

Pūlama Lānaʻi Conservation Updates

Community Meeting Summary June 19, 2023

Presenters: Dr. Rachel and Jonathan Sprague, Pūlama Lānaʻi Conservation Department co-Directors

2022-2023

Conservation Highlights

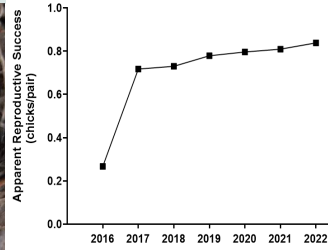
- Community events & outplanting
- All windward wild nāʻū fenced
- 65 new bryophyte species catalogued
- Parthenium* removed from island
- USDA deer harvest resumption

Hiʻi Restoration Area

- 80 acres protected from predators
- Predator-proof fence excludes cats/rats
- Largest montane predator-proof fence outside of NZ
- Focal area for habitat restoration
- Partners: NFWF, Pono Pacific
- Over 140 ʻuaʻu burrows found
- Monitoring cameras indicate cat-free
- Habitat restoration-Kuahiwi a Kai grant to Pono Pacific
- Monitoring-ʻuaʻu, habitat, etc.
- Rodenticide application to fully eradicate rodents
- Federal/expert partners support
- Late summer/early fall
- Same formula as Ramik
- USFWS EA for review/comment
- Limited use – 2 days over a period of one week

ʻUaʻu – Hawaiian Petrel

- Developed monitoring program w/partners to evaluate our management & detect threats
- Lānaʻi is home to one of the densest remaining colonies
- Implemented one of the largest predator control grids in the state for seabird protection.
- Trapping predators successful but always has “holes”



ʻAkēʻakē – Band-rumped storm petrel discovered on Lānaʻi!

- One of 3 Hawaiʻi endangered seabirds
- Only confirmed nesting area on Hawaiʻi Island
- Likely on Nā Pali Coast, Lehua, Haleakalā
- Potential future conservation tool-social attraction site
- Colonial birds
- Attract to artificial burrows
- Acoustic recorders surveyed new areas for nocturnal ʻakēʻakē
- Emergency Proclamation: fences at Kapano, Mānele-Hulopoʻe, Kuahiwi a Kai
- Downward deer harvest trend
- Mouflon on upward trajectory
- Increase hunting Control Hunts: PL, CGMA
- Refine surveys
- Kuahiwi a Kai Lānaʻi CHC stewardship program
- Remove ungulates in management fences: Hulopoʻe-Mānele; Hiʻi; Increment 2

Ungulate

Management status

2023 & Beyond

- 2012 Axis deer estimate 17,000
- 2023 Estimate 25,000-35,000 deer
- State conducts yearly helicopter transects
- Manage herd size
- w/DOFAW
- Focus on ewe harvest

Kuahiwi a Kai: Lānaʻi Watershed Conservation Program

Status Update

- 2020-21 data collection, strategic planning
- 2022-23 active restoration
- 2024 RFP, coming soon!

Reef Health

- The Nature Conservancy (In water)
- NASA aerial high-tech mapping w/FluidCAM
- Shallow reef dominated by sediment & turf algae, 61.5 & 22.4 % of bottom, respectively
- Deeper reef (>2 meters) had highest avg. coral cover in the state at 54.7%
- Over a fifth of deeper reef survey sites had >75% coral cover

First island vegetation survey

- Native and Polynesian introduced plants 8.6%
- Non-native & invasive plants 66.7%
- Bare earth/Talus 24.7%

On-the-ground Restoration

- Ungulate management fence-Hauola
- Pono Pacific, USFWS, DOFAW, NFWF

Cover Class	Area (km ²)	Land area (%)
Aalii native shrubland	24.6	7.04
Albizia	1.4	0.41
Bare earth	59.1	16.91
Brazilian pepper	7.5	2.13
Cook pine	3.6	1.03
Eucalyptus	13.5	3.88
Formosan koa	6.4	1.83
Ironwood	9.3	2.67
Kiawe, Ku, and Koa haole	61.8	17.68
Kukui	0.7	0.21
Mixed non-native grass and shrubs	54.4	15.56
Non-native grassland	73.1	20.92
Strawberry guava	2.2	0.63
Talus	27.2	7.78
Uluhe and Ohia	4.6	1.33



University of Miami Fluid lensing

- Classify coral—check out Nemo-Net citizen science app



More info:



What's Coming Up

- Common nursery greenhouse
- Endangered damselfly artificial habitat & introduction

For more information, please reach out to communitymeetings@pulamalanai.com

Info as of June 19, 2023 subject to change without notice