



Nene Research and Conservation

Nene.org

Proposal for 2-year effort to remove a feral cat colony from Waikōloa

Nene, the Hawaiian Goose is considered the rarest goose species in the world and is listed as endangered by the State of Hawaii and Federally listed as threatened. Overlap between endangered native species and non-native mammalian predators must be avoided at all costs. In December 2022, we received the first reports of nene foraging around cat feeders in the Queens Marketplace Parking lot. Over the following months, we identified 26 different nene in this area through photo identification, citizen science efforts, and dedicated fieldwork. We documented these nene consuming cat food left on or near the feeders and drinking from water bowls. This situation poses several risks to the rehabilitation of the nene population. As herbivores, nene are adversely affected by the unhealthy nutrients in cat food, which is high in fats and proteins outside their typical diet. Traffic collisions involving nene account for a substantial percentage of known fatalities for the species. *Toxoplasma gondii* (*T. gondii*), an obligate intracellular parasite, has a complex life cycle involving cats as its definitive host, where sexual reproduction leads to the release of oocysts in the cat's feces. These oocysts can subsequently infect other intermediate hosts, such as nene and humans. Nene already exhibit the highest infection rates of *T. gondii* among bird species worldwide, making it crucial to minimize their overlap with colonies where infection rates are higher. Infection with *T. gondii* also increases the nene's risk of death by trauma. In April 2023, a petition was started by Kāko'o Haleakalā in response to nene feeding on cat food near feeders owned on property owned by Alexander and Baldwin (AB). Abaykitties is the primary caretaker for this colony.

To address these issues, Nene.org will serve as the point of contact between AB, Abaykitties, and Kāko'o Haleakalā to facilitate the removal of the feral cat colony on land owned by Alexander and Baldwin. This proposal constitutes a 2-year effort to live trap an estimated 600 feral cats, provide health assessments, determine adoptability, and transport them to shelters along the west coast of the United States. In consultation with Hawai'i State predator control managers and Hallux Ecosystem Restoration, the majority of the feral colony can be removed quickly given adequate resources and participation by all parties. The bottleneck will be finding community veterinarians willing to perform spay/neuter procedures and identifying shelters with capacity for more cats along the west coast. Any cats that are deemed unadoptable by a licensed veterinarian will be humanely euthanized by an IACUC-approved method.

In order to successfully manage and remove this colony, Abaykitties and AB will develop a plan to reduce recruitment of feral cats and reduce incidental feeding by the general public. This could include additional signage, electronic monitoring, and marketing and educational campaigns.

Additional signs will specifically prohibit pet abandonment on the property, and any applicable marketplace rules should be amended to reflect this. More prominent signs will be posted recognizing Abaykitties as the only authorized party allowed to care for the feral cat colony during the project period. Additional nene feeding-related mitigation steps will also be taken, such as the development of a new type of feeding platform to separate nene from the cat food, feeding cats only during the evening hours, and continued monitoring during and after feeding to verify nene aren't present.

Nene.org will deploy an array of game cameras in undeveloped areas around the property to conduct population estimates and monitor the progress of removal over the project period. Regular population estimates and associated errors will be provided to all parties at regular intervals during the project period.

Kāko'o Haleakalā will provide regular updates about the project to their followers and recognize the efforts of all parties involved in solving this issue in response to the petition started in April 2023.