Re-introduction of the tammar wallaby (*Macropus eugenii derbianus*) to Kalbarri National Park: Home range, habitat use and notes on survival

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Fauna translocations are a commonly used tool for improving the conservation status of threatened species. A review of translocations undertaken in Western Australia reported the success of 39% of these were unknown due to inadequate post-release monitoring**.** Global positioning system (GPS) data loggers can provide valuable information on survival, habitat use and sociality, and can be particularly useful for cryptic species and translocations in remote locations. This project reintroduced tammar wallabies to Kalbarri National Park (KNP), 600 km north of Perth. We used GPS data loggers, and VHF radio transmitters to determine survival, home range, and time spent in different vegetation types. Approximately two-thirds of collared wallabies died within one year post-release and just over half of the deceased wallabies was due to fox predation. The home range and core area estimations of male wallabies were generally larger than females, and home ranges at KNP were larger than other published studies. Wallabies utilised long undisturbed vegetation with a dense canopy cover during diurnal and crepuscular periods, and a mosaic of recently burnt and >10 years undisturbed vegetation on a variable canopy cover during the typical feeding period. Based on our initial success criteria, this reintroduction was not considered successful due to the number of wallabies that died in the first year post-release. However, the results of the monitoring provided valuable information to inform future translocations of the tammar wallaby and other species.

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ABSTRACT BOOK