

## State of Hawaii DLNR/DOFAW Update for RAC

Meeting date: June 30, 2021

### PERSONNEL AND LOGISTICS

#### Kure Field team

##### **Deployed Winter 2020 Camp**

*Honolulu on October 6 via Signature Air (Sentry Air) to Midway. Traveled to Kure Via HRG chartered M/V Imua November 3, 2020*

Andrew Sullivan-Haskins (DLNR RCUH Camp Leader)  
Saxony Charlet (Kure Atoll Conservancy Nursery manager)  
Alyssa Mincer (DLNR volunteer)  
Cara Gates (DLNR volunteer)

##### **Summer 2021 Camp Deployed March 30, 2021**

Outbound Honolulu – Kure Leg: *via DLNR Chartered Imua - Marine Debris Cruise*

Amital Orzech (DLNR volunteer)  
Suika Sono-Knowles (DLNR volunteer)  
Michelle Smith (DLNR temp hire)

Inbound Kure to Honolulu

Cara Gates (DLNR volunteer)

**Scheduled to return (Kure – Honolulu) chartered NMFS vessel Kahana II** (Monk Seal drop off cruise) Cruise dates Honolulu – Kure – Honolulu July 10 – Aug 6 2021

Michelle Smith (RCUH)

**Scheduled to return Summer 2021 DLNR team** via DLNR chartered Imua, Dept. Honolulu Sept 30, 2021. Ship returns to Honolulu October 12, 2021.

Andrew Sullivan-Haskins (CCRT RCUH)  
Saxony Charlet (DLNR volunteer)  
Alyssa Mincer (DLNR volunteer)  
Amital Orzech (DLNR volunteer)  
Suika Sono-Knowles (DLNR volunteer)

#### Kure Honolulu Staff

Cynthia Vanderlip Kure supervisor (CCRT RCUH part time)  
Naomi Worcester Wildlife Biologist (CCRT RCUH part time)

### KURE 2021 WINTER FIELD TEAM ACCOMPLISHMENTS

#### ***Verbesina***

Verbesina seed bank is rapidly declining. If the current trend continues we may expect to remove 6,000-7,000 total VERENC in 2021.

Annual totals

- 2016 VERENC Total = 200,040
- 2017 VERENC Total = 87,159
- 2018 VERENC Total = 47,928

- 2019 VERENC Total = 40,236
- 2020 VERENC Total = 15,328

Verbesina has been documented to seed in as little as 30-40 days, necessitating a full island treatment cycle that removes plants before they go to seed. We have been conducting full-island 40-day island treatments for 10 consecutive months. Recent factors that have improved our eradication program and allowed us to stay on the 40 day schedule include:

- 1) We doubled experienced team members from 2 to 4.
- 2) The abundance and distribution of Verbesina has been significantly diminished. The annual number of Verbesina removed in 2021 is just 3.5 % of what was removed in 2016.
- 3) Zero Laysan duck botulism outbreaks this year. Outbreaks take time to contain.
- 4) Key objectives have been postponed such as: facility maintenance, Big Head Ant surveys, runway remediation, Christmas Shearwater surveys, Albatross banding, Index albatross surveys instead of full island counts etc.
- 5) Using past data to locate areas where plants were missed and allowed to go to seed. Performing check ups in those areas before the 40-day scheduled treatment.
- 6) cutting narrow trails into dense naupaka where Verbesina was missed in the past and went to seed.

### ***Marine Pollution***

Marine debris Cruise (March 30- April 22)

- Removed 47.2 tons (94, 472 pounds) from FFS, Laysan, Lisianski, Midway and Kure
- 28,000 removed from Kure (~ 1/3 of all the material removed). The Kure collection was collected and bagged in super sacks by DOFAW over the last three years.
- Disentangled a sub-adult female monk seal entangled in derelict fishing gear at Laysan. Also disentangled three black-footed albatross chicks and one 'Iwa (great frigatebird).

### ***2020 Container spill fall out***

- On December 4th, 2020, personnel were alerted to a major container spill that had been reported approx. 1800 NW of Hawaii. Approx. 1,900 containers were reported to have fallen into the ocean from a large cargo vessel; 40/1900 were reported to be possibly containing hazardous materials. Continued to observe, record and collect container spill items from the beaches and interior of the island including an influx drinking straws, practice combat weapons, soap dispenser pumps, Tie-dyed Crocs, Styrofoam, etc. Items are now being found in albatross boluses
- On February 18th, 2021, the first fallout from this event was observed as multiple “new” items were found washing ashore. Items with manufacturers codes and new packaging may be able to be linked to the specific spill.
- Items continued to wash ashore daily throughout May including: Crocs, combat practice weapons/equipment, seat cushions, drinking straws, various sized pieces of Styrofoam, soap dispenser pumps, baby toys, bike helmets, colored slime, volleyballs, tennis balls, etc.
- In addition to the daily arrival of pollution along the shoreline, many items are being found inland as items like straws, medical vials, pieces of Styrofoam and plush toys
- In May some items started to show up in albatross boluses.
- On May 17th a “Squeezamal” with a tag reading “Made exclusively for Claire’s” inside a Laysan albatross bolus
- On May 19th one of the soap pumps was found in a fresh Laysan albatross bolus

- Data collected on each item: Date, time, location, item description, collector, photos y/n, collected y/n

***Monk Seal Monitoring (monitoring conducted before NMFS monk seal teams arrival in July 2021)***

- 2 full-island Hawaiian Monk Seal surveys are conducted per month.
- Tagged 9 weaned monk seals under NOAA permit #22677.
- 16 Hawaiian Monk Seal mom and pup pairs have been identified this year. One pup has died.

***Laysan Duck Monitoring and Management***

- June 2021 Population estimate is 65-75 adult ducks, including 30 hatch year.
- At least 30 ducklings from winter broods have survived to independent advanced stages
- Botulism prevention - Removed albatross carcasses and eggs from hard pack runway areas that can become ephemeral wetlands. All water sources are checked daily for sick or dead ducks.
- Sources of food for foraging broods observed were small moths in sweet alyssum and flies in albatross chick carcasses and seabird feces.
- Laysan Duck translocation - Received 200k grant from C- SWG USFWS to translocate 25 more ducks from Midway to Kure to increase genetic diversity in the Kure population. Due to a busy schedule at Midway in the fall the translocation was postponed until next fall.

***Black-footed (BFAL) and Laysan (LAAL) Albatross Monitoring***

Albatross Egg count Dec 2020

36,500 LAAL nests

3,700 BFAL nests

Fledging count June 2021

LAAL fledglings (35.6% reproductive success)

BFAL fledglings (42.60% reproductive success)

***Brown (BRBO) and Masked (MABO) monitoring Jan - May 2021***

- o MABO – 33 active nests
- o BRBO – 117 active nests

***Shorebird monitoring***

- The highest count and date for each common shorebird this year is as follows:
  - o Ruddy turnstone (*Arenaria interpres*): 184 – 4/25/2021
  - o Pacific golden plover (*Pluvialis fulva*): 212 – 03/17/2021
  - o Bristle-thigh curlew (*Numenius tahitiensis*): 29 – 1/19/2021
  - o Wandering tattler (*Tringa incana*): 4 – 4/30/2021

***Mosquitoes (*Culex quinquefasciatus*) Eradication program***

- No mosquitos (checks 2Xweek, one monthly treatment of Vectolex Bs (*Bacillus sphaericus*) for all duck water sources.
- In Aug 2021, it will be two years since the last mosquito was observed. First discover on Kure in 2016

***Recruiting Volunteers for winter season (Sept 12, 2021 – March 2022)***

- 6/3 - Began posting winter 2021 positions on hiring/recruiting websites. Interviewing via zoom now. Offering 5 volunteer positions to be announced the second week of July 2021.
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***Kure Atoll Conservancy 501 c 3***

- Board members considering updating the MOA with the State to allow KAC to help with hiring.
- 5/29 – Last Board Meeting, Next meeting July 18, 2021
- Subcommittee formed for future fundraising for \$20K
- New KAC website being build off line.

***COVID 19***

- RCUH UNOLS COVID 19 rules changed in June 2021: COVID testing and one week self quarantine for vaccinated and unvaccinated people. Planning on 1-week self-quarantine for winter crew at Kawainui facility and Makiki base yard