

## Hawaiian Hoary Bat

### *Thermal IR and Acoustic Monitoring Project for Tree Trimming along powerlines at Fort Shafter's Palm Circle on 18 June 2016*

#### Survey Goals

Establish whether or not Hawaiian Hoary bats (*Lasiurus cinereus semotus*) are roosting with pups on two Pink and White Shower trees (*Cassia javonica*), three Chinese banyon trees (*Ficus microcarpa*), five ear pod trees (*Enterolobium cyclocarpum*) and eight Monkey pod trees (*Samanea saman*) that require trimming as they are encroaching on power lines. If bats present, discuss with regulatory agency possible mitigation measures to continue project or postpone removal of trees until pupping season is completed.

#### Survey Map



Figure 1. Map of the SB Credit Union and Warrior Transition Battalion project site which Fluke thermal imager surveys. Red dot indicates location of the site.





Figure 2. Map of palm locations

## Survey Methods

Visual and acoustic surveys for bats were conducted on 18 June 2016, the day of the scheduled tree trimming. A Fluke Ti400 thermal imager was employed to scan the trees for any roosting bats as well to confirm no presence. OANRP also employed the hand held Wildlife Acoustics Echo Meter Touch attached to an iPad as a way to scan the area for any possible bats returning to a roost within close proximity. This tool has the ability to listen to bats in real time, GPS tracks and tags all recordings with location information and has full color spectrograms. Scanning commenced from 05:00-06:30 from the ground from different angles and locations.

## Results and Discussion

The visual thermal IR survey detected no bats at all. Multiple species of birds were observed with the thermal IR, with visual confirmation, in and around the area. It was determined that there would be No Effect to bats if the trees were removed.

## Recommendations

Work with DPW to better monitor the contractors work so that trees that need trimming are not missed prior to the pupping season.