

Effect of Grazing on Habitat and Behavior of Wild Mammals (Advanced Studies on Sustainable Animal Production: Interrelationships among Human, Animal and Environment, 8th International Symposium of Integrated Field Science)

著者	TSUKADA Hideharu
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2-4. Effect of Grazing on Habitat and Behavior of Wild Mammals

Hideharu TSUKADA

National Institute of Livestock and Grassland Science, Japan

Although there are few grassland specialists among terrestrial mammal species (110-115) in Japan, 52 mammal species inhabit Japanese grasslands and 22 of them are listed in the RDB of Japan. However, some grassland mammals, such as the sika deer and the wild boar cause serious damage on grasslands. The relationship between cattle grazing and wild mammals in Japanese grasslands should be considered from the following two contexts: 1) conservation of grassland mammals and 2) the control of mammal damage in grasslands. Firstly, the effect of cattle grazing on the habitat of small mammals was considered in the context of conservation of grassland mammals. The habitat quality for small mammals was high in tall-grass pasture with low grazing intensity but low in short-grass pasture with high grazing intensity. Therefore, there is a trade-off between the habitat quality for small mammals and the productivity for grazing cattle in the animal production system. Secondary, zoning with grazing cattle between wildlife habitat and agricultural area was considered for controlling wildlife damage in grasslands. In the abandoned cultivated land, the introduction of cattle grazing was effective deterrent against rooting by wild boars because cattle grazing had diminished the food resource and the secure cover for wild boars. However, the intrusion of sika deer into pastures could not be prevented by cattle grazing. The activity of sika deer within a stock farm was affected by the nearest escape cover and the herbage quality. Hence, grazing cattle alone is not sufficient for preventing wildlife damage in grassland.