Cave are well within the size range of living bighorn sheep found in the same area today. There is overlap in all measurements taken except the minimum depth of the diaphysis of the metatarsal, suggesting that modern bighorn sheep have at least the genetic potential to reach the overall size of the fossil form. The data are in agreement with previous work and suggest that the Natural Trap Cave bighorn sheep should be considered a temporal subspecies of modern *Ovis canadensis*.