

# Maui, Lanai need not share

Travelers should be careful not to pack invasive species

## Kia'i Moku

By Wendy Swee



Lanai, Maui's quiet sister island, lies in the rain shadow of its larger, more

widely-visited sibling. Its reserve seems cultivated, like its former pineapple fields, considering its exclusive resorts and golf courses. Yet Lanai has natural reserves as well—a rare gardenia tree (nanu) clings to survival here, endangered Hawaiian petrels (uau) nest in high burrows, and Lanai even harbors several unique species of flightless moths (*Hyposmocoma* spp.) featured in a recent National Geographic issue as an example of diverse evolution. The origin and fate of Maui's and Lanai's environments are intertwined, but while the two islands share a diversity of native species, both islands must take care not to share invasive species.

When invasive species control work began on Lanai in the early 2000s, it was partly to protect the island of Maui.

Fountain grass was the first target, discovered 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 Lanai and easily could bring back seeds on their hunting gear if fountain grass became widely established. Maui has only a few fountain-grass locations, so that would make it much more difficult to keep tabs on an invasion.

Fountain grass, extensively planted for golf course landscaping on the Mainland, is adapted to fire—even promotes it—unlike Hawaii's native vegetation. Wildfire would harm Maui's native species and put businesses and residences adjoining grasslands at risk. Fountain grass also outcompetes native plants and has infested about 200,000 acres on the Big Island.

Pat Bily, invasive species specialist with The Nature Conservancy, had an interest in pro-

tecting species on Lanai; the Conservancy's dryland preserve, Kanepuu, holds eight of only 12 remaining wild nanu, gardenia trees (*Gardenia brighamii*). As a board member with the Maui Invasive Species Committee (MISC), Bily led the charge to remove the weed: "I saw fountain grass as

a gateway weed to get MISC involved in control work on Lanai," he recently disclosed.

He got more than MISC involved. After two multiagency surveys, battle lines were drawn and troops began to descend on the island in 2005. MISC, the Conservancy and DOFAW participated, with support from Castle & Cooke (primary landowner of Lanai) for lodging, transportation, and staffing. Field crews continue to sweep and control fountain grass over 200 acres on a regular basis. Now there are far fewer mature plants found—down from almost 3000 plants between two fairways of the golf course, for example, to only 15 last year.

Fountain grass was not the only weed discovered on Lanai. Glenn Shishido of DOFAW first noticed and reported ivy gourd, a plant that grows quickly and smothers other vegetation, at the barge harbor, Kaunalapau. Though that plant was eradicated, the Manele Bay area was later discovered to be infested with ivy gourd and an active control program on that target began in 2007.

Ivy gourd is a typical control target—newly established and possible to be eradicated. But another Lanai project is focusing on a species that is already widely established, strawberry guava, which threatens uau and the Lanai watershed. After the 2006 discovery of a significant Hawaiian petrel colony on Lanaihale (top of Lanai), biologists from DOFAW and the University of Hawaii formed the Lanaihale Forest & Watershed Project. Around the same time, Castle & Cooke began exploring wind-power options on the island. A Castle & Cooke habitat



**Fountain grass** (photo above) poses many threats on Lanai, including one to The Nature Conservancy's Kanepuu dryland preserve, which holds eight of only 12 remaining wild nanu gardenia trees.



conservation plan related to the wind development is helping fund a project to restore three acres—now heavily infested with strawberry guava—to create suitable nesting habitat for uau.

Keeping invasive species at bay in Maui Nui also includes protecting Lanai from Maui's invaders. Staff from DOFAW and Castle & Cooke twice reported controlling coqui frogs and Lanai remains coqui-free. MISC conducts annual surveys for banana bunchy-top virus and only Lanai among the major islands has never had an instance of the disease. Infected banana plants or other plants harboring infected aphids can spread banana bunchy-top virus.

So, whenever traveling between Maui and its quiet sister island of Lanai, clean one's gear and check all plants being transported.

• Wendy Swee is the education/outreach and data associate for the Maui Invasive Species Committee. She previously worked for the Hawaii Natural History Association at Haleakala National Park and recently returned to Maui after working as a historical interpreter on the Mainland. "Kia'i Moku," (*Guarding the Island*) is prepared by the Maui Invasive Species Committee to provide information on protecting the island from invasive plants and animals that can threaten the island's environment, economy and quality of life.