On Monday, September 22, 2014, KISC held a general meeting to review work performed over the past year. This meeting also focused on the restructure of the committee and roles within the committee. The following information is a synopsis for those who were unable to attend. Please see pages 13-15 for more information on new Kauai Invasive Species Committee structure and Strategic Plan.

Funding Summary

The general trend for KISC funding has been upward since its inception in FY02. The new level of funding is at a level that staff feel is adequate for maintaining a high quality Early Detection and Rapid Response Network. It is our goal to maintain funding at this level.
Current Staffing

Vincent Vea (3 months)
Bill Lucey (3 months)
Ray Kahaunaele (4 months)
Pat Gmelin (4 years)
Tiffani Keanini (5 years)
Cleve Javier (5 years)
Mugs Kaneholani (7 years)
Joe Aguon-Kona (10 years)

New Positions FY15

Early Detection Botanist
Outreach Coordinator
Data and Mongoose Field Tech

Brown Tree Snake Training

Ray Kahaunaele, Field Operations Supervisor, traveled to Guam to train for the Brown Tree Snake Rapid Response Team Training. This training is a program run by US Geological Survey based out of Fort Collins Science Center. It’s main goal is to have trained response people on all Pacific islands for a rapid response to snake sightings.
Outreach Highlights

KISC’s methods of “spreading the word” about invasive species involved a lot of different venues, activities, and publications. Highlights during this period included: events, displays, give-away items, brochures and posters, newsletters, service learning projects, Early Detection Workshops, and media interface.

EVENTS
• Garden Fairs
• Banana Poka Roundups
• KCC Earth Days
• Arbor Days
• Agricultural Education and Awareness Days
• KCC Market
• County Farm Bureau Fairs
• Hawai‘i Conservation Conference
• Little Fire Ant Movie Premier
• NTBG Music Legends
• HISAW Kauai Volunteer Day with KRCP

PRESENTATIONS
• Kilauea Neighborhood Association
• ED Workshop - HDOT
• ED Workshop - KRCP-HYCC
• ED Workshops - KFBRP
• ED Workshops - KESRP
• ED Workshops - KLIC
• ED Workshops - UH Master Gardener’s
• ED Workshops - Rotary Clubs
• KCA Meetings
• ED Workshop - Kilauea Point Wildlife Refuge
• ED Workshop - Kapa’a High School JROTC

VOLUNTEERS TO NOTE
• Miconia volunteer workdays - KRCP, Plant Pono, The Garden Island Newspaper
### Outreach Continued...

#### MEDIA
- KISC and Keren Gundersen recognition at HISAW and by County of Kauai
- Articles in the Star Advertiser and The Garden Island and multiple internet articles regarding Bingabing discovery, Miconia, LFA on Kauai, KISC work, and Coqui frogs
- Television coverage regarding the discovery of Bingabing in Hanalei
- KISC as guest on KKCR radio
- Chiefess Kamakahele Middle School media project re: Miconia

#### DISPLAYS
- Educational display at Princeville Library
- Signage at Lihue Airport, Nawiliwili Harbor, and Young Brothers
- Traveling Mongoose Display featured at Schools and Libraries across the island
- Environmental Safety posters installed in KFD Sparky Trailer

#### SCHOOL VISITS
- Waimea High School (5 classes)
- KEO Preschool
- Kamehameha Spring Program - Student volunteer trip and service learning project

New outreach materials produced include brochures, newsletters, pest alerts, posters, and educational flyers.

Informative Helicopter tour with Senator Gabbard and Rep. Lee

Environmental Safety posters installed on KFD Sparky Trailer. KISC “Cootie Catcher” game corresponds with posters.

This year’s new mongoose campaign: the traveling display was featured at schools and libraries across the island.
KISC has been making great progress on our priority species and the example graphs on the following pages show clearly the success we are having. Work hours, depicted in the pie-chart below, are distributed quite well over all of our priority species, with increased attention to Early Detection work (ED Species), Little Fire Ants, and Long Thorn Kiawe.

Acres surveyed by species reflected in the bottom chart indicate miconia as the priority plant species and the work we can do from the air. Utilizing HBT helps to bring both the person-hours and costs done.
Meeting Summary

Oct 2013 - Sept 2014 Annual Meeting

Priority Species Update Continued...

The table below shows our overall numbers regarding the species we worked on during the period of September 2013 to September 2014.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Survey Acres</th>
<th>Total Mature Controlled</th>
<th>Total Immature Controlled</th>
<th>ISC Work Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED Species</td>
<td>578</td>
<td>382</td>
<td>2121</td>
<td>546</td>
</tr>
<tr>
<td>Arundo</td>
<td>84</td>
<td>79</td>
<td>238</td>
<td>238</td>
</tr>
<tr>
<td>Ivy Gourd</td>
<td>70</td>
<td>660</td>
<td>692</td>
<td>233</td>
</tr>
<tr>
<td>Coqui frog</td>
<td>138</td>
<td>3</td>
<td>1</td>
<td>543</td>
</tr>
<tr>
<td>Miconia</td>
<td>1824</td>
<td>1</td>
<td>309</td>
<td>366</td>
</tr>
<tr>
<td>False Kava</td>
<td>75</td>
<td>233</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>LTK</td>
<td>159</td>
<td>51</td>
<td>12696</td>
<td>669</td>
</tr>
<tr>
<td>Moluccas raspberry</td>
<td>31.74</td>
<td>1400</td>
<td>900</td>
<td>111</td>
</tr>
<tr>
<td>LFA</td>
<td>129</td>
<td></td>
<td></td>
<td>916</td>
</tr>
</tbody>
</table>

This map shows the treatment areas for our target species we worked on during the period of September 2013 to September 2014.
One Mature Miconia was found from Sept 2013- Sept 2014. This was a direct result from an article published in the Garden Island Newspaper.

**Miconia calvescens**

Miconia Ground Survey
- 15 Ground Surveys
- 300 immature treated
- 1 mature treated
- Area covered: 585 acres

Miconia Aerial Survey
- 3 Aerial Surveys (2 with HBT)
- 12 immature treated with HBT
- 0 mature detected
- Area covered: 1,239 acres

**Eleutherodactylus coqui**

The crew continues monthly night survey in high-risk areas including nurseries and historic capture location.

KISC also continues to assist HDOA by responding to any new reports, like the recent one in Koloa.

4 coqui frogs were caught during this last year.
Early Detection Species Update

KISC continued with Early Detection priority species control, monitoring, mapping, and evaluating.

2014 Naio Roadside Survey

2919 acres were surveyed for *Myoporum sandwicense* as part of the 2014 HDOT SNIPP Grant. All known locations of *Myoporum sandwicense* were mapped and recorded. This data will be included in the action plan for rapid response to Naio Thrips (*Klabothrips myopori*) on Kauai. (Naio is not known to be on Kauai as of this meeting).

ED Priority Species monitored this year:

- **Wax Myrtle** (*Morella cirifera*) - No regrowth found on previously controlled population
- **Velvet leaf glory bower** (*Clerodendrum macrostegium*) - No regrowth found on previously controlled population and 1 new location found on SNIPP survey

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**Mule's foot fern** (*Angiopteris evecta*)

- 114 plants controlled
- 1 new location found

**Seasonvine** (*Cissus verticulata*)

- Trail treatments - 100 plants
- KISC is currently researching feasible treatment methods.

**Grape Ivy** (*Cissus nodosa*)

- 65 plants controlled
Two new location of Bingabing (*Macaranga mappa*) were discovered this past year. KISC is currently surveying infested areas before beginning treatment phase.

- 518 plants were discovered in the Hanalei infestation area.
- 41 plants were discovered in the Wailua (Fern Grotto) infestation area.

**KISC ED Species currently being assessed for possible control:**

- Salt Cedar (*Tamarix aphylla*)
- Indian Devil Tree (*Alstonia macrophylla*)
- Bishop Wood (*Bischofia javanica*)
- Feathertop Grass (*Pennisetum villosum*)
- Turkey Berry (*Solanum torvum*)
- Rubervine (*Cryptostegia madagascariensis*)
During this last year, 66 mongoose sightings were recorded. 26 of these sightings were deemed questionable while 40 were deemed credible. Observers of reported sightings are interviewed and the answers are scored as to whether the sightings are not credible, questionable, or credible.

40 different trapping groups were set on the island this last year. These trapping groups were prioritized by recent credible sightings or a group of sightings in a specific area.

New collaboration on the horizon...
USFWS, DOFAW, and KISC will be begin working on a mongoose action plan for Kauai. This will include possible population study/assessment, methods adjustment, standard trapping protocol, and possible funding sources.
Phase I of the Kauai Little Fire Ant Eradication Project is almost complete. Phase I.a. is complete and involved treatment of approximately 8 acres of landscaped and densely vegetated areas. We are currently working on Phase 1.b. which involves controlling the surviving Phase I colonies. These surviving colonies are mostly found in the tree tops.

Hawaii Ant Lab (HAL) is planning and preparing for Phase II. Phase II will focus on the treatment on the cliff and coastal areas. Phase II presents challenges with steep cliffs and a wide gully area. HAL, KISC, and HDOA personnel have completed rappel training to assist with this project. Due to the difficulty of accessing the area, members of the Climb Aloha team assisted in the treatment. Phase II will continue with surveys and treatments on the cliff sides and steep terrain. Property surveys for surviving colonies and hotspot treatment will also continue.

In addition, KISC will continue to assist HDOA in actively surveying the island’s nurseries, transfer stations, and any possible LFA reports.
Meeting Summary

Oct 2013 - Sept 2014 Annual Meeting

• HDOA-KISC assisted HDOA in setting traps to survey over 71 acres for Coconut Rhinoceros Beetle (*Oryctes rhinoceros*) - **CRB not found on Kauai**

• HDOT-KISC controlled *Calliandra calothyrsus* along the right-of-way by Halfway Bridge (220 mature, 2004 immature plants). *C.calothyrsus* will not be added to the KISC list, it is locally naturalized in areas on Kauai.

• HDOT-KISC surveyed over 49 acres along HDOT roadways recently hydro-mulch for Fireweed among other pests along HDOT roadways.

• KNPS-KISC controlled 9 mature *Citharexylum caudatum*

• HDOA-KISC assisted HDOA to survey over 71 acres of bee hives for Varroa Mite and Small Hive Beetle - **Small Hive Beetle found on Kauai. Varroa Mite not found on Kauai.**
Committee Restructure

The committee proposed and accepted a new committee structure. KISC currently does not have an active executive committee. The new proposed structure will maintain an executive committee. This will allow the committee to gain strength and maximize efficiency.

Executive Committee

The new KISC Executive Committee is set up to have a rotating Chair. The executive committee will consist of 3 seats: Past Committee Chair, Committee Chair, Committee Chair Elect. KISC opened the Executive Committee positions to any person active within the committee. These are voluntary positions and require a 3 year commitment. The new elected committee positions will start January 2015.

The KISC Chair will chair committee meetings as well as strategic planning meetings. The Chair oversees the KISC Coordinator position and preforms the coordinator's annual evaluation.

Elected Executive Committee:

- **Past Committee Chair** - Allan Reitow (KISC Current Chair), TNC
- **Committee Chair** - Adam Williams, DOFAW
- **Committee Chair Elect** - Tim Flynn, NTBG

Vision Statement

KISC’s Vision Statement will be discussed at future Strategic Planning meetings. Vision statements define the optimal desired future state of what an organization wants to achieve over time. This will provide guidance and inspiration as to what KISC will focus on achieving in 5-10 years. KISC everyday work will ultimately contribute towards accomplishing the vision over the long term.

Action Plan and Strategic Plan

In FY15, KISC will begin working on a new Action Plan, the last KISC Action Plan was updated in 2007. The Action Plan will be based off the new vision statement and KISC Strategic Plan.

KISC will begin hosting Strategic Planning meetings to start the process of developing a Strategic Plan. The four focus areas will include terrestrial plants, aquatic, vertebrate & invertebrate, and mongoose. Each focus area will have its own strategic planning committee.
Meeting Summary

New Strategic Plan

Mongoose Strategic Plan

- What: monitoring, standardized methods, and proving if there is a naturalized population on Kauai
- Who: USFWS and Mongoose Strategy Partners

Discussion: Michelle Clark, USFWS, noted that USFWS has elevated the issue. USFWS is having internal discussion. DOFAW, USFWS, KISC are pulling their efforts together to look into standardized protocol trapping, population existence/density, and possible quarantine.

The Mongoose Strategic Planning meeting will begin in January.

Invertebrate and Vertebrate Strategic Plan

- What: Coffee Berry Borer, Brown Tree Snake, Rose-ring Parakeet, Little Fire Ant, rusts, scales, assorted bugs, vermin, etc.
- Who: HDOA, USDA Wildlife Services, APHIS, DOFAW, farmers, Hawaii Ant Lab, CTHAR, USGS, USFWS
- How: early detection, surveys, prioritization, control

Discussion: Partnerships are focus in this Strategic Plan. KISC has historically helped with Partnership Projects and Early Detection and Rapid Response for vertebrate and invertebrate species.

Invertebrate and vertebrate Strategic Planning meetings will begin in early 2015. Please let KISC know if you would like to sit on this strategic planning committee.
Strategic Plan Continued...

**Aquatic Invasive Strategic Plan**

- What: seaweeds, coral, fresh and salt water fish
- Who: DAR, local dive shops, commercial fishermen, watershed partnerships
- How: early detection, survey, prioritization, control

Discussion: Oahu is the only island with an Aquatic Invasive Species Committee. KISC is proposing partnerships with AISC, DAR, and others. KISC previously assisted DAR with Snowflake Coral control in Port Allen. A proposed DAR/KISC partnership involving invasive seaweed monitoring.

Suggestions: KISC to possibly become a member/technical advisor on the Kauai Watershed Alliance. Possible partnership project working with water flow and mosquito populations with KFBRP and USFWS. Kahili ginger in streams is a possible aquatic restoration project.

Aquatic Strategic Planning meetings will begin in early 2015. Please let KISC know if you would like to sit on this strategic planning committee.

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**Terrestrial Plants Strategic Plan**

- What: trees, plants, early detection, rapid response,
- Who: UH CTHAR, CGAPS, KLIC, NTBG, DOFAW, KRCP, TNC, KNPS, Plant Pono, landscapers, property owners, nurseries, farmers, etc
- How: early detection, surveys, prioritization, control

Discussion: KISC to open a full time Early Detection Botanist position. This will free the crew to take on more efforts and targets. Position longevity is based on funding.

Can any widespread species be controlled by KISC? Locally? Island wide? Protected Green area work under KISC Vision? - Discussion for planning meeting.

Terrestrial Plants Strategic Planning meetings will begin in early 2015. Please let KISC know if you would like to sit on this strategic planning committee.
Future Meetings

KISC annual meeting: September 2015
Strategic Planning meetings: Early 2015

Please notify KISC if you would like to participate in any of the strategic planning meetings.

Mahalo!

Meeting Chair: Tim Flynn

Presenters: Bill Lucey, Ray Kahaunaele, Tiffani Keanini, Craig Kaneshige, Pat Gmelin, and Mugs Kaneholani.


(Please contact us if you are interested in a printed copy of this Meeting Summary)