

The Impact of Using a Web Based Output in Extension Programing

Andrea Kawabata

Associate Extension Agent for Coffee
and Orchard Crops



COOPERATIVE EXTENSION
UNIVERSITY OF HAWAII AT MĀNOA
COLLEGE OF TROPICAL AGRICULTURE AND HUMAN RESOURCES

Cartoon of the week

<http://totaleclipsed.hypermart.net/>



Learn about

Technologies
used

Sustainability

Training
needs

Advantages &
disadvantages

Costs

Impact

8:07

Saturday, January 13



EMERGENCY ALERTS

now

Emergency Alert

BALLISTIC MISSILE THREAT INBOUND TO HAWAII. SEEK IMMEDIATE SHELTER. THIS IS NOT A DRILL.

Slide for more

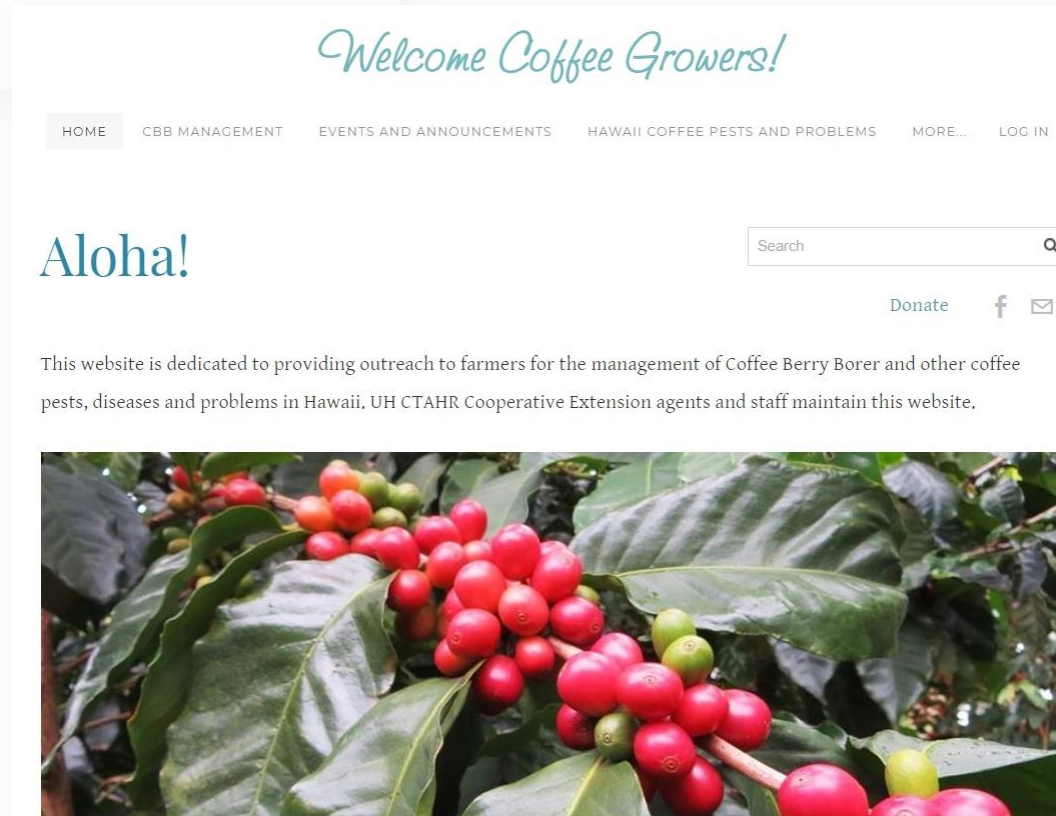
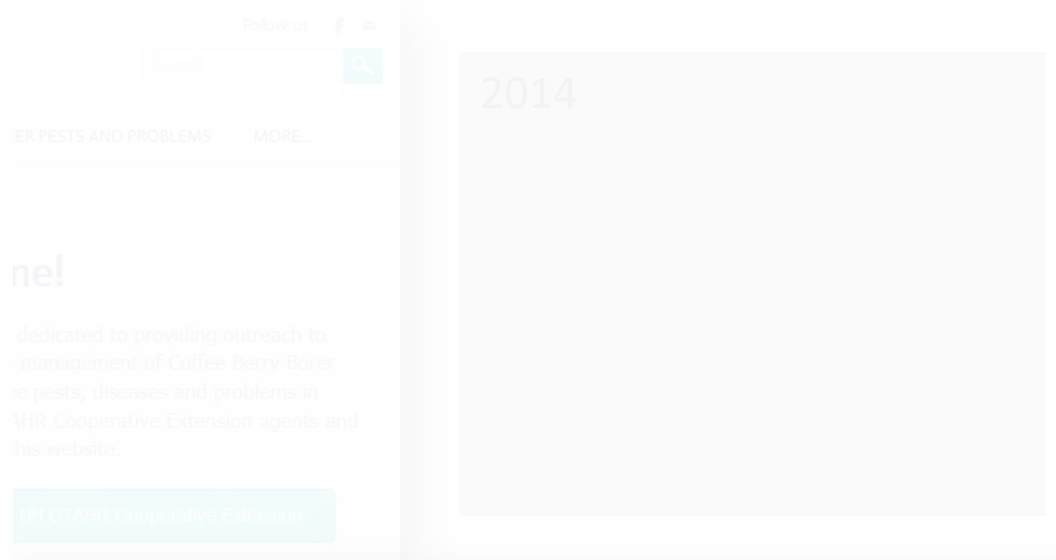
FALSE ALARM

Photo courtesy Tuls Gabbard / Twitter

Welcome Coffee Growers!

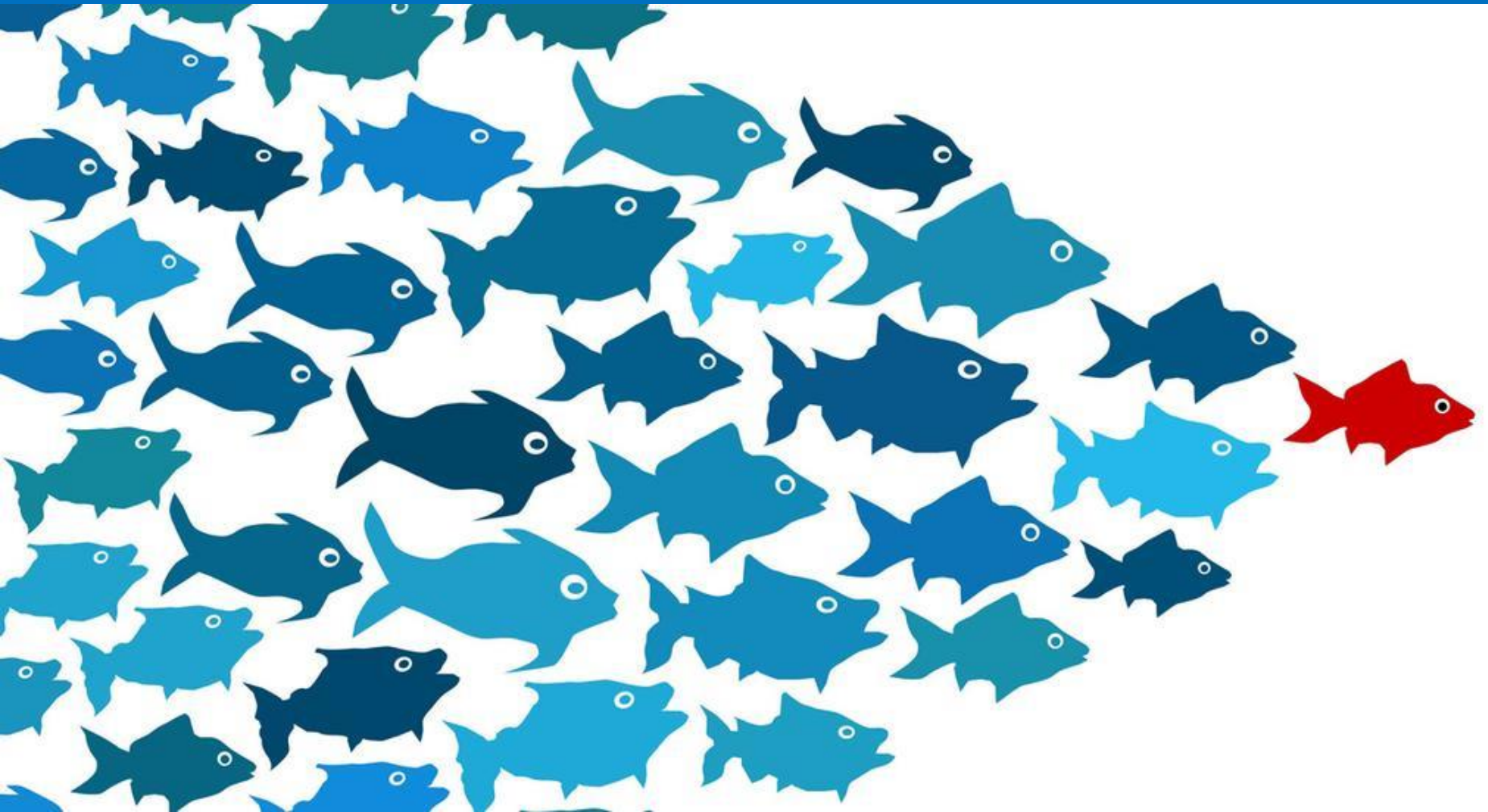
- CBB IPM recommendations
- Ag events & announcements
- HI coffee pests & other problems
- Coffee pests NKO in HI
- Coffee/CBB publications & presentations
- HDOA/USDA coffee rules & regs
- HI coffee organizations
- Archives
- Donate to UHF account
- Facebook & Email
- Google translate
- Search

2018



Sustainability:

Lead & update your site(s)





COOPERATIVE EXTENSION
UNIVERSITY OF HAWAII
Department of Plant Industry
Horticulture and Forest Sciences Research Center

USDA
NATIONAL AGRICULTURAL MECHANIZATION SERVICE

Coffee Root-knot Nematode Workshop & Field Day for Commercial Growers - Kona

Two classes offered!

Registration is required. Each class is limited to 30 participants.
RSVP at <http://hawaii.cacta.org> or by contacting Gina at 808-322-4892 by January 8th.

Wednesday, January 10, 2018
Thursday, January 11, 2018
Kona Cooperative Extension - Conference Room
79-7381 Mamoeha Highway, Kealahou

AGENDA

8:45 am	Registration
9:00 am	Welcome & introductions
9:15 am	Nematodes & their effects on coffee
9:40 am	Basics & benefits of grafting
10:00 am	Costs of coffee grafting
10:25 am	Break
10:35 am	Research project overview & tour
11:05 am	Nematode sampling demonstration
11:35 am	Q&A
12:00 pm	Evaluations & acknowledgements

Speakers include: Dr. Rosana Myers of USDA, Dr. Ailsa Cho, Dr. Stuart T. Nakamoto, Andrea Kawabata and Jon Bart of CIARR.

USH-CFAHR's Cooperative Extension, USDA ARS's DR Pacific Basin Agricultural Research Center and the County of Hawaii welcomes you to an informational workshop on coffee root-knot nematode.

Coffee root-knot nematode, *Meloidogyne jenkinsi*, feeds on and reproduces in coffee roots. They can disrupt plant growth, cause tree decline, may reduce coffee yields by 20% or greater, and in severe cases will kill the coffee tree.

During this workshop and hands-on field day, participants will learn about nematode biology, the effects of nematodes on coffee, as well as the costs and benefits of grafting trees. Growers will take a tour of the nematode research plot, learn about the current project, and participate in a nematode sampling demonstration.

BONUS! Participants will take home a nematode sampling instruction kit and a \$5-off single substitution voucher for nematode analysis on their farm. One per farm.

Visit us at hawaiicoffee.weebly.com

- Calendar of Events and Announcements
- Coffee Berry Borer (CBB) Information
- CBB Funding
- CBB Publications
- Coffee Pests and Diseases
- LFA, Predatory Beetles...more

Or on Facebook at [Kona Orchard Crops](https://www.facebook.com/KonaOrchardCrops)

Hawai'icoffee.weebly.com
CBB IPM information

A Grower's Integrated Pest Management Program for Coffee Berry Borer in Hawai'i

Andrea M. Kawabata, Stuart T. Nakamoto, R.T. Cortijo

CBB IPM in Hawai'i

Phytophthora blight or Coffee Berry Borer (CBB) is a tiny scaled beetle that infests coffee berries, damaging and eventually destroying the coffee bean within. CBB was introduced to Hawaii from Papua New Guinea in 2002 and is spreading throughout the coffee growing regions. Economic crop loss is now almost inevitable. CBB can be controlled with proper farming and cultural control techniques in an integrated pest management (IPM) program.

Extensive Outreach: Growers are trained in the CBB IPM program adopted for Hawaii. Successful implementation has resulted in reported coffee infestation rates to be under 2%.

Field Sanitation

Careful harvest practices are essential to help reduce the spread of CBB. Removing coffee tree, dried berries (chips), and any fruit residues (residue left), breaks the breeding cycle of CBB, starting the cycle anew with less an infestation rate is possible in managing the pest.

Efficient Harvesting

Careful harvest practices are essential to help reduce the spread of CBB. Removing coffee tree, dried berries (chips), and any fruit residues (residue left), breaks the breeding cycle of CBB, starting the cycle anew with less an infestation rate is possible in managing the pest.

Block Pruning

Coffee branches identified in blocks are typically pruned only 2-3m above the vertical of multiple ages in a crop. Maintaining the crop by pruned at the vertical of crop can break the CBB cycle.

Biocontrol

Biocontrol agents could be promising, but need to be checked for entry into the USA and Hawaii. Red-footed booby, Colletes quadricellus and honey bee are potential candidates. More research is needed to determine if any of these species are effective against CBB on berries remaining on the tree.

Biopesticide/Chemical Use

As in many other IPM programs, relying on more pesticide would be a poor choice. Coffee berries need to be sampled to find the level of CBB infestation. Results determine whether the berries should be harvested. The products are checked for coffee. An entomopathogenic fungus, Beauveria bassiana, is the most insecticide currently in use (shown).

USDA

Training needs:

No formal training required



ADA website compliance

- **UH system-wide** Policies and Procedures for ADA compliance for websites.
- US Access Board rules on accessibility of web-based information - Section 508 Standards ([Subpart B-1194.22](#))
- Tool to evaluate sites: <http://wave.webaim.org>.
- If you have any questions or need assistance, please contact:

Elsie Kawahara kawaharae@ctahr.hawaii.edu

Kathy Lu luk@ctahr.hawaii.edu

Marvin Chun chunm@ctahr.hawaii.edu

Matt Chun-Hori chun-horim@ctahr.hawaii.edu

Carl Dionne dionnec@ctahr.hawaii.edu

Advantages & disadvantages:

What's your level of commitment?



Advantages

- Ease
- Accessibility
- Broad audience
- Central location
- Copy n paste responses
- Free or relatively inexpensive
- Google translate
- Blog & RSS feed
- Outreach event registrations

Disadvantages

- Need internet
- Time consuming to create & maintain
- Customizations cost \$
- Information correctness
- Photo/information credit
- Working links
- Not everyone uses the web

Costs:

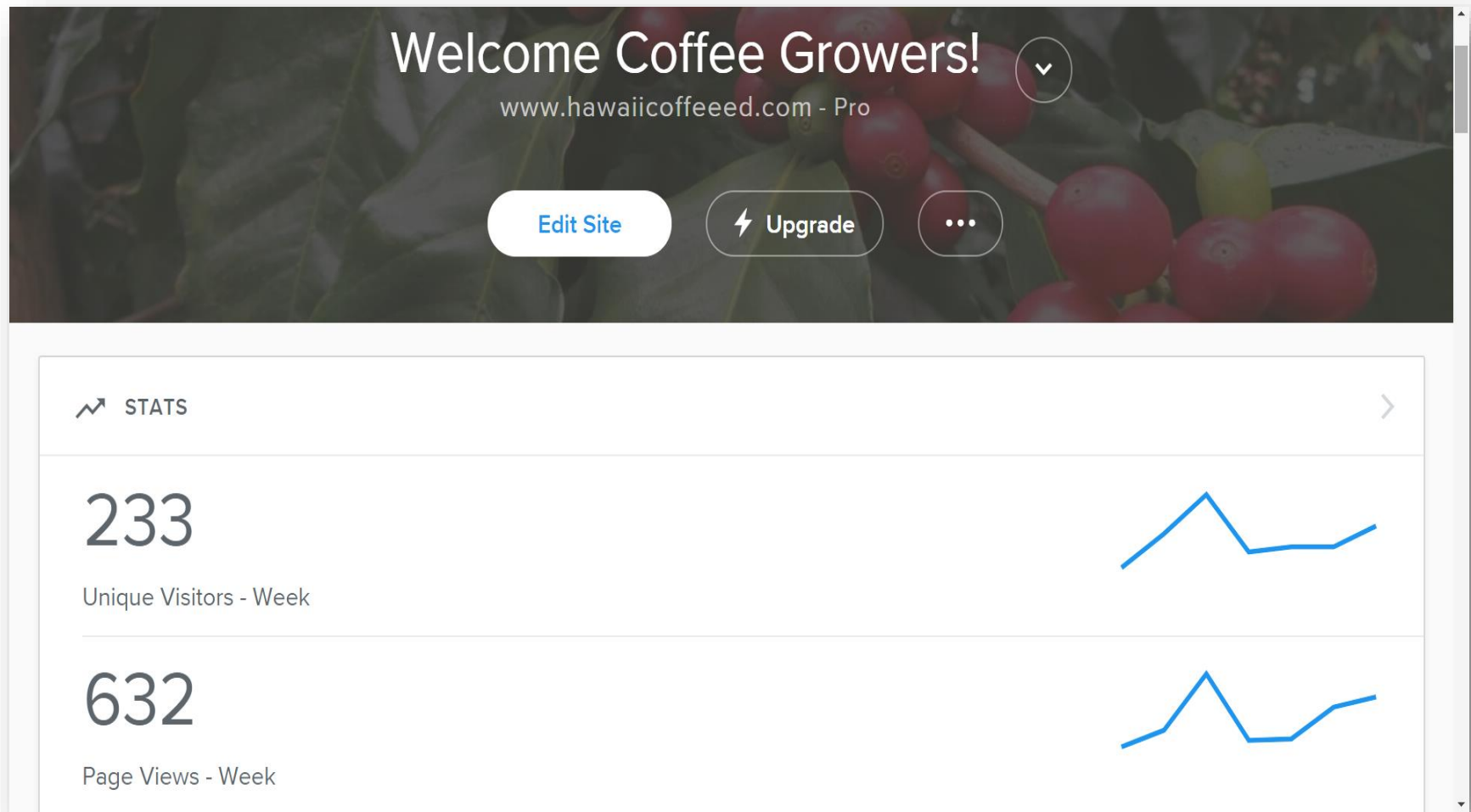
Free to OMG!

Weebly has 4 premium plans:

Weebly Pricing Plans	1-Month (\$/month)	1-Year (\$/month)	Savings (%)	2-Years (\$/month)	Savings (%)
Starter	\$14	\$8	43%	\$5	64%
Pro	\$18	\$12	33%	\$9	50%
Business	\$35	\$25	29%	\$21	40%
Performance	\$46	\$38	17%	\$35	24%

Impact:

Hooked on web-based outreach





kona extension



Kona Extension

3 subscribers

SUBSCRIBE 3



HOME

Uploads PLAY ALL



Coffee Berry Borer IPM - End of Season Strip-Pick

413 views • 1 month ago



Coffee Berry Borer IPM - 30 Trees Sampling Method for

117 views • 6 months ago



Coffee Berry Borer IPM - 30 Trees Sampling Method for

172 views • 6 months ago



How to Release Flat Bark Beetles

231 views • 2 years ago



How to Setup your Flat Bark Beetle Kit

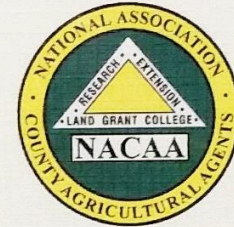
414 views • 2 years ago

KonaCoffeeFarmers – [Controlling the Coffee Berry Borer](#) – over 10,900 views

So simple, so
easy, so valuable

- Website and MailChimp
- >10 fold increase of individual visits/week
- Decrease in time spent looking for information
- Create additional websites

*The National Association of County
Agricultural Agents*



Communications Award: Web Site

National Finalist

Presented to

Andrea Kawabata

For

Weebly've in Coffee



My websites & resources

- Weebly - hawaiicoffeeed.com
- MailChimp – konaextension
- YouTube – [Kona Extension](#)
- FaceBook – [Kona Orchard Crops](#)
- Instagram – [wrampic2016](#)
- Eventbrite
- Bitly
- QR codes



Questions?

Thank you very much!

- Jen Burt
- USDA, WERME, CTAHR, HDOA, County of Hawaii and Maui County for the continued support of my Extension programs and online presence
- 2018 Ag Pro Committee
- Western SARE

