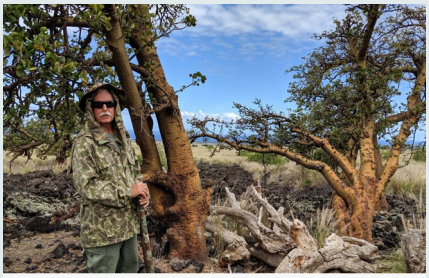
HAWAIʻI

Hawaiʻi Department of Land and Natural Resources, Division of Forestry and Wildlife

Hawaiʻi has 48 different forests and woodland types.[1] These are home to more than 10,000 native species, 90% of which are found no where else. Of these, Hawaiʻi dryland forests are among the most endangered ecosystems in the world with only about 5% remaining today. Kaulunani, the Hawaiʻi Urban & Community Forestry Program, supports a range of forest types and community projects. This story features a number of dryland forests and community-based restoration on Hawaiʻi Island.

More than 25% of endangered plant species[2] in Hawaiʻi are found in dryland forests.[3] So while these system are incredibly valuable, they are not necessarily well recognized. Hawaiʻi's dryland forests are like islands in a sea of non-native and invaded forests, pasture, and lava fields, a Hawaiian concept known as kīpuka---variation or change of form, especially an oasis within a lava bed where they may be vegetation.



Dr. Richard Stevens, project leader and Humanities Lecturer at the Pālamanui campus, regales the Council with stories about the ancient Wiliwili trees. *Photo Credit: Heather McMillen*

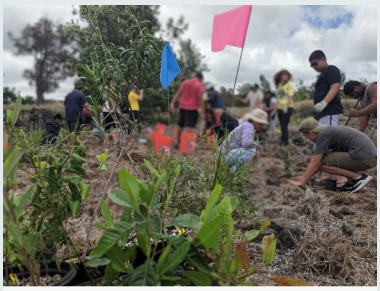
Kaulunani, the Urban & Community Forestry Program of Hawaiʻi, has been supporting community efforts to heighten awareness, appreciation, and aloha (love, compassion) for dryland forests. Program funding supports the Waikoloa Dryland Forest and their Wiliwili Festival, which focuses on an iconic native Erythryina (*Erythrina sandwicensis*). Wiliwili means to repeatedly twist, much like the tree's bark and seed pods that twist to show the tree's stunning red seeds.

Wiliwili populations declined greatly due to a gall wasp, but since the introduction of a biocontrol agent and the dedicated efforts of staff and volunteers, there is growth again. At the Hawaiʻi Community College Pālamanui campus, Kaulunani supports the outplanting and restoration of a dryland forest. Pālamanui, is a placename that refers to a great, sacred enclosure made from lama (*Diospyros sandwichensis*), a tree that is associated with protection and healing. These trees have great mana (spiritual power) as well as ecological function and are seen as both cultural and ecological keystone species.

Another dryland forest restoration site supported by the program is upslope from the Veterans' Cemetery in Kona where alaheʻe (*Psydrax odoratum*), is a dominant species. When translated, alaheʻe actually refers to the plant's slippery or wandering fragrance, which the Kaulunani Advisory Council, experienced fully as they toured the restoration site.

The Council also joined intermediate school students from Oʻahu in outplanting dryland forest species at Puʻu Waʻawaʻa Forest Reserve in North Kona.

Alaheʻe (*Psydrax odoratum*) filling the dryland forest with its fragrance. *Photo Credit: Heather McMillen*



Students outplant dryforest seedlings with the Council in Puʻu Waʻawaʻ Forest Reserve. *Photo Credit: Heather McMillen*

All of these efforts raise community awareness as well as health among forest remnants with the goal of connecting these forests so they are no longer kīpuka but corridors of dryland forest spreading out across the landscape.

1 https://www.nature.org/media/hawaii/the-last-stand-hawaiian-forest.pdf
2 https://dlnr.hawaii.gov/dofaw/rules/endangered-plants/
3 http://www.drylandforest.org/

FOR MORE INFORMATION

Hawaiʻi Department of Land and Natural Resources, Division of Forestry and Wildlife
Kaulunani Urban & Community Forestry Program
http://dlnr.hawaii.gov/forestry/lap/kaulunani/