

Variation in home range size exhibited by Red Junglefowl (*Gallus gallus spadiceus*) in oil palm plantation habitat, Malaysia.

ABSTRACT

A Radio telemetry study on Red Junglefowl (*Gallus gallus spadiceus*) was conducted in oil palm (*Elaeis guineensis*) plantation at Sungai Sedu Estate, Selangor, Malaysia from October 1996 to July 1997. The main objective of the study was to examine the ranging behaviour of the species. Four Red Junglefowls (3 males and 1 female) were caught using decoy and leg trap method. They were then equipped with single stage 16 g transmitters and were radio-tracked using Mariner 57 receiver. The radiolocation was taken every 30 minutes by triangulation. The results show that the daily and monthly home range size of male was greater than that of a female. Similarly the home range size of a male without a female was greater than with a female. Environmental factors such as temperature, relative humidity, sunshine duration and cloud cover have no effect on the size of home range. The movement (distance travelled) contributes 49.1% of the variability on home range size. The total daily movement of male was greater than that of a female. The Red Junglefowl travelled more in the morning than in the afternoon and evening. In general, the size of home range varies according to several factors such as when the male is establishing and defending its territory. Habitat destruction and predators may also affect the home range size.

Keyword: Environmental factors; Home range size; Movement; Oil palm plantation; Radio tracking; Red Junglefowl.