

## RECOMMENDATIONS

Populations of non-native small mammal species at KALA are a threat to the native flora and fauna. Therefore, it is important to conduct regular monitoring of priority species and select ecological areas. These data are necessary to secure authorization and registration for comprehensive methods to control non-native small mammal populations that affect both native bird and plant species.

Any presence of feral cats and mongooses is noteworthy as they are devastating predators of avian species. Urgent attention should be paid to the presence of feral cats and mongooses in Pu`u Ali`i NAR as it possesses the best possible habitat for the remaining native avifauna on Moloka`i. Additionally, despite the lack of evidence of feral cats in certain areas of this study, these species should not be presumed absent from any location within the park, especially when sensitive species are being actively protected or propagated.

Implementation of properly planned and executed cost-effective rodent control programs both along the coast and in high-elevation forests in KALA lands would likely benefit reproduction efforts of rare native plant populations like hō`awa and loulou palm, reintroduced forest bird species, and vulnerable ground-nesting seabirds such as Wedge-tailed Shearwaters, Red-tailed Tropicbirds, and White-tailed Tropicbirds. In particular, the aerial broadcasting of rodenticide in selected target areas is an important management strategy to consider for this region. The distribution of the rodenticide can be controlled fairly accurately and requires few field days. Additionally, considering the steep terrain of most of the park, this method would facilitate a fairly even distribution in the focal area.

Future censusing of small mammals could benefit from the trapping and tracking methods we used. The tracking tunnels provided a good deal of presence data, especially for mongooses, cats, and rats. Adding a mouse-specific bait to the carnivore bait may result in mouse sign at the tracking tunnels as well. Since a tracking station may be visited by the same animal repeatedly, estimating population size from this method is not possible; however, it is suitable for determining presence/absence. Glue boards are also helpful in gathering presence data for small mammals, especially the rodents. For removal techniques, the snap traps and live traps were more successful, though the choice of baits should be given some thought and prebaiting is also recommended. The likelihood of capturing cats may be increased by using more pungent bait, such as rotting fish, to lure more cats to the trapping area. Replacing or cleaning the cage traps and tracking tunnels after a capture and by increasing the number of consecutive trap nights may also increase cat capture/sign. A better choice of bait, such as coconut, is recommended for future rodent censusing in this region, as it would not be adversely affected by weather conditions and can be easily transported by field personnel. Coconut could be glued to snap traps to reduce instances of stolen or lost bait.