

THE EFFECT OF REPELLING A WILD JAPANESE MACAQUE TROOP IN THE NORTHERN AREA OF MT. FUJI, JAPAN

Y. Yoshida¹, D. Nakamura^{2,3}, S. Hayashi¹, M. Fujisono³, A. Kobayashi¹, M. Kitahara¹

¹*Yamanashi Institute of Environmental Sciences, Fujiyoshida, Yamanashi, Japan*, ²*Gifu University, Gifu, Japan*, ³*Wildlife Damage Management Support Center, Fujiyoshida, Yamanashi, Japan*

Presenter's Email: bear@yies.pref.yamanashi.jp

Crop damage caused by wild Japanese macaques (*Macaca fuscata*) is currently a topic of public concern in Japan. Since June 2007, the Wildlife Damage Management Support Center has been responsible for reducing such damage by repelling macaques from areas in Fujiyoshida, Yamanashi Prefecture, Japan using soft air rifles and monkey dogs and teaching macaques that human dwellings are dangerous. We examined the effects of repelling a wild Japanese macaque troop from the northern part of Mt. Fuji, Japan between June 2004 and November 2008. As a result of these efforts, the time the macaques spent in populated and agriculture areas was reduced from 20.3% to 5.1% ($p < 0.05$, chi-square test). In addition, the frequency of crop damage decreased sharply from 1.53/hr to 0.26/hr in the area from which the macaques were repelled versus a decrease from 1.02/hr to 0.59/hr in a control area. Moreover, the populated and agriculture areas where the macaques were repelled were part of the core of their home range (kernel method, 50%) before the study started, but were no longer part of the core area after the troop was repelled. Therefore, the activity kept the macaques away from populated and agriculture areas and reduced the damage they caused.

Keywords: Wildlife damage management, Japanese macaque, Repelling animals, Home range