

-

# LEEWARD HALEAKALA OCCUPANCY STUDY

- 20 SM4Bat acoustic detectors
- Same set-up as Oahu study
- Deployed in July 2019
- Checked every 2 months



# LEEWARD HALEAKALA OCCUPANCY STUDY

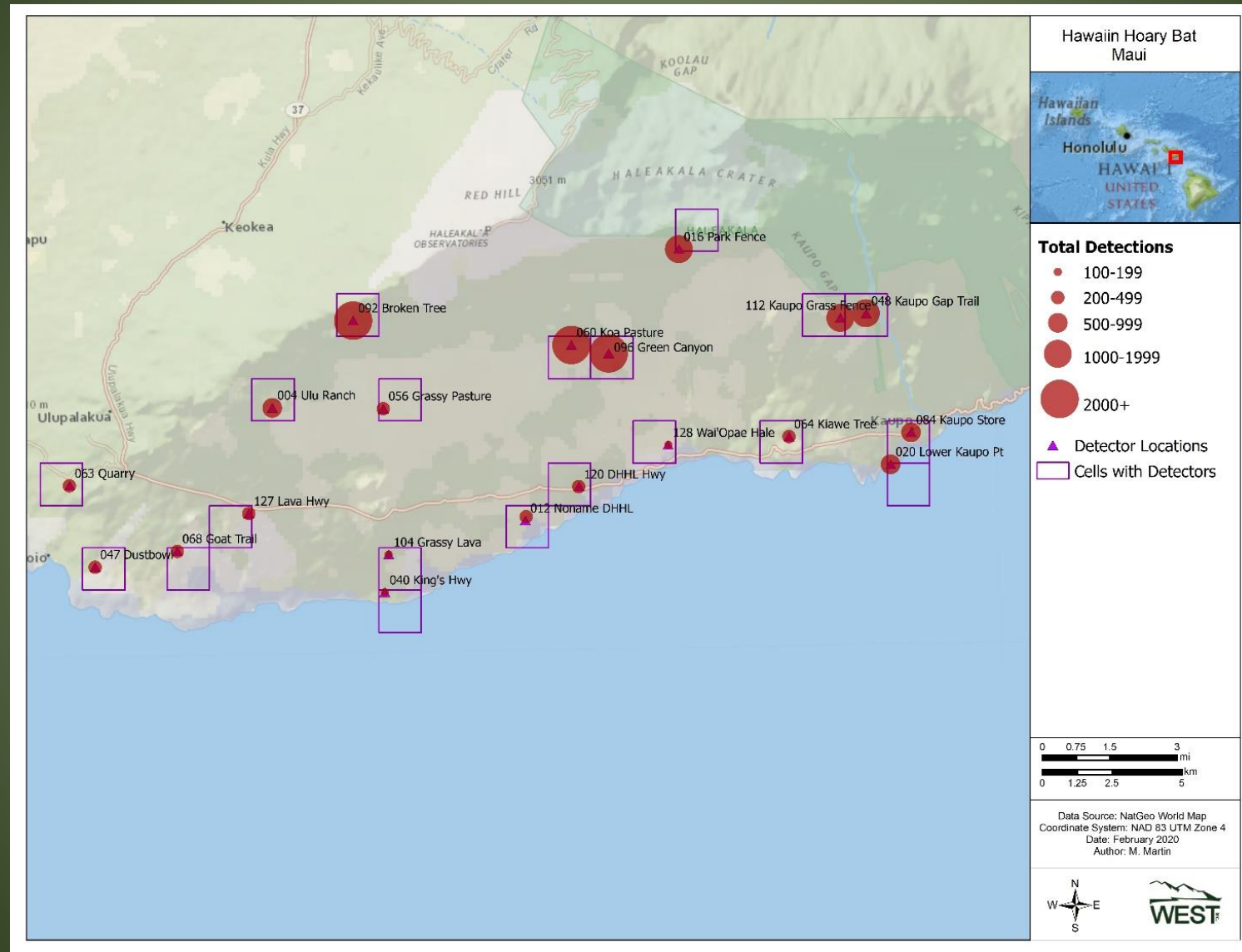
## LEEWARD HALEAKALA July 18 – December 20

- 20 detectors
- 66-157 detector nights
- ~17,429 detections
- 115 – 3,267 detections per site (**median = 455**)
- 0.71 – 27.85 calls/detector night (lactation and post-lactation)
- Feeding buzzes at all locations
- Proportion of nights with detections = 0.19 – 0.96

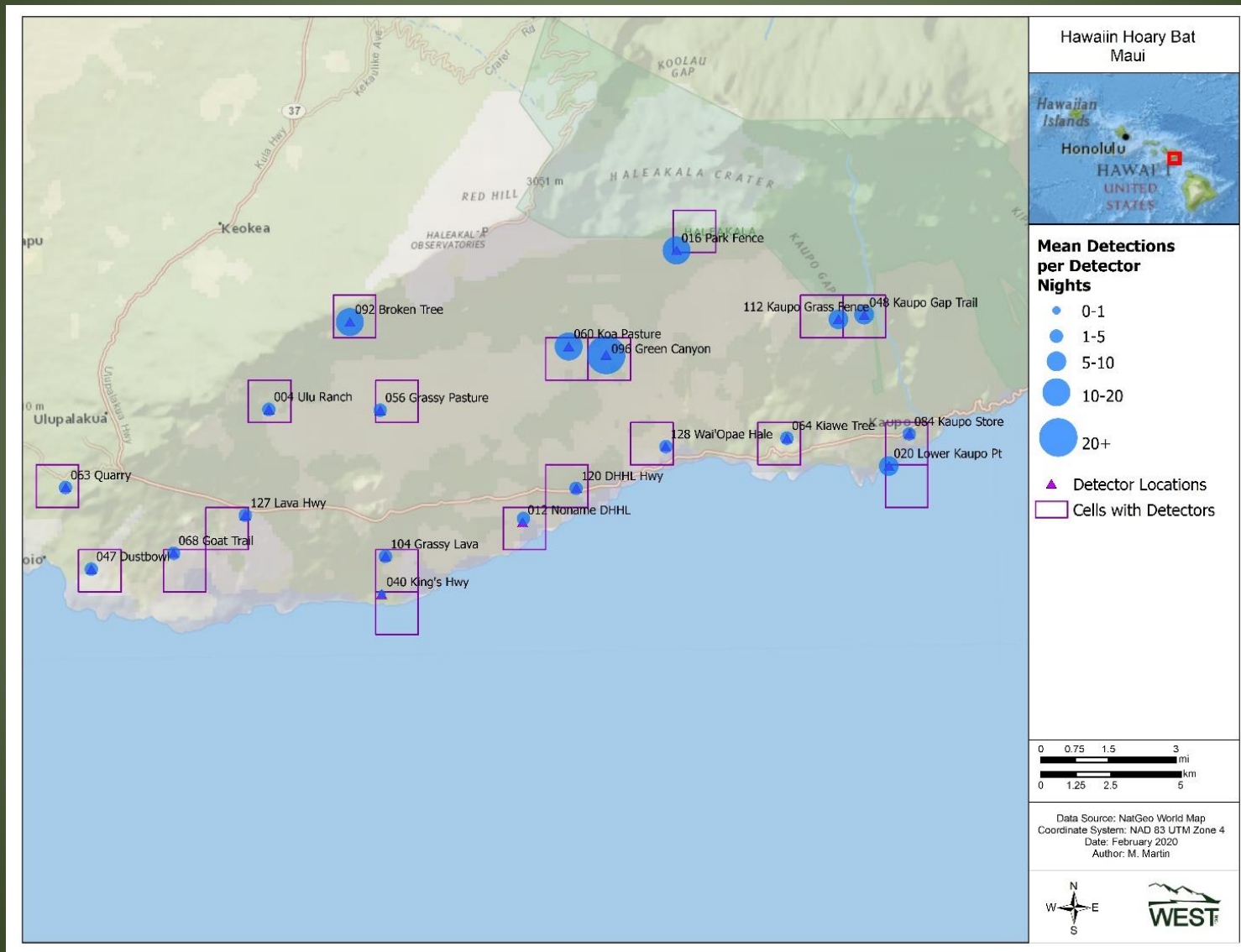
## OAHU – ISLAND WIDE June 2017 – October 2019

- 87 detectors
- 106 - 800 detector nights
- ~12,200 detections
- 0 – 2,551 detections per site (**median = 11**)
- 0 – 21 calls/detector night (lactation and post-lactation)
- Feeding buzzes at 39 of 87 locations
- Proportion of nights with detections = 0 – 0.84

# LEEWARD HALEAKALA – TOTAL DETECTIONS JULY 19 – DEC 20, 2019

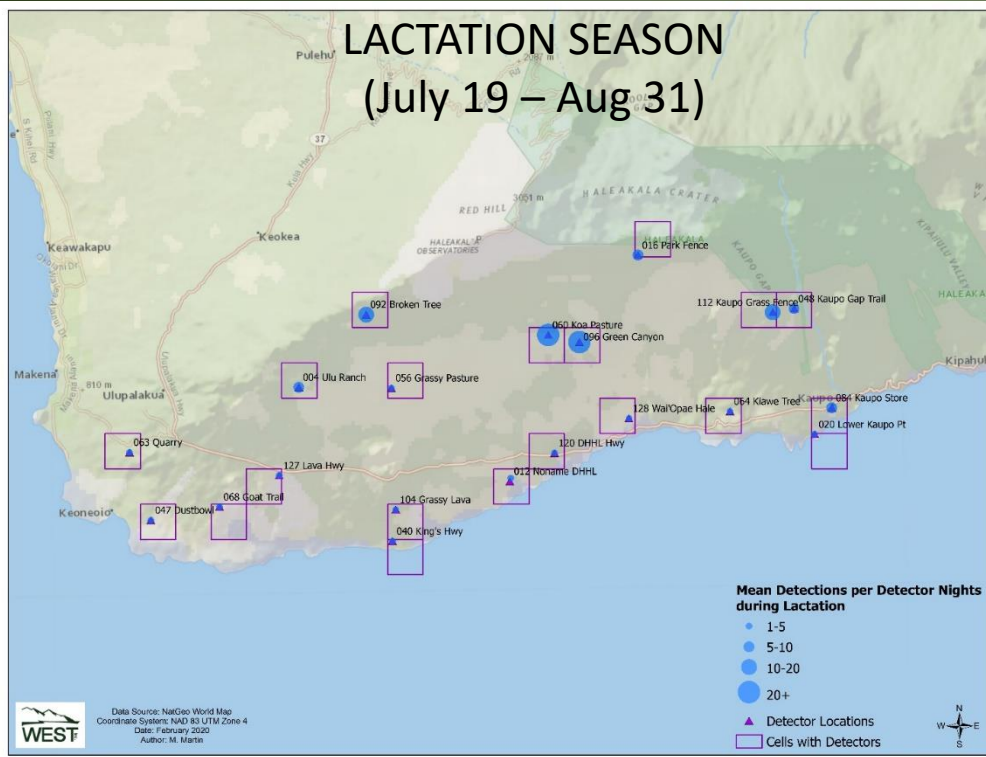


# LEEWARD HALEAKALA – MEAN DETECTIONS / NIGHT JULY 19 – DEC 20, 2019

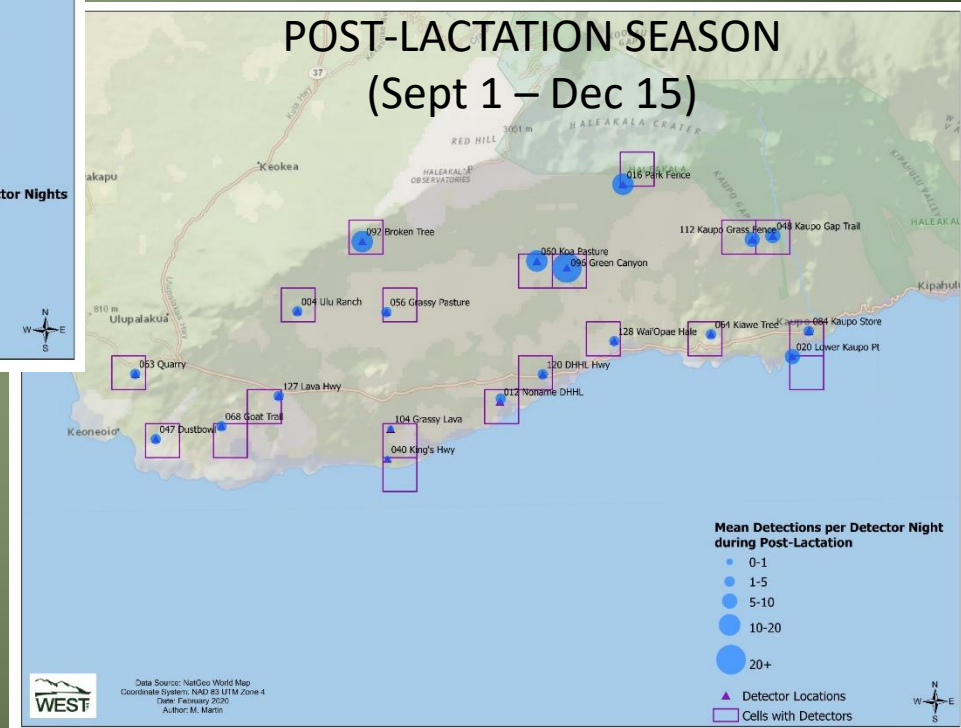


# LEEWARD HALEAKALA – MEAN DETECTIONS / NIGHT

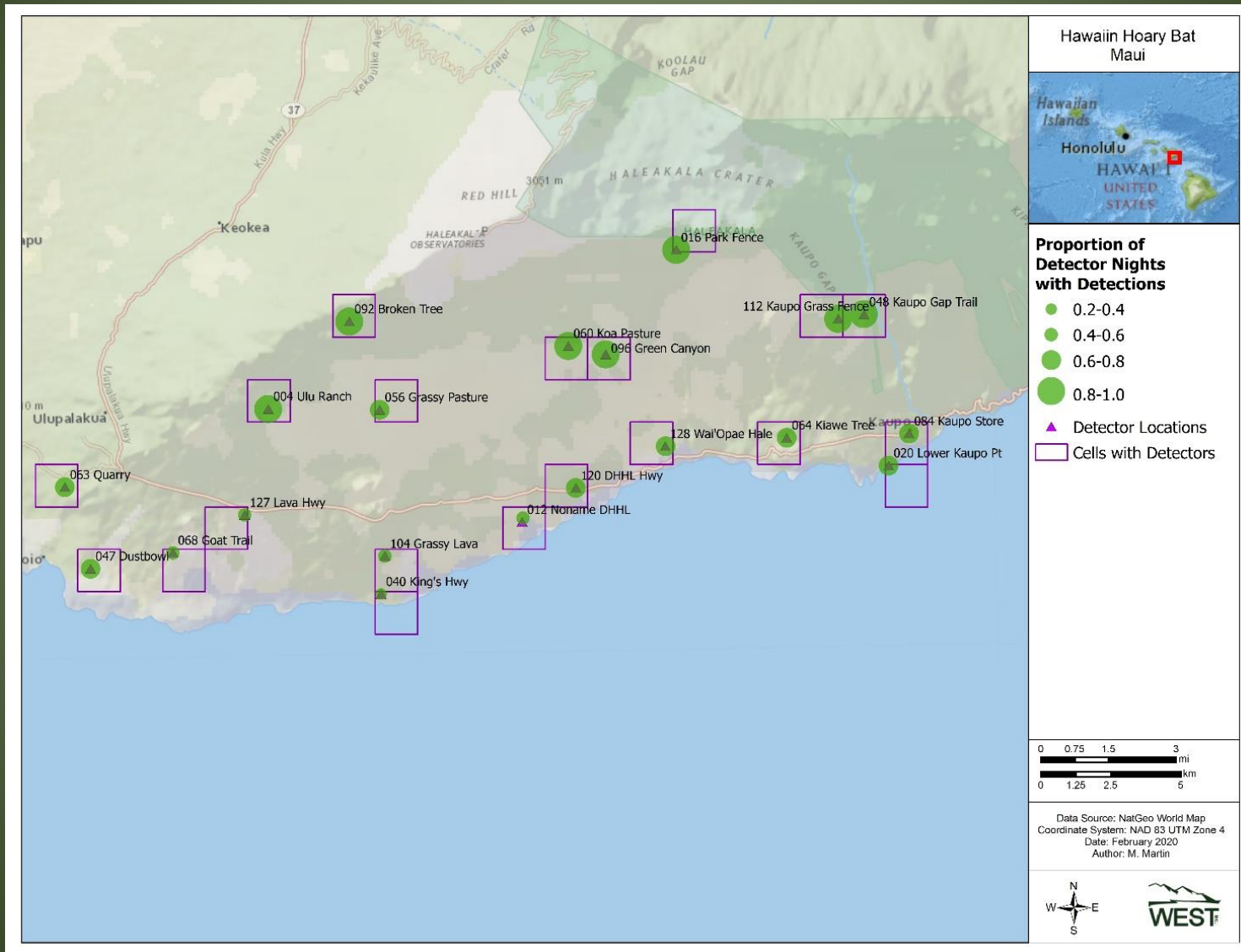
## LACTATION SEASON (July 19 – Aug 31)



## POST-LACTATION SEASON (Sept 1 – Dec 15)

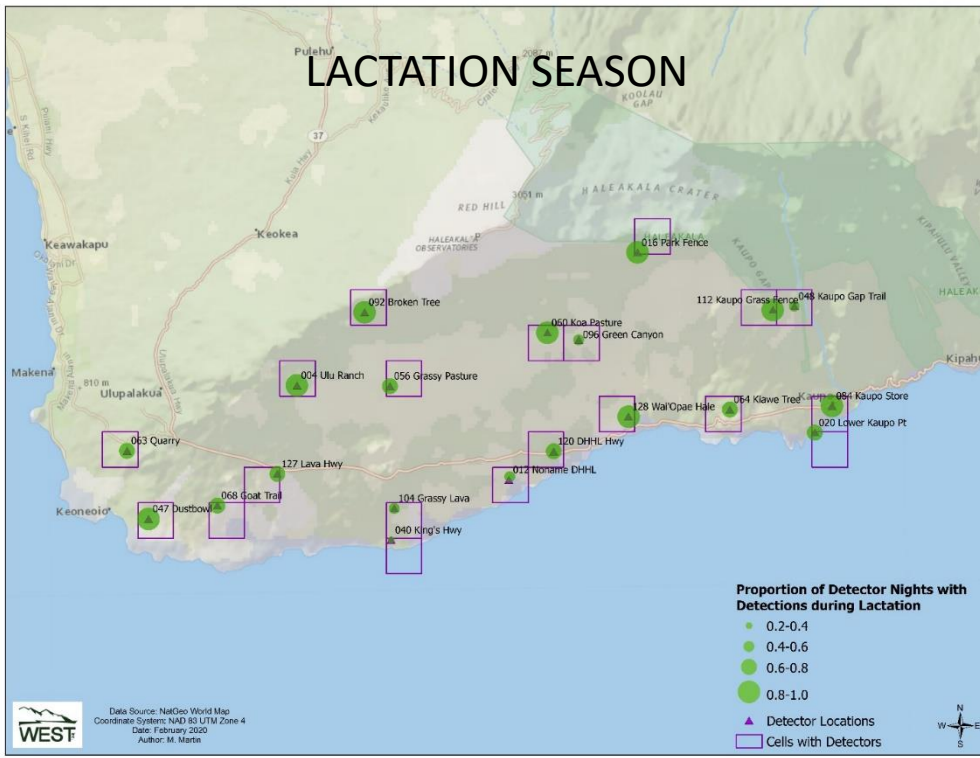


# LEEWARD HALEAKALA – PROPORTION NIGHTS WITH DETECTIONS JULY 19 – DEC 20, 2019

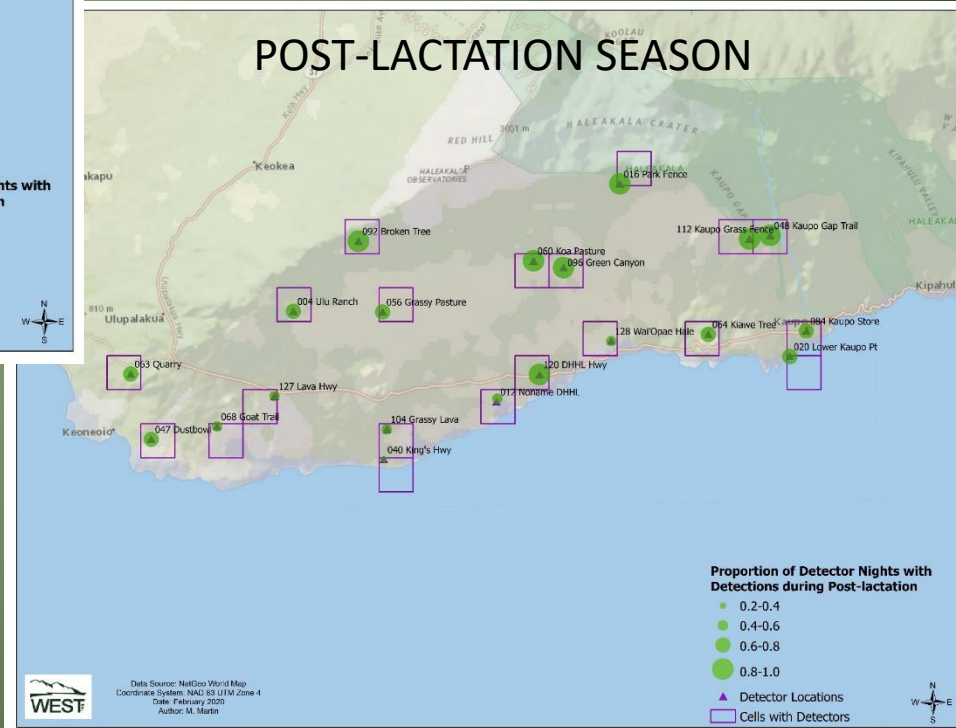


# LEEWARD HALEAKALA – PROPORTION NIGHTS WITH DETECTIONS

## LACTATION SEASON



## POST-LACTATION SEASON



# LEEWARD HALEAKALA – INSIGHTS TO DATE

- Bat activity widespread across the study area
- Bat activity greater and more frequent in mid-upper elevations and eastern side of study area
- Evidence of foraging activity at all 20 locations
- Bat activity much greater than on Oahu

Special thanks to a number of helpful collaborators across the islands that have allowed access and provided assistance to gain access to sample sites: DOFAW, State Parks, HECO, City/County of Honolulu, Water Supply Board, YMCA, DOD & Army Natural Resources Group in particular, Kahuku Wind, Kawaihoa Wind, USFWS, AEP and Auwahi Wind, Ulupalukua Ranch, Haleakala Ranch, Kaupo Ranch, DHHL, and number of other individuals and small businesses.



[west-inc.com](http://west-inc.com)

Corporate Headquarters

---

415 West 17th Street, Suite 200, Cheyenne, WY 82001

307.634.1756