

**OISC Miconia strategy meeting**  
**Meeting Agenda**  
**March 10<sup>th</sup> 2005**  
**7:00 – 4:30**

Task notes taken in conjunction with a separate file for field surveys that need to be done, thus not all surveys to do are listed under the areas.

I. Miconia locations:

1. Wahiawa:

- a. Point by reservoir what mean?
- b. Access issue:
  - i. Dole / Galbraith landowners in reservoir
    - 1. Whitmore village need to get into the farms with in gulch
  - ii. Parcel of land within Wahiawa that is greenbelt Pat C see if state manages
  - iii. Look up Hiilawe flowers: from notes of Pat C
- c. Buffer:
  - i. 500m: all homes
  - ii. 1 mile all natural areas, parks schools ect, and flyways
    - 1. Whitmore village:
      - a. all homes
      - b. Natural areas surrounding
      - c. Farms that go into resevoir
    - 2. Reservoir: split ->
      - a. stream in schofield E rangs
      - b. kayak rese follow splits
    - 3. Wahiawa:
      - a. Homes
      - b. Green belt
      - c. State park around school -> E range
- d. PR: flyers for for all zip code
  - i. Hand mailer for 1 mailer
  - ii. Combine with budmad
- e. aerial:
  - i. hold off until ground is done

2. Maunawili

- a. Discrepancy: points that don't know what they are: as far as notes go only 2 points of plants found off of trails but there are 7 points
  - i. Email snapshot to Mike with access forms and get help on points:
  - ii. Thinking that the point marked 1998 and 2000 are the ones that are real.
  - iii. Look at hardcopy data
  - iv. Ask Joby/ Kapua
  - v. Thinking that its non repro no info on it
  - vi. Need to rebuffer
- b. 500m buffer:
  - i. Need to more surveys around lower gulches
  - ii. Restarting from aniani ridge all upper gulches / and lower sections
- c. Source:
  - i. Still unknown: possibility from Waima. 1.2 from heco plant / .7 from MH plant to closest // 2ns immature (more kahuku) 1.5 mi to MH plant 1.9 to HECO plant
- d. Aerial survey

- i. Wait until rebuffer then do lower areas,
      - ii. can do spot aerals around farms
    - e. PR
      - i. Farms in Maunawili: aka ag association
- 3. Waimanolo
  - a. PR
    - i. Work with growers association (same people as coqui)
      - 1. any info on previous miccal
      - 2. about accessing streams
    - ii. Talk with Matt and Rick:
      - 1. ask about Leland Mayano
      - 2. who state contact for neighborhood
    - iii. Campaign: in neighborhood, flyer etc, to be able to access the streams
    - iv. State of Hawaii lands. Access around bumpys land
      - 1. survey land above reservoir 1<sup>st</sup> one...think its bumpy and private res.
  - b. Ground
    - i. Follow up on mahiku pl point
    - ii. Concentrate on urban areas between growers and streams: lots of area
    - iii. Area around 1<sup>st</sup> reservoir inside 500m buffer
  - c. Aerial:
    - i. Think ok
    - ii. Possibly urban areas
    - iii. Town side of Koolau:
      - 1. lower priority
  - d. Discrepancy:
    - i. Two points don't know where from thinking not miccal
      - 1. ML and kapua
  - e. Source
    - i. Unknown possibly nursery in Waimanolo
- 4. Haiku: think from nursery as plants just found around
  - a. Ground: increase to 800m buffer
    - i. Hike stream until hau
    - ii. Nursery area
    - iii. All area w/in 800m buffer
  - b. PR
    - i. Canvass all neighborhood
    - ii. Hike major streams through neighborhood w/in 1 mile buffer
    - iii. Nursery: check with previous owner of nursery about history
      - 1. talk with kam schools about previous leases
    - iv. Matt &Rick :
      - 1. talk with about the surveys they want to do etc..
- 5. Kahaluu: still don't know source plant for this. It is 2 miles to the hart and tagami plants..
  - a. Discrepancies:
    - i. Couple of points near Joby and Kapua
  - b. Source plant?
    - i. Unknown ideas?
  - c. PR
    - i. All houses in w/in 800m buffer
  - d. Aerial survey
    - i. Lots in area on Windward side
    - ii. Some on Ko'olau side

6. Kaalaea: source: it shows 1 mile from hart and tagami plant to mature tree in back of valley: does this mean there is another mature in-between?
  - a. Discrepancy:
    - i. 2 points in area
    - ii. Mature trees: says 13 in notes but 3 in access should get original data from Nilton
  - b. Source: 1 mile suspect
  - c. Ground:
    - i. Survey big farm areas
    - ii. 800 m buffer extra surveys
  - d. PR:
    - i. Access big farm areas
    - ii. Neighborhood board
    - iii. Canvass neighborhood
  - e. Aerial
    - i. Lost of area to the north
    - ii. Leeward koolau: low priority: discuss with bigger MCWG
7. Kalihi
  - a. Discrepancy:
    - i. Map original plant
    - ii. Is the plant right at the gate on GIS actual: ask CY
8. Nuuanu
  - a. Discrepancy:
    - i. 3 points in neighborhood ask Nilton
  - b. PR
    - i. Revisit canvassing / survey areas w/in buffer
    - ii. Ewa side of pali canvas condos
9. Makiki
  - a. PR campaign: search houses in Makiki around Miccal
  - b. Ground: top surveys around gulch
10. Manoa
  - a. Discrepancy:
    - i. ask Stef Joe if she has GIS of Lyon arb
    - ii. ML/RS missing field form for naniopo
11. Waimea Botanical Gardens
  - a. Discrepancy:
    - i. Waimea survey: missing info on tib urv
    - ii. Field form RS meeting up there: field form Pampass grass
    - iii. Check out the exact local of miccal plant next time RS there
12. Makaha
  - a. Stargate toilet sighting by Landis Ornelis:
    - i. Army will check

## 2. Buffering

- i. Buffering surveys: farthest 'unknown source' of a plant is Maunawili 1.5mi to 2 mi depending on which mature tree in Waimanolo that use as a source plant to the plants along the trail (same situation for these plants if buffered from Manoa). This may be increased as the trail could be a fly way for birds.

- ii. Farthest known source:
  1. Kaalaea from art gallery to back of valley mature
  2. Nuuanu almost 900m from mature to dead mans plant
- iii. Need to establish overall ideal buffer for areas: e.x. 2 based on sci and empirical data
  1. **Ground :**
    - a. 800 m around mature: realistic initial ground survey of where high priority spread. Based on farther extent that we are seeing spread: aside from unknown sources
    - b. 500m around immature: to catch potential matures that do not yet know about. It is a safeguard, in case we are incorrect on assumption that know source trees in area
    - c. 800m around all unknown source plants: although not mature provide with greater chance of getting source mature plant
  2. **Aerial**
    - a. Methodology: Aerial surveys area that we ground survey only as needed i.e. after ground survey areas: ex. too steep etc.
    - b. 1 mile buffer: of all mature plants and unknown source plants (aka Haiku , Maunawili) : realistic initial survey buffer. Want to buffer all matures. (some immature plants have no associated data and do not know if they are legitimate or not)
- iv. Residential areas
  1. what do about them
  2. PR person HECO bill etc.

b. Resurveys

- i. Time scale every 2 years / mature areas:
  1. **All gulches w/in Miconia buffer within 3 years**
    - a. OISC goes on calendar year: generate a list for each calendar year of revisit surveys that hit 3 years anytime during that year. This may result in some surveys done b4 3 years and some after.
    - b. **MH recalculate survey areas**
    - c. **OISC may have to prioritize surveys with given resources**
    - d. **Check realism of miconia acreage projection**

2. Field techniques

- a. **Line buffers of surveys**
  - i. Aerial: 50 m around aerial track: ensuring all emergent miconia within buffer
  - ii. Road surveys: 30m suggested but dependent on individual road survey
  - iii. Walking: 30m suggested but dependent on individual walking survey
- b. **Quality of surveys**
  - i. Confidence Level Miconia Final: General survey goal is between a Q3 – Q4.
    1. Q5: Close together – Clean sweep. Can cover 100% of the way to the neighbor 100% of entire time. Maybe can see others in the survey line as well. Every plant is spotted. Basically, overkill.
    2. Q4: Closer together – Complete coverage. Can cover 100% of the way to the neighbor most of the time. However, sometimes lose sight of neighbor due to vegetation, features, etc... All plants 30cm and above are spotted.
    3. Q3: Standard survey quality – Functionally clearing all area. Can see 50-75% of the way to the neighbor. May occasionally see neighbor, but

often lose sight. Confident that all ground is searched. All plants 1m and above are spotted.

4. Q2: Recon quality – Prioritizing search area by suitable habitat. Not all area is completely surveyed. Can see less than 50% of the way to the neighbor. Can hear neighbor, but never see them. May be the only person in a gulch.

5. Q1: Poor quality - Redo survey. Something went wrong need to be redone.

ii. **8. Grass species do not have a Confidence level attached to it. It is assumed that all is being treated**

iii. **Confidence Level Other Species (not grasses) Final: General survey goal is between Q3- Q4.**

1. Q5: Close together – Clean sweep. Can cover 100% of the way to the neighbor 100% of entire time. Maybe can see others in the survey line as well. Every plant is spotted.

2. Q4:- Closer together - Complete coverage. Can visually cover a 100% of the way to the neighbor most of the time.

3. Q3:- Standard survey quality. Can cover 50-75% of the way to the neighbor. May occasionally see neighbor, but often lose sight. Confident that all ground is searched.

4. Q2:- Recon quality. Prioritizing search area by suitable habitat. Not all area is completely surveyed. Can cover less than 50% of the way to the neighbor.

5. Q1: Poor quality - Redo survey. Something went wrong need to be redone.

c. Scheduling Miconia

i. Days to reach desired goals

1. look at desired goals: realistic etc

2. set aside time new surveys vs old surveys:

a. Ground one old resurvey for every 3 new surveys

i. 25% resurvey / 75% new survey

ii. schedule / maps of miccal surveys: MH do by quarter

1. Josh will take care of maps

2. MH/JF prep all the access forms initially, eventually have staff doing them as well.

3. **Public outreach:**

a. Canvassing / systematic access in areas : see individual sites

i. HECO mailing

ii. Nursery associations

iii. Neighborhood meetings

b. Botanical gardens: Hoolmaluahia check records to see if Miccal ever present

i. Nursery associations

4. **Large Miccal meeting TBA:** these are task items that need to address for this meeting.

a. Talk with staff about aerial surveys: not doing ground unless comes from ground surveys

b. Buffers go over:

i. Need to establish what is upper limit goal: need sci backing i.e. bird dispersal and empirical evidence

c. Aerial surveys on leeward side

d. PR campaign: KISC did 1 mile track of all houses that they would search, 2 mi self serve

i. Neighborhood board meetings

- ii. Send out letters: then go door to door
- e. Aerial recons
  - i. Waihole: huge area suspect land
    - 1. see what KMWP connection with area is if people that we could have put on their radar
  - ii. Likelike plant: told MH @ GIS conference prob not valid point
  - iii. Moanaloa
- f. Other Recon
  - i. Flyways: need to address
  - ii. Streams: doing all in miccal areas
  - iii. Suspect areas: how do areas outside the 500 m buffer that are suspect
    - 1. ie Manoa makai of Puu pia: recon these areas 1-2 people/gulch
- g. Gauging success:
  - i. Goal for Miconia:
    - 1. Find all known plants: Buffer exiting plants to establish survey area
    - 2. Systematic resurvey /treatment of population areas: resurveys
    - 3. Safeguard of unknown areas: set up system for prioritizing areas outside of our buffer zones to ensure that no populations are escaping us
    - 4. success: measure of equation: % done / to do new surveys + : % done / to do resurveys + : % done / to do Safeguard of unknown areas = overall gage of success
  - ii. Can we use this model for other species?
    - 1. Yes, just need to establish buffer for each species
      - a. grasses: how do we buffer them: buffer all suitable habitat within a topographic boundary: ex all of Halawa / Temple valley for schcon.
    - 2. safeguard of success
      - a. Vary with species on how to tackle it: ie Miccal aerals, schcon trail hike, weed wackers baesyard etc.
  - iii. Other ideas:
    - 1. show population sizes decreasing over time:
      - a. may not be feasible with incipient pops as we find spikes in pop. Sizes, still finding new plants/populations
  - iv. Need to disseminate this idea with other ISCs and see if can agree on model for success
- h. Research
  - i. Bird passerine:
    - 1. bulbul info:
    - 2. review RS's emails
    - 3. Keren KISC what they found
    - 4. Can we use HISC R&D money to contract?
  - ii. Unknown sources:
    - 1. go through all the sites that are unknown