



ALOHA ARBORIST ASSOCIATION
MEETING MINUTES – 09/20/2017 - APPROVED
Gordon Biersch, Honolulu, HI

Members in Attendance: Jay Zambo, Desiree Page, Carol Kwan, Sergio Vasquez, Jamilee Kempton, Angela Liu
Guests: David Golden, Ilana Nimz, Wai Lee, Jolie Wanger

1. Call to Order & Approval of the Meeting Minutes of 7/19/17 - The meeting was called to order at 6:45pm. The motion was made and seconded to approve the minutes; the motion was passed unanimously.

2. Guest Speakers: Jolie Wanger and Wai Lee, Smart Trees Pacific (STP), spoke about the Citizen Forestry Training and Inventory Program. The 1.5 year old program was piloted in 2016. The program helps to collect street tree data for the City and County of Honolulu Division of Urban Forestry. The second and equally or more important purpose of the program is to engage community members in advocating for and building towards urban forestry goals shared by the neighborhoods and by the City & County. STP wanted to use the program to overcome negative perceptions about trees and the government agencies that manage them.
 - So far, inventory data for about 4,000 street and park trees have been collected using Tree Plotter, a web-based interactive app. Trees are plotted using GPS data. Data was collected on trees in the right-of-way including if the tree was planted by the adjacent homeowner, if the tree had been cut to a stump, or if the location was vacant and plantable. The City's arborist contractors helped calibrate the data.
 - Residents in the Kailua area where this program was rolled out experienced a high level of comfort seeing the program's volunteers in their neighborhoods inventorying the trees.
 - Data was imported into iTree to develop information on the benefits of the tree cover in Kailua.

Following their presentation, STP invited arborists from AAA to help with several different roles during the upcoming second phase of the training program. Jamilee Kempton and J Zambo will assist with the panel discussion to kick off the training. Arborists also are needed to teach neighborhood volunteers how to collect tree data, and how to identify the trees' species. Some of the arborist-trainer roles were filled by the AAA members present. There was a suggestion to apply for CEUs for arborists who help to train the citizen foresters.

There was discussion about species identification. While there are many obscure species spread across the islands of Hawaii, most public trees are one of a few dozen species. Steve Connolly, Carol Kwan and others discussed a few different options for identifying more unusual species, with Steve adding that he would like to see a Facebook page dedicated to woody plants. Jolie commented that on the Tree Plotters map, trees of unknown species are marked in white.

3. Old Business
 - a) Research Committee (Chair: Dudley Hulbert) – Angela reported for Dudley that he had a conversation with a VP from Davey, who expressed interest in working with Andy Kaufman to support tropical arboriculture research projects; Dudley is putting the two parties in touch with each other and will report on further developments.
 - b) Chainsaw Workshops, Beginner Level (J Zambo) – Angela reported for Dudley that he

contacted Jayme Grzebik at the Urban Garden Center. UGC is excited to host the chainsaw safety workshop; Dudley will work with her to schedule the event. Jayme also invited AAA to provide chainsaw safety demonstrations during UGC's Arbor Day events on Saturday November 4th. There was a short discussion about Arbor Day activities organized by others, which include tree giveaways, Ask an Arborist booths, and other volunteering at different sites on the different islands. AAA will be sending out a Mailchimp announcement on behalf of Kaulunani asking for arborists to volunteer on Arbor Day; traditionally, arborists can get 2 CEUs for doing so.

- c) Tree Appraisal Workshop Part 2 by James Komen, 09/01/17 (Angela Liu) – The appraisal workshop went well, there was a good turnout and James has already paid for the coordination time done by AAA.
- d) LICH Conference, 10/05/2017 (J Zambo) – J reports that the roster of presenters for the Arborist Track is top-notch, and will include Ernie Rezens, Randall Wakumoto, Prof. Richard Criley, Steve Nimz with Matt Lyum, as well as himself.
- e) Proposal for Arborist Rope Splicing Workshop (Angela Liu) – If the workshop happens, instructor Mark Przekurat from New Hampshire will be on his way to New Zealand and Australia when he comes through Oahu. It's unclear whether he has a minimum number of students in mind in order to hold the class – other instructors have been satisfied with having only a portion of their expenses covered. His classes tend to extend late, going much longer than most workshops, and the registration fee also goes toward paying for materials, and his partner who will videograph the event. So far there are 15 respondents who are interested, and he wants people interested in the class to help him get the number of attendees up to 20. There was a discussion about the value of rope splicing skills – this used to be critical for climbers, but a great deal of equipment can now be purchased already spliced.
- f) WCISA Annual Conference 2019, Sheraton Waikiki, April 2019 (Carol Kwan) – Rose Epperson of Western Chapter ISA were on Oahu this month to evaluate the venue.
- g) Monthly Meeting location (Desiree Page) – Nico's Pier 38, Ho'omaluhia Botanical Garden, and the restaurant at Pearl Harbor were mentioned as possible future meeting locations. Desiree welcomed ideas for other possible meeting locations.
- h) Green Waste / Tree Industry Survey (J Zambo) – J reported that Sid Higa communicated with Andrew Kendall. Sid's company's market research concluded that there isn't enough demand for their biofuel in Hawaii, and therefore the project was terminated.
- i) Offer for free media services from Olelo Channel (Kevin Eckert, Andrew Kendall) – Tabled.
- j) AAA Officers and Board members roles and responsibilities (J Zambo, Lance Bookless) – Desiree asked about what types of administrative activities could be done by the officers and board members instead of by AAA's paid administrative contractor. She asked Angela to create a summary of those options.
- k) Treasurer's Report (Desiree Page) – AAA's current bank account doesn't have free online access. There was a motion to pay for one month of online banking so that AAA's records could be updated electronically; the motion was approved. Thereafter, Desiree will look for a checking account plan that's more suitable, possibly with another bank following suggestions made by Carol Kwan.

4. New Business

- a) Pest of the Month – Ambrosia beetles in Hawaii – island pinhole borer (*Xyleborus perforans*), sugarcane shot-hole borer (*X. affinis*), and ambrosia beetle (*X. ferrugineus*) (Weevil Family *Curculionidae*, SubFamily *Scolytinae*)

- i. Description: Small reddish-brown to dark-brown cylindrical beetles that tunnel into xylem tissue (sapwood or heartwood) and inoculate their galleries with fungal symbionts, on which their larvae feed (In contrast, bark and twig beetles, many of which are also Scolytid beetles, only attack the phloem and/or cambium). Jolie Wanger reported that 95% of indigenous ambrosia beetles are endangered.
 - ii. Distribution: Cosmopolitan.
 - iii. Hosts: Most ambrosia beetles are generalists (as opposed to bark beetles)- See handout for list of tree hosts. The beetle attacking ohi'a trees infected with *Ceratocystis* on the Big Island were reported as ambrosia beetles, however it's unclear whether the beetles are acting as disease vectors. Most ambrosia beetle species attack stressed plants, but others are known for attacking healthy trees. *X. affinis* is a vector for laurel wilt, but the fungal agent *Raffaella lauricola* hasn't been found in Hawaii yet.
 - iv. Symptoms and Damage: Sawdust tubes may be extruded from entry points; plugged pinholes with staining also are commonly seen. Ambrosia beetles typically tunnel into wood, but some (*X. affinis*) build galleries beneath the bark.
 - v. Control: Once beetles bore into trunks or stems, there are no effective treatments. Preventive measures include maintaining optimal plant health, removing and destroying or properly discarding infested plant material, or apply pesticides prophylactically.
 - vi. References:
 - J.A. Zarders, A.H.Hara, R.Y. Niino-DuPonte, S.K.Cabral, and K.L.Aoki. *Ambrosia Beetles*. University of Hawai'i at Mānoa, CTAHR, 2013.
 - Swain, Steve, Akif Eskalen, Shannon Lynch and Suzanne Latham, "Scolytid beetles and associated fungal symbionts threaten California hardwoods," *Western Arborist* (Spring 2017), pp54-60.
 - Atkinson, Thomas H., "Bark and Ambrosia Beetles of Hawaii." http://www.barkbeetles.info/regional_chklist_condensed.php (Accessed 09/13/17).
- b) Ooma phone service (Angela Liu) – Tabled.
 - c) Safety Workshop by Steve Nimz and HEMIC (Angela Liu) – Tabled.

5. Announcements

- a) Carol Kwan shared that for the John Ball Safety Workshop, Western Chapter ISA netted the following for each of the island's workshops (approximate sums): AAA \$2,700, KLIC \$240, MBG \$660, and Big Island \$1040. Amounts are preliminary and are subject to review and approval by the WCISA Board prior to disbursement to partnering organizations, which is expected to be sometime in November.
- b) Steve Connolly observed ironwoods in Kahana Bay being topped and lion-tailed. He expressed disappointment that the work is being done in an unprofessional manner. Carol Kwan explained that she performed a Level 1 risk assessment prior to the work that Steve observed, and she had recommended for the work to be done according to ANSI A300. Steve asked for AAA to issue a statement regarding the situation; Carol provided Steve with contact information for her contact at the DLNR Division of State Parks.
- c) Carol shared that she has knows an IT person who might be able to update the AAA website to be mobile-friendly, and estimated that it would require 20-30 hours of work for about \$600

to \$900. It was suggested that additional bids be considered, and that the topic be added to the agenda.

d) *Please join us on:*

September 20th, 2017, 6:30pm – Monthly Meeting – Location TBD

6. Adjournment – The meeting adjourned at 8:32pm.

Respectfully submitted,
Angela Liu

HANDOUT:

J.A. Zarders, A.H.Hara, R.Y. Niino-DuPonte, S.K.Cabral, and K.L.Aoki. *Ambrosia Beetles*. University of Hawai'i at Mānoa, CTAHR, 2013.

AMBROSIA BEETLES

Scientific names: *Xyleborus perforans*, *X. affinis*,
X. ferrugineus

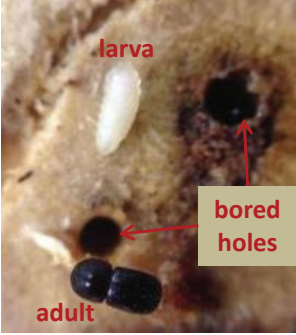
Order: Coleoptera Family: Curculionidae

Common names: island pinhole borer, ambrosia beetle,
sugarcane shothole borer



actual size

Adult females are slightly larger (2 to 3 mm) than males (1.5 mm). They are stout bodied, dark reddish brown, and have a hunched-back appearance, with their heads completely hidden when viewed from above.



larva

bored holes

adult

HOST PLANTS

Ambrosia beetles are known to infest ornamentals and fruit trees, including:

anthurium	hibiscus
avocado	koa haole
brush box	kukui
Dracaena	litchi
cacao	macadamia
Christmas berry	mahogany
citrus	mango
coconut palms	paper-bark
coffee	red ginger
ti	Surinam cherry
eucalyptus	turpentine tree
guava	



Sawdust tubes

DAMAGE

<p>Sawdust tubes are extruded from tunnels bored by adult beetles.</p>	<p>Pinholes with staining and sawdust tubes are signs of ambrosia beetle damage.</p>
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Ambrosia beetles are considered secondary pests, attacking stressed or unhealthy plants.

LIFE CYCLE/BEHAVIOR

Egg to Reproducing Adult - approximately 50-55 days

- Adult females** bore into host plant trunks and branches, excavating tunnels or galleries.
- Galleries** are inoculated with a symbiotic **fungus ("ambrosia")** on which **adults and larvae feed**.
- Mating, egg laying and larval development** are completed within these galleries.
- Mature females** leave infested plants and fly to new hosts; **flightless adult males** remain within the infested plant.

References: Mayfield, A.E. and M.C. Thomas MC. 2009. The redbay ambrosia beetle, *Xyleborus glabratus* Eichhoff (Scolytinae: Curculionidae). DACS-P-01651 .Florida Dept of Agric. & Consumer Services, Gainesville, FL.
Rabaglia, R. 2008.. *Xyleborus glabratus*. Exotic Forest Pest Information System for North America. Forest Health Protection, USDA Forest Service, Arlington, VA..

BEST MANAGEMENT PRACTICES FOR AMBROSIA BEETLE

	OPTIONS AVAILABLE
MONITORING TECHNIQUES	<ul style="list-style-type: none"> ▪ Visually inspect plants for sawdust strings from gallery excavation and stains from ambrosia fungus near beetle tunneling. ▪ Check plantings near water sources, which may be more susceptible to ambrosia fungi infection. ▪ Set out isopropyl alcohol traps 1-5 feet off the ground, 30-50 feet apart to monitor ambrosia beetle populations in the nursery.
SELECT BEST CONTROL METHOD	<ul style="list-style-type: none"> ▪ There are no effective treatments once beetles bore into plant trunks or stems; preventative measures include: <ul style="list-style-type: none"> ○ Keep plant stock healthy to minimize attracting ambrosia beetles. ○ Remove and properly discard or destroy infested plants or plant parts. ○ Use pyrethroids or chlorpyrifos (a restricted use pesticide, RUP) as preventative trunk treatments every two weeks in 3 to 4 applications to reduce infestations (systemic insecticides are not as effective because beetles do not feed on plant material).
TREATMENT BEFORE MARKET	<ul style="list-style-type: none"> ▪ Remove infested plant material.
FINAL INSPECTION	<ul style="list-style-type: none"> ▪ Visually inspect for evidence of ambrosia beetle infestation (sawdust).

PRECAUTIONARY STATEMENT / DISCLAIMER: These recommendations are provided only as a guide.
Please read and follow all label directions

J.A. Zarders, A.H.Hara, R.Y. Niino-DuPonte, S.K.Cabral, and K.L.Aoki.2013. University of Hawai'i at Mānoa, CTAHR, Komohana Research & Extension Center, Hilo, HI