# Kia'i Nā Moku O Maui Nui

"Guarding the Islands of Maui County"

Summer 2009

Newsletter of the Maui Invasive Species Committee

# 'Ua'u on Lāna'ihale: A Call To Action

By Jay F. Penniman Maui District Endangered Species Research Specialist Lānaʻihale Forest & Watersĥed Project

arch 20, 2006: late evening, foggy, windy, and cold. I walk up the treacherous Munro Trail, pushing my hood back to listen for the 'ua'u, or Hawaiian petrel. Its call is unmistakable—easy to hear when the air is calm and ears are unencumbered by rain gear. Neither is true tonight on Lāna'ihale, the highest peak on Lāna'i. My headlamp barely penetrates the thick fog, but in clear breaks, the sheer drop on both sides of the trail is unnerving.

I listen at openings in the vegetation: I have yet to hear the sound of a seabird. Hearing 'ua'u is pretty much the only

way to know if they are present, since they come ashore after dark and quickly scurry into their burrows. At the top of Hono'umi gulch the wind screams through

a notch. The Hawaiian people named manager and renowned naturalist, many animals for the sounds they

made. The sound coming from Hono'umi gulch is clearly 'ua'u u u! A bird. briefly visible with the naked eye, flies through notch so close the wind over its wings is audible. It's the first

confirmed petrel sighting in years.

Hawaiian petrels were once the most numerous bird species in Hawai'i. Large flocks were "A bird, briefly visible with the naked eye, flies

said to have darkened the sky. Today, they are endangered; the largest known colony, in Haleakalā National Park, has an estimated 1,200 burrows. Back in the 1950s, Lāna'i ranch

George Munro (for whom the trail



Biologists discovered a significant breeding colony of 'ua'u, the Hawaiian petrel, on Ľāna'ihale.

is named), worried that 'ua'u would soon be extinct on Lana'i. Since that time, biologists have reported only irregular observations of 'ua'u on Lāna'i. Intrigued by repeated rumors, wildlife biologist Dr. Fern Duvall knew that the island should be searched for 'ua'u.

Systematic surveys subsequently delineated a significant breeding colony of 'ua'u on Lāna'ihale. Biologists estimate that several thousand 'ua'u use this colony. However, just knowing the birds were present wasn't enough.

See 'Ua'u on Page 5

#### IN THIS ISSUE:

• PLANT EXTINCTION PREVENTION PROGRAM

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RAIN CATCHER: LĀNA'I Watershed Conservation

- THE UN-RETIRING RETIREMENT OF UNCLE SAM
- BOTANIZING BOB: HOBDY'S DISCOVERIES



### Crossing the Channel

By Teya Penniman MISC Manager

"Cooperation fosters more than just efficiency; natural resource workers within Maui County are able to forge friendships as they work side by side."

ur name-Maui Invasive Species Committee-doesn't fully capture the full geographic scope of our *kuleana*, which includes all of Maui County, not just the island of Maui. Moloka'i has its own highly accomplished Invasive Species Committee, MoMISC, but Lāna'i, the focus of this issue, does not.

Maui-based field crews must haul gear, supplies, and often camping equipment back and forth across the 'Au'au Channel every six to eight weeks to control invasive species on Lāna'i. The work is a responsibility willingly assumed, especially as we have come to understand more about the special natural and cultural resources of Lāna'i. Over the last five years it has come to be an effort that is increasingly shared by those on Lāna'i.

Conservation staff from Castle & Cooke and the Department of Land and Natural Resources often join the field team searching for fountain grass across the red-dirt plateau of Kānepu'u or criss-crossing the grassy island on the Kō'ele golf course. Castle and Cooke provides golf carts, lodging or camp sites, and transportation assistance, all of which greatly improve our operations.

More recently, a cooperative relationship with the Lāna'ihale Forest & Watershed Project has helped increase the productivity

of both projects by teaming up when MISC staff is on island. This cooperation fosters more than just efficiency; natural resource workers within Maui County are able to forge friendships as they work side by side. They also gain a deeper appreciation both for what threatens the watershed and what is being protected: the native plants and animals, and the way of life that is unique to Lāna'i.

In a perfect world, MISC's long-term vision is to be out of a job—to have

run out of invasive species to control. Operating on a shorter timeframe, we hope someday to see a cadre of Lāna'i-based field staff tackling invasive species on Lāna'i. In the meantime, MISC staff will continue to enjoy the opportunity to work closely with partner agencies, and to reap the benefits of our regular excursions to this most enticing island. We hope you enjoy reading about Lāna'i in this issue! §

# LĀNA'I



# RAIN CATCHER:

## Lāna'i Watershed Conservation

By Adia White AmeriCorps-Hawai'i with MISC

hen Castle & Cooke's conservation manager Bryan Plunkett goes to work, he maneuvers a colossal fourwheel drive truck up a sloping dirt mountain road to the Lāna'ihale preserve. His biggest worry for the day: capricious weather that transforms his only route to and from work into a mudslide. Plunkett's goal is to ensure that the preserve accumulates as much wetness as possible by protecting its flora.

The taller trees in the preserve condense and capture moisture while the matty understory of native plants acts like a sponge. The absorbed water then percolates into the island's aquifer. Back in the office, he battles paperwork to ensure the preserve sees enough funding to survive.

Historically, goats, sheep, and deer have overrun Lāna'i; its flora didn't stand much of a chance. Without forests to capture fog drip and moisture, there was nothing on Lāna'i to hold water in its soil. Lāna'i receives only 33.5 inches of rainfall a year. The rainfall it does capture is owed to its only watershed: the 3,000-acre Lāna'ihale.

Lāna'ihale is the forest preserve

covering the slopes of Lāna'i's highest peak. The preserve, as well as 98% of the island, is owned and managed by David Murdoch's company, Castle & Cooke. While

Lāna'i is more famous for its sea cliffs, hunting, and beaches than for its native species, preservation of native plants in this preserve is vital.

Without a healthy watershed, there is not a sufficient amount of water in the aquifer to support residents, development, or tourism on Lāna'i. For this reason, Plunkett noted, the

preservation of Lāna'ihale is Castle & Cooke's top conservation priority.

"He proudly pointed out

endemic tree snails that

could have disappeared

if work in the preserve

had not taken place."

With an entire island to manage, responibility for preserving Lāna'ihale falls to Castle & Cooke's Department of Conservation

and Game Management. This team consists of only seven people and deals with hunting regulations in addition to conservation. Bryan Plunkett simultaneously supervises ungulate removal, invasive species eradication, fence construction, and

fundraising for the preserve. Despite the enormity of his task, he was happy to spend several hours showing a summer intern around the preserve. He proudly pointed out endemic tree snails that could have

disappeared if work in the preserve had not taken place.

The Lāna'ihale conservation project has made remarkable progress in the few years since its inception. One section of the preserve has been fenced and fencing of two more sections is underway. Together, these sections will protect the critical parts of the preserve from feral animals. Plunkett has also begun replanting the Cook pine trees to replace those that Munro had planted in the 20s, to capture fog drip. Much of the preserve is still infested with invasive species; however, some areas have been cleared and replanted with native plants to restore watershed health and provide habitat for native birds.

Castle & Cooke is also active in assisting MISC with eradication of aggressive invasive plants such as ivy gourd and fountain grass found in the lower elevation areas of the



Conservation Manager Bryan Plunkett stands outside one of a series of fences protecting the Lāna'ihale watershed.

## PLANTS ON THE VERGE: THE PLANT EXTINCTION PREVENTION PROGRAM

The Plant Extinction Prevention Program (PEP) is tasked with snatching rare Hawaiian plants from the jaws of extinction.

By Hank Oppenheimer Maui Nui Coordinator with PEP

**₹**he Plant Extinction Prevention Program (PEP) grew out of concerns raised by the Hawai'i Rare Plant Recovery Group, an informal consortium of over fifty governmental, private, and non-profit conservation and resource management organizations and individuals. There was an obvious and immediate need to prevent the imminent extinction of many Hawaiian species. After a pilot program was initiated on Oʻahu, a Maui County program was established with funding from the U.S. Fish & Wildlife Service, the



A day in the 'office' for staff of the Plant Extinction Prevention Program.

Hawai'i Division of Forestry and Wildlife, and private sources. There are now Big Island and Kaua'i programs as well.

PEP staff consults knowledgeable individuals and compiles a list of the most critically imperiled species. Plants are ranked according to threat levels, life history traits, number of populations and individuals, and other factors. Generally, the PEP list is comprised of plants with only 50 or fewer wild individuals remaining; many are down to less than five. The list is continually updated.

Currently there are 200 Hawaiian species on the statewide list. Combined with 100 species that are already believed to be extinct, this is about 25% of the native flora—alarming to say the least.

PEP staff locates, maps, numbers and tags all wild individuals of target species (this ensures tracking each parental lineage to preserve all the genetic variation remaining). They collect propagules (seeds and/or cuttings) from all mature individual plants for storage, living collections, and propagation by authorized nurseries and facilities. Propagated plants are introduced back into secure, appropriate habitat. PEP goals also include protecting wild plants from threats such as invasive species.

While Lāna'i is not generally known for its rare plants and animals, it still harbors pockets



rich in native ecosystems and species. Lāna'i has good examples of coastal shrubland, dry forest, mesic forest, and cloud forest. The recent discovery of a large breeding colony of the endangered Hawaiian petrel (*Pterodroma sandwichensis*) or 'ua'u, as well as Blackburn's sphinx moth (*Manduca blackburnii*), is testament to Lāna'i as a refuge for native species.

During the course of fieldwork on Lāna'i, some encouraging discoveries have been made. A Lāna'i endemic not seen since George Munro's collections in the 1930s, *Cyanea lobata* subspecies *baldwinii*, was found in a gulch on Lānai'ihale. Four plants are now known, and seeds were collected last winter.

Also noteworthy was a single individual kopa (*Kadua cordata* subspecies *remyi*), a small vine in the coffee family that was feared to have disappeared about 10 years ago. While searching the former location, the PEP team found a single plant growing up through the *uluhe* fern! More were planted thanks to previous efforts by the National Tropical Botanical Garden, which had propagated the old plants

See PEP on Page 8

### 'U'AU FACTS:

- Endangered, endemic Hawaiian seabird
- Named for sound they make in flight: "ooo-ah-oo"
- Spend nearly all of their life in flight, coming ashore only to nest
- Nest in underground burrows
- Breeding pairs take turns feeding a single chick
- Travel vast distances to feed on squid and lanternfish
- At-sea census work projects a total population of 20,000
- Feral cats, rats, barn owls and mongooses prey on chicks and eggs

### 'Ua'u continued from page 1

The Lāna'ihale Forest & Watershed Project was created to help protect the 'ua'u and restore the island's only watershed.

Lāna'ihale Project staff identified the most significant threats to the birds: predation, collisions with fences and wires, and habitat degradation. They began controlling predatory feral cats and barn owls and outfitting fences with white tape to make them more visible. The biggest threat to the survival of the 'ua'u colony on Lāna'i: strawberry guava.

In Hawaiian forests, strawberry guava forms dense, single-species thickets, replacing native plants. 'Ua'u cannot nest in a strawberry guava-dominated forest because the soil is root-packed. The density of strawberry guava stems is so great that not even a seabird can pass between the trees. The soil in these areas is bare; no plant cover exists

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Christine Costales, Lāna'ihale Forest & Watershed staff, releases an endangered 'ua'u.

to protect birds from predators. Strawberry guava also harms the watershed. Forests dominated by strawberry guava have significantly higher rates of water loss than native forests, with serious consequences for long-term watershed health.

Strawberry guava control on Lāna'ihale began in early 2008 in conjunction with Castle & Cooke's installation of meteorological towers. Each of the seven 160-foot towers are supported by twenty-four guy wires, forming a potentially deadly net for 'ua'u. As mitigation for potential harm to these and other endangered birds, Castle & Cooke provides support for a habitat restoration project and predator control.

The restoration project will clear three acres in two years, in an area known to have supported 'ua'u breeding before strawberry guava invaded. Lāna'ihale Project staff have become the new experts in strawberry guava control.

Back on that foggy night, I had no way of knowing that my life was about to become defined by frequent ferry trips to and from Lāna'i and late nights spent in a colony of wheeling, raucous petrels. It is satisfying work, but perhaps most gratifying has been the ability to help develop the capacity of people from Lāna'i to *mālama* their 'āina. Staff from MISC helped get the project off the ground, but the Lāna'ihale Project now employs four on-island staff and is hosting two AmeriCorps interns from Lāna'i. We hope to turn the project over to Lāna'i residents, much as we hope to restore the remaining forest to its native condition. Both the 'ua'u and the watershed are depending on it. &



Jay Penniman monitors an 'ua'u nest on Lāna'ihale

### **FOUNTAIN GRASS FACTS**

Unlike native grasses, fountain grass thrives in burned areas, even providing fuel for fire. Once established, the plant spreads like wildfire, as residents of Hawai'i Island can attest, where fountain grass has invaded approximately 200,000 acres.

- Impacts: Fuels wildfires and outcompetes native plants.
- Native range: Northern Africa
- Why introduced: Once used as an ornamental becuase of drought tolerance.
- **Identification:** 4-foot-tall bunchgrass with stiff, cylindrical leaves. The flower can be purple to light pink and resembles a bottle

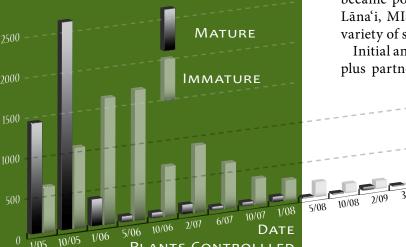
brush.

**Habitat:** Adapted to harsh conditions, fountain grass can thrive in droughtprone areas such as lava flows. Found on Hawai'i Island, Kaua'i, Oʻahu, Maui, and Lānaʻi.



### FOUNTAIN GRASS CONTROL on 'Gary's Island'

At the core location, the number of mature plants found has decreased from 2,680 plants in October 2005 to only 12 in March 2009.



PLANTS CONTROLLLED

# DISCOVERING LĀNA'I

By Wendy Swee MISC Outreach & Data Associate

Then MISC began invasive species control work on Lāna'i in 2003, it was partly to protect the island of Maui. Fountain grass was the first target, discovered near Kanepu'u and on a golf course, and reported by Bob Hobdy, former district manager for the Department of Land and

> Natural Resources—Division of Forestry and Wildlife (DOFAW). The rationale for controlling this species was that many Maui hunters go to Lāna'i and could easily bring back seeds on their hunting gear.

> Pat Bily, Invasive Species Specialist for The Nature Conservancy (TNC), played the "protect Maui" card to galvanize the troops into action, later admitting that he saw fountain grass as a "gateway weed to get MISC involved in larger weed issues on Lāna'i." Bily knew the importance of protecting Lana'i for its own sake. The Conservancy's dryland preserve, Kānepu'u, is home to numerous rare native treasures, including

eight of twelve remaining wild nānū, or gardenia trees.

Bily led two interagency surveys to evaluate the extent of fountain grass, one on foot and one by air. MISC, TNC, and DOFAW participated. They found fountain grass scattered sparsely over 100 acres, in the direction of the prevailing trade winds, southwest of the original Kanepu'u site. One hundred acres seemed small enough to control and large enough to warrant a concerted effort.

As MISC's organizational capacity grew, that concerted effort became possible. Now fully committed to controlling pests on Lāna'i, MISC regularly travels to its sister island to work on a variety of species.

Initial annual expeditions involved 14-18 MISC crew members, plus partners from Castle & Cooke, MoMISC, and Haleakala

> National Park. Crew caravanned down to the harbor and took the early ferry, set up a sea of tents, and divided into trucks to conquer fountain grass in the field. Castle & Cooke provided the logistical support to make it all possible. Now between seven



Nānū, or Gardenia brighamii, a native gardenia endemic to Lānaʿi

and ten crew members go quarterly, lugging their personal gear on the ferry, and still relying on partners' support.

When the Lānaʻihale Forest & Watershed Project (LFWP) formed in 2006, MISC gained a new partner. The field crews pull together—literally, in this case—to control fountain grass. All this effort has resulted in a dramatic decrease in mature plants at our target sites: Kānepuʻu, the golf course, and Honopū, a site discovered in 2008.

Fountain grass isn't the only MISC target on Lāna'i. Glenn Shishido of DOFAW first reported ivy gourd, a plant that grows quickly and smothers other vegetation, at the Kaumalapau barge harbor. That plant was eradicated, but a large infestation was later discovered in the Mānele Bay area. Active control on that population began in 2007.

In addition to the fountain grass brigade, MISC sends two people roughly every six weeks to control ivy gourd. They receive additional staff and support from the LFWP. MISC crews have enjoyed seeing mature ivy gourd numbers decline sharply.

Lāna'i also needs protection from invaders that may have hitched a ride from Maui. Staff from DOFAW and Castle & Cooke twice reported controlling coqui frogs, and today Lāna'i remains coquifree. MISC conducts annual surveys for banana bunchy-top virus (BBTV). Lāna'i, unique among the major islands, has never had an instance of the disease, which can be spread by infected banana plants or other plants harboring infected aphids. MISC field crews are careful not to bring their work home with them. All gear is meticulously cleaned before and after going to Lāna'i.

MISC takes the connection between the islands seriously. As our commitment to Lāna'i has grown, our familiarity with the island and relationships with partners have deepened. We now realize the privilege we have, both to protect and enjoy the rare plants, seabirds, and fragile watershed of Lāna'i.

# GOING TO LANA'I

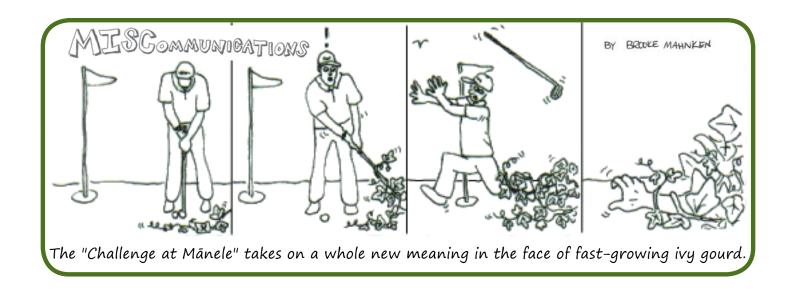
- · 20 X 20 canopy
- · tents
- · sleeping bags
- · headlamps
- · lanterns
- camping stove
- cooler
- kitchen box (pots pans etc.)
- · chairs
- · day packs
- · radios
- · sunscreen
- · GPS units
- · herbicide
- goggles
- · binoculars
- · picks
- · kevlar gloves
- machetes
- ferry tickets
- borrow golf carts to survey the course

DON'T FORGET::

snorkel fins and mask
fishing pole
volleyball and net







#### PEP, continued from page 4

before they died off and kept them thriving in their Kaua'i nursery. Recently, seeds were collected from the last two *Cyanea munroi* plants on Lāna'i, as well as from some of the eleven remaining  $n\bar{a}n\bar{u}$ , or *Gardenia brighamii*, a tree with beautiful, fragrant flowers.

A new population of Lāna'i's endemic violet, *Viola lanaiensis*, was found, bringing the total number of wild plants to 20. A unique form of our state flower (*Hibiscus brackenridgei*) was also planted in a DOFAW exclosure in the Lāna'i Cooperative Game Management Area with plants grown at Maui Nui Botanical Garden.

None of this important work happens without help. PEP has received tremendous support from Castle & Cooke, the island's principal landowner. The Lāna'ihale project, The Nature Conservancy, 'Ike Āina, National Tropical Botanical Garden, Hawai'i Division of Forestry and Wildlife, and Maui Nui Botanical Garden have all been key to the success of the program on Lāna'i. &

#### Plunkett, continued from page 3

island. Castle & Cooke provides water, transportation, housing, and manual labor to aid MISC's battle against these species. Since MISC has increased its work on Lāna'i, Plunkett has been our point of contact, facilitating Castle & Cooke's assistance. Without this help, MISC's work on Lāna'i would be nearly impossible.

"Bryan Plunkett's cooperation and knowledge of the island is an integral aspect of operations on Lāna'i," says MISC field worker David McPherson.

Conservation on Lāna'i is different from many other places as the

island is privately owned. On one hand, there are fewer legal hoops and people to deal with. On the other hand, Plunkett notes, "It takes so much money, especially when an island already costs so much to run." Through partnerships with outside conservation organizations, preserving the natural resources of Lāna'i is a much less daunting task.



Crews sweep Kānepu'u for fountain grass.

### BOTANIZING BOB HOBDY

By Shannon Wianecki MISC Newsletter Editor

n 2002, after thirty-seven years in forestry, Bob Hobdy retired. Sort of. He's still busy "botanizing," building on the hobby he picked up as a teen on Lāna'i.

In his so-called retirement, this patron saint of native plants launched a consulting business, surveying flora and fauna and evaluating sites subject to environmental protection requirements. He mapped Fleming Arboretum's copious inventory of native plants. He's still logging field hours, collecting specimens for the new Olinda Rare Plant Facility, tipping off MISC about invasive targets he spots in his travels, and regularly attending MISC meetings. He continues to serve on the Maui Nui Botanical Garden's Board of Directors and Maui County's Arborist Advisory Committee, as he's done for the past three decades. In truth, Maui couldn't let Hobdy

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completely retire. He's indispensable, a treasure of knowledge MISC has depended on since its inception.

Raised on tiny, rural Lāna'i, Hobdy had just gotten his driver's license when his father volunteered his chauffeur services. His passengers happened to be internationally renowned botanist Otto Degener and his wife Isa, on the hunt for native Hawaiian plants.

His eyes opened to

the world at his feet

and that beyond the

shores of his island.

Hobdy watched as Degener excitedly collected specimens of *nehe*, yellow flowers growing along the roadside, for botanical gardens in New York,

Munich, and Paris. His eyes opened, to both the world at his feet and that beyond the shores of his island.

teacher, especially for a young kid like me." Young Hobdy pored over the autographed copy of Degener's

Flora Hawaiiensis he received for his efforts.

Having grown up in a plantation town, Hobdy figured he'd study agriculture, but summer camping trips with his cousins on the mainland sold him on forestry. After four years at Oregon State University, he returned to Hawai'i to work for the Department of Land and Natural

> Resources (DLNR) forestry division on Kaua'i. There he met his second mentor: Dr. Harold St. John. The Bishop Museum botanist needed

assistance with field collections and recognized Hobdy's aptitude.

"He asked me to collect some "Degener was a really wonderful plants he was working on—halapepe and Canavalia," says Hobdy. "At his suggestion, I started keeping a log of all the things I collected."

His personal log now numbers over 4,000 species.

"My number 52 I sent to St. John was iliau. I was down in this remote area of the Na Pali cliff planting some forestry trees. We broke for lunch and I saw an iliau that looked different. So I pressed a flower head and sent it off." It was a new species. St. John named it Iliau hobdyi.

By the time Hobdy left Kaua'i, he'd discovered 10-12 new species. Five were named after him by other botanists and two he described himself.

While botanizing was his passion, forestry paid the bills. He moved to Maui in 1971 and was promoted to Maui County district manager

\ISGommunications PROOKE MAHNKEN Bob Hobdy, I presume

See Hobdy on Page 10

### MISCELLANEOUS FILES

Dear Dr. MISCellaneous,

I keep hearing about plans to introduce bugs to get rid of waiawī. Aren't you worried that they'll just eat other plants when they've eaten all the waiawī? Haven't they learned anything since introducing the mongoose to get rid of the rats? Now we have both rats and mongooses eating native birds!

-Bug Cautious

Aloha Bug Cautious,

It's great to know that you are paying attention. Yes, scientists are in the planning process for the release of an insect to control strawberry guava, or *waiawī*. Strawberry guava is a highly invasive species that is taking over huge swaths of native Hawaiian forest.

The insect will only slow the spread of strawberry guava; it

won't kill the trees. Introducing an invasive species' natural enemy, such as an insect that eats strawberry guava, reduces the invasiveness of the plant—levels the playing field, so to speak. Native species will be able to compete rather than being completely choked out.

When scientists look for potential natural enemies to release, they closely study how the natural enemy has evolved in relationship to the invasive species they intend to control. Tectococcus ovatus, the insect planned for release to control strawberry guava, is highly dependent on strawberry guava. It's been rigorously tested to see if it will feed on anything else in Hawai'i and it doesn't. It is unable to survive on other plants, even common guava.

Many scientists feel that natural enemies are the only hope against some widespread invasive species. Other control methods, such as

pulling or using herbicide, are unsustainable, both financially and environmentally.

The methods for selecting biological controls have come a long way since that private landowner brought in a mongoose. That definitely wasn't a good idea. It wasn't tested. It wasn't even what scientists call classical biological control, since the mongoose is not a natural enemy of the rat.

Since that time, scientists have released numerous biological controls with success, saving tens of millions of dollars per year for the agricultural industry and giving conservationists one more arrow in the quiver to defend native Hawaiian ecosystems. I share your concern: protecting what's left of Hawaiian species and watersheds in a sustainable, responsible manner.

Mahalo! Dr. MISCellaneous

#### Hobdy, continued from page 9

with the DLNR. Throughout his tenure, the state forestry mission changed, from a primary focus on planting marketable trees to a greater appreciation for native plants.

Another lifelong interest of Hobdy's—place names and geography—led him to investigate ahupua'a, ancient Hawaiian land divisions. He became an authority on the subject, teaching classes at the Bailey House, Kīhei Canoe Club, and in Hāna.

"Here I am, a manager of land, and there's lots of ways to manage land. I realized that the old *ahupua'a* system that the Hawaiians used was very effective," says Hobdy. "One of the system's benefits was responsibility. We have all these human rights, but

we don't focus on responsibilities. The Hawaiians had that."

As a founding member of MISC, Hobdy put that sense of responsibility into practice. He describes flying over Hāna in the early 90s and seeing

miconia growing a mile and half away from where it was first detected and, supposedly, eradicated.

"We realized it was a big problem that needed to be jumped on or we were going to lose the forest. It was on state land, but not forestry land. I could've easily said: it's not in my bailiwick. Instead, I went to my boss and said we've got to take the lead on this."

His efforts, combined with those of other land managers willing to think out of the box, resulted in the formation of MISC.  $\mathcal{S}_{\Delta}$ 



Bob Hobdy on 'Eke Crater

### THE BAREFOOT LEGEND

By Lissa Fox MISC Public Relations and Education Specialist

ver the years, the faces of MISC have come and gone, but some faces have changed only with experience. Sam Akoi III, or Uncle Sam, as he is known, has been pulling miconia since 1997, before the formation of MISC. By late summer of 2009, he will have retired

from the MISC Hāna miconia crew.

Uncle first began controlling miconia as a volunteer, going out to pull plants whenever he could find time in

between his full-time job as a cook at Hotel Hāna Maui and managing a landscaping business. He was concerned about what was happening in the forest. "My two boys was working over there [on the miconia crew]. They came home and told me about the miconia plant. They were concerned. We are hunters—we no like see our mountain come like Tahiti."

When a field crew position opened up, he applied, thinking he wouldn't be hired since he already had another job. He was offered the position and, with seniority at the hotel, Uncle arranged his schedule to work the night shift there, days with the miconia crew, and landscaping on the weekends. After two years he retired from cooking to work only one full-time job.

Uncle's trademarks are a ready laugh and a willingness to talk story with anyone. Born and raised in Hāna, he knows everyone in town. He's a hard worker, able to handle anything. He's gone from field crew to crew leader. During a pampas grass sweep on the slopes of Haleakalā,

Uncle's boots didn't fit properly so he simply walked barefoot that day, now a MISC legend.

He's a fisherman and diver and, like fishermen anywhere, he has a few tales. Take, for example, the story about his pet tiger shark.

Uncle's father, also a diver, taught

"We are hunters—

we no like see our

mountain come

like Tahiti."

him not to be afraid of sharks. Uncle recalled, "In those days, in the 1960s, there was so many fish and so many sharks. Those sharks,

they want the fish, they're not after you." When a shark approached a diver, the diver would just chase the shark off. One day a shark approached Uncle. "That shark was real small, and he just stole my fish from my spear."

For several days Uncle returned with the intent of killing that shark, but the shark kept his distance. "He knew that I was watching him. He was smart and when I went for him, he ran away."

Soon the shark grew bold, approaching Uncle

again to steal fish. Uncle was watching, ready act. "Then I just changed my mind. This shark is not goin' harm me, he just want the fish, so I started feeding him. Just one fish. Then he wanted one more, so I gave him one more, then no

more. He started hanging around with me, and from that time on I give him only two fish. I watch him grow and grow, every time." When Uncle last saw the shark several years ago, it was 25 feet long. A skeptical friend wanted to see the shark himself, so Uncle took him diving. The friend took one look and ended up balanced precariously on an inner tube.

True to Uncle's style, his plans for retirement are full of adventure. "I'm thinking of buying a boat, maybe going back to lobster fishing or diving." Perhaps he'll travel to Alaska to help on a friend's gold mine in the Yukon. It's far from the ocean but Uncle is adaptable. "I like the waves and I like the ocean, but there's a river, so that's good enough for me." As the joke among staff goes, you can never leave MISC, only go on intermittent status. Uncle is keeping the tradition alive. He'll be helping crews gain access to property and occasionally going in the field. "Even if I gonna retire, I committed myself to this thing. I like really see this thing [through]. We win this battle."





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Working to protect Maui Nui from invasive species that threaten our environment, livelihoods, and quality of life.

# MISC PARTNERS

Castle & Cooke Resorts, LLC

Haleakalā National Park

Hawaiʻi Department of Agriculture

Hawaiʻi Dept. of Land and Natural Resources

Maui County Department of Water Supply

Maui County Office of Economic Development

Maui Land & Pineapple Co.

Pacific Islands Exotic Plant Management Team
The Nature Conservancy of Hawai'i

University of Hawaiʻi -College of Tropical Agriculture and Human Resources

> University of Hawaiʻi -Pacific Cooperative Studies Unit

US Fish and Wildlife Service

**USDA** Forest Service

US Geological Survey - Biological Resources Division

USDA Tri-Isle Resource Conservation and Development Council, Inc.

The Maui Invasive Species Committee is a partnership of government, non-profit, and private organizations working to protect Maui County from the most harmful invasive plants and animals.

MISC works to prevent invasive species from becoming established, controls invasive species on private and public property free of charge, and educates people about how to protect Maui County.



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