

Meeting Summary

June 17th, 2015

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Attending: Amber Stillman, Jessica Kirkpatrick, Don Thomas, Tom Giambelluca, Jackson Bauer, Stewart Hunter, Darcy Yogi, Christian Kaponu, Tisha Pi'ilani-Pelanca, Wallace Ishibashi, Ron Terry, Jesse Eiben, Anya Tagawa, Cas Vanderwoude, Springer Kaye, Deborah Ward, Susan Cordell, Fritz Klasner.

DEPARTMENT OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

Meeting Summary: the meeting focused on omkm.org website statistics, design development of Maunakea climate monitoring network project, review of the Maunakea Invasive Species Management Plan updates and the review and prioritization of the Natural Resource Management Plan (5 year update).

1) Focal Discussion

- a. Website Statistics: OMKM uses Google Analytics to track visitation at its website, since April 2014. The presentation gave a brief overview of the categories that we monitor monthly, and discussed yearly and monthly trends, comparisons and anomalies. We have found that users and session trends correlate very well with big events and media coverage of these events. Data collected can be analyzed make well-informed improvements to the website.
- b. Climate Monitoring Network- Tom Giambelluca presented an overview of the Maunakea Climate Monitoring Network (proposal and scientific documentation in preparation). Complete details and plan are anticipated later in 2015 for review. To generalize, the network would be analogous to Tom's work on Haleakala with HALEnet. Maunakea is envisioned as addressing climate-related monitoring across elevation and aspect gradients, using a master 'summit' station and lower elevation 'satellite' stations. While exact locations are to be determined; data management, data analysis/review, and long-term operations are important considerations in the plan. Group discussion was supportive of the concept and, to the extent it is consistent with funding and ultimate (and approved) climate network priorities, consensus emphasized interest in proceeding with lower elevation satellite stations even if a master 'summit' station is slower in physically materializing given compliance and public review processes.
- c. Invasive Species Management Plan Updates: there was not much detailed discussion of individual SOP updates or new documents. Materials will be submitted to Kahu Ku Mauna Council (consultation) and Maunakea Management Board (approval).
 - i. SOP 01: Cleaning of Vehicles and Personal Belongings. v1.2.
UPDATE (proposed changes shown using track changes) to include basic grounds-keeping requirements.
 - ii. SOP 02: Inspection of Vehicles, Construction Materials, Scientific Equipment, & Supplies. v1.2.
UPDATE (proposed changes shown using track changes) to include basic grounds-keeping requirements.
 - iii. SOP 11: Annual Alien Invertebrate Early Detection & Wēkiu Bug Monitoring. v1.1.
Documenting methods initiated by Bishop Museum and continued by OMKM. Expectation is that with improved habitat knowledge and substrate mapping, methods will evolved using UH Hilo and other entomologist expertise.
 - iv. SOP B: Maunakea Vertebrate Threats, Identification, Collection, and Processing Guide. v1.0.
New document, basic overview.
 - v. SOP D: Maunakea Plant Threats, Identification, Collection & Processing Guide. v1.0.
New document, basic overview, prioritization using Hawaii Weed Risk Assessment.

- vi. SOP Z: Revising the Invasive Species Management Plan. v1.0.
Transparent criteria and articulation of process for revisions, corrections, new documents, reports, etc.
 - vii. As mentioned previously, we expect to continue to have such Invasive Species Plan revisions and additions on the agenda at Environment Committee meetings for the foreseeable future. Kahu Kū Mauna Council Comments:
- d. Addressing Oil leakage/spill concerns at TMT site:
- i. OMKM and TMT are documenting site conditions and communicating with OCCL and DOH re: spill reports on Maunakea.

2) Brief Updates

- a. Threat Prevention & Control
 - 1. See monthly update
- b. Protection, Enhancement, & Restoration
 - i. Native Plant Propagation: We have been watering plants propagated from Israel Stillman's KS Hawai'i Senior Legacy Project and have about 20 mamane seedlings and a couple of trays of 'aweoweo sprouting. We will use this information to help develop a restoration plan and efforts.
- c. Program Mgmt
 - i. Information Mgmt/ GIS
 - 1. New OMKM Blog: As requested at the May 2015 MKMB Meeting, we have created an OMKM Blog on our website to provide better communication and transparency with the public community. The blog will be a space where we can share information and updates on current stewardship and management of Maunakea. Blog posts will cover a wide array of topics that can range from natural resource program updates, results and awareness of routine surveys, reposts of public announcements and news of scientific papers and publications. The blog will also connect to our Facebook social media feed to reach an even wider community.
 - 2. GIS: A 3D Perspective animation flyover tour and map of UH Managed lands will be added to our website under the visitor information tab. Weekly monitoring is continuing on geocache sites on UH managed and surrounding lands.
 - 3. Geocaching: Weekly monitoring is conducted on geocache sites on UH managed and surrounding lands. There are two caches located on UH managed lands; these are the least invasive types of geocaches (earthcache and webcam cache). GIS data has been provided to geocache.com reviewers to ensure that no new geocaches can be placed on UH managed lands.
 - 4. Monitoring of tripadvisor.com site created in the past by the VIS is being handled by OMKM and will continue to manage the account. Questions about UH managed lands and policies are the main source of interaction from website users.
 - ii. Outreach:
 - 1. Volunteer efforts: On February 7 we had our first public volunteer event of 2015 and pulled just about 40 bags of weeds with 13 volunteers. On March 7 we had the Waiākea High School Interact Club, UHH Rotaract Club and UHH Pre-Pharmacy Club help pull about 60 bags of weeds. We had two volunteer events on June 16 and 18 with the Hawai'i Youth Challenge National Guard Program. They helped to pull about 150 bags of weeds! The cadets were given presentations about the work that OMKM does and ask questions about the current issues on Maunakea. We were able to discuss future plans post-graduation and about college, careers and

internship opportunities in Hawai'i. We had a great time with both groups and managed to squeeze in some PT (physical training) for them as well!

2. Resource Orientation: The Natural and Cultural Resource (aka User) Orientations are posted on the website calendar. We have incorporated more cultural specific content as requested by Kahu Kū Mauna. Content added relates to Maunakea as a wahi pana, or Hawaiian sacred place and how visitors/guests should behave and conduct themselves; more information on offerings and proper protocols was also added. All information added was taken from Hawai'i Tourism Authority Brochure: "Nā Wahi Pana Respecting Hawaiian Sacred Sites" (<http://dlnr.hawaii.gov/dsp/files/2014/10/Wahi-Pana-brochure.pdf>)
3. Resource Brochure: print copies are available, and were distributed to those at past meetings, a pdf file is also available on the website. We printed a limited number to solicit feedback in 2014 and early 2015. We are currently revising content based on feedback and redesigning the layout. When the new version of the brochure is ready we will solicit feedback. Let us know if you'd like a paper copy of the current brochure.
4. Trading Cards: We are currently in the process of developing more trading cards in the future that will include cultural aspects of Maunakea as well. Let us know if you are interested in copies of current cards.
5. Kealakehe Elementary School Science Showcase: On April 22, OMKM participated in the Kealakehe Elementary School Science Showcase featuring ecology, archaeology, entomology, robotics, and astronomy. We could not have done it without the help of our supporting participants. Mahalo nui loa to Jesse Eiben, Hawai'i Ant Lab, Spatial Data Analysis and Visualization Lab, and Tom Chun for their great educational activities and collaborating with OMKM to make this event such a great success.
6. OMKM Open House Kūkākūkā Session: OMKM hosted an open house talk story session on May 28th from 10am- 2pm on Maunakea at Halepōhaku. The open house focused on the Natural Resource program emphasizing what and how we manage the natural resources on the mountain. We had 3 arthropod posters (1 rapid response, Monitoring procedures, and results), a GIS poster, photo monitoring poster, along with insect display boxes, Maunakea 3D overview video, a UAV flight simulator, OMKM plans, procedures, brochures, trading cards, volunteer sign-up sheet, and color sheets. Special mahalo to Dr. Jesse Eiben and Nathan Stephenson (with Dr. Ryan Perroys Lab) for participating in the event. Attendance was low, about 15 people outside of OMKM attended reaching the group of protestors that this event targeted. One of the leaders, Lanakila came and thanked us for the work we do. Good discussions and relationships were generated from this event. We anticipate doing a few more open houses within the next few months.

iii. Partnerships

1. Schools: Hawai'i District School Science Fair: Megan Nakamoto participated in the Junior Division of the Hawai'i District science fair, and the Junior Division at the Hawai'i State Science Fair. At the District level her project with Dr. Eiben on "Arthropod diversity and abundance differences on curled unhealthy Mamane leaves and healthy Mamane leaves at ~8,500ft on the South slope of Maunakea" has received numerous awards for Junior Research Best Subject in Category- Environmental Sciences, Sierra Club- Moku Loa Group, Dr. Wayne Gagne award, Ricoh Sustainable Development, 3rd place Hapai Enterprises- Outstanding

Entomology/ Zoology, and an award from the American Association of University Women.

2. Neighboring Lands: MKFR: A special thanks to Debbie Ward and Jessie Eiben for reaching out to the individuals at MKFR and VIS to discuss ant threats. The BIISC crew and Jessica Kirkpatrick originally found the ant on April 16th and we continue to work on ways to communicate what OMKM is doing regarding invasive species. We have been passing out 'A'ole Ant handouts and have had an open house to discuss resources and threats (invasive species and other forms) at VIS.
- iv. Internships & Professional Development
 1. 2015 Hawaii Conservation Conference: OMKM will have a poster and a presentation at the HCC conference.
 2. OMKM has 3 summer Interns in 2015, two PIPES interns: Sean Kirkpatrick, who is working with Ryan Perroy/SDAV Lab on Maunakea erosion studies, helping to develop characteristics of surface cinder to ash layer and Christian Kaponono, who is working with the VIS to develop cultural resource and community outreach materials. Tisha Pi'ilani Pelanca is our LSAMP/HCC Forest Team intern who is helping the NRP with summer field work and developing restoration efforts.
- 3) Next Meeting: is to be scheduled via Doodle poll, will send this out. Please send us your agenda item ideas for the next meeting.