

Nest and Space use in a Highland Population of the Southern Mountain Cavy (*Microcavia australis*)

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Abstract

We examined the spatial and social structure of a high-altitude population of the scarcely known southern mountain cavy (*Microcavia australis*) in Argentina. We used radiotelemetry techniques to monitor nest use at night and daily home ranges and examine whether southern mountain cavies form nesting associations that are socially cohesive groups. We further timed our observations to breeding time of our study population (September–November) to assess opportunities for communal breeding. The nighttime telemetry of 24 radiotagged cavies revealed 7 nesting associations (i.e., communal nesting). These included 1–4 breeding females and 1 or 2 breeding males. Nesting associations were stable in terms of identity of individual members and in the location of putative nest sites. Most associations used a single nest site, but some shared 2 or 3. We noted that all nest sites were located under dominant shrubs, but use of nest sites was unrelated to variation in shrub cover. Nest sites with more burrow entrances were more frequently used by radiocollared cavies. During the day, home ranges of cavies overlapped more with ranges of nest mates than with those of non–nest mates, implying that nesting groups were socially cohesive units. This study confirmed that southern mountain cavies are communally nesting, and, because communal nesting occurs during breeding time, our findings support the idea that cavies engage in communal care of young.