

Rose Ringed-Parakeets on Kauai

Phase II Research

Texas A&M University – Kingsville, in collaboration with the U.S. Department of Agriculture (USDA) Wildlife Services, Kauaʻi Invasive Species Committee (KISC), and the Rose-Ringed Parakeet Working Group, is conducting two research studies to evaluate the effectiveness of tools to reduce damage caused by invasive rose-ringed parakeets. The goal is to identify the best methods for reducing rose-ringed parakeet damage across the island of Kauaʻi.

Study 1 – Rose-ringed Parakeet Selective Feeder

Contraceptives may be used as part of an integrated wildlife damage management strategy to slow or reverse rose-ringed parakeet population growth. The drug DiazaCon has been found to reduce fertility in captive rose-ringed parakeets. However, if contraceptives were used with rose-ringed parakeets in the wild, they would need to be delivered in a way that prevents exposure to other species, including protected native birds.

The USDA Wildlife Services National Wildlife Research Center has developed a selective feeder for use with invasive monk parakeets (Figure 1) in Florida. This feeder includes a traditional hopper-style bird feeder, surrounded by a wire “curtain”. Parrots’ feet are well adapted for climbing up and down surfaces, rather than simply perching on them. In order to access the feed in the parakeet-selective feeder, birds must climb under and around the wire curtain. Researchers hypothesize that in Kauaʻi, only rose-ringed parakeets will be able to access the food in the selective feeder.

In this study, researchers will test the parakeet-selective feeder in Kauaʻi to determine 1) whether wild rose-ringed parakeets in Kauaʻi will use the feeder and 2) whether the feeder successfully prohibits use by other species. During this study no contraceptives or chemicals of any kind will be used; feeders will be baited with commercial bird seed, peanuts, and/or millet.



Figure 1. Monk parakeets utilizing the parakeet-selective feeder in Florida. Image courtesy of USDA Biologist Eric Tillman.

Study 2 – Shooting at the Roost

Lethal removal using firearms is one method used to reduce invasive rose-ringed parakeet abundance in many places in the world. It was instrumental in the only successful eradication of rose-ringed parakeets on the island of Mahe in the Seychelles. This method must be conducted in a way that is safe for humans, effective for damage reduction, and humane for the parakeets.

One option is removing parakeets at night from their roosts - the large, communal areas where parakeets gather to sleep. This should be conducted by professionals trained in firearms safety and bird removal activities to ensure safe practices and prevent the dispersal of birds to inaccessible areas. Known parakeet roosts in Kauaʻi are in Lihue, Poipu, and Kapaʻa—all heavily populated, urban areas. These roost sites are monitored for changes in the parakeet population's size and distribution. Roost removal efforts should not be conducted too frequently, as the birds will abandon the roost sites if they are regularly disturbed. If the birds disperse into small, unknown roosts, it will spread the damage they cause and might make further monitoring and management impossible.

Kauaʻi County is funding a local, privately-owned, wildlife control company to remove parakeets from roosts on public and private property. Researchers are coordinating with this company to collect the parakeet carcasses and gather information on the age and sex of the individuals removed. With this information, researchers can predict how lethal removal might impact future parakeet numbers (e.g., removing adult females will have a larger impact on the long-term population size than removing juveniles). This effort is being conducted from February through June 2020.

Researchers recommend landowners forego removing parakeets from the roosts on their property until a formal coordinated parakeet damage management plan is completed. This will help avoid unintentional negative consequences of independent actions.
