

**CURRENT STATUS AND CONSEVATION OF JAPANESE MACAQUES IN YAKUSHIMA ISLAND**

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The Japanese macaques (*Macaca fuscata yakui*) on Yakushima Island are an endemic subspecies and closely related to the population of Kyushu, one of the main islands of Japan. Twenty one percent area of this island was put on World Natural Heritage List in 1993 because of the highly diverse vegetation from coastal subtropical forest to mountainous subalpine grassland. During the last century, the natural forest had changed drastically due to anthropogenic impact. Once this subspecies listed Near Threatened species in both of IUCN and Japanese governmental Red List, but the rank changed to out of list in 2008. To re-evaluate this change, this paper reviews the current habitat status, and conservation measures for Yakushima macaques. Recently, about five hundred heads of macaques were hunted because of pest control in the coastal area every year. In coastal area, population size was estimated ca. 2000 to 3000 in the early 1990s. The result of population viability analysis showed that coastal macaques have high extinction risk during the last two decades. Nevertheless, the numbers of pest-controlled animals have been held constant. So many macaques were thought to have shifted their home ranges from the mountainous area to the coastal area. To estimate the extinction risk on whole area of this island, I conducted population viability analysis (PVA) on nine sub-populations by basin areas with reproductive parameters and census data from previous studies. With these results, I discuss future concrete population management measures and the status in Red List.

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