2018

Hawai'i Annual Code Challenge (HACC)

Challenge	Plant Identification
Department / Organization	Department of Land and Natural Resources – Division of Forestry and Wildlife KUPU
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Aloha+ Dashboard Connection

Natural Resource Management/Green Workforce & Education



Native Species Managed

By 2030, increase the percent of threatened and endangered native species managed in Hawaii.

Workforce & Professional

By 2030, promote productive employment for Hawai'i's workforce – professionals, volunteers, practitioners – that supports community, environment, and economic prosperity through institutional transformation and job creation.

Challenge Information

Background

Hawaii's native plants are unique, culturally important, and many are critically endangered. However, they are not known by the general public. The resources for identifying native plants are outdated, usually in the form of books that are not written for a general audience. Although mobile apps that use image identification exist (PlantNet), they do not recognize Hawaii's native plants.

KUPU provides hands-on training in conservation, sustainability, and environmental education for young adults. To increase the knowledge of their workforce, they need a tool to engage youth in learning about and identifying plants in Hawaii.

	 There is information on which native plants occur on each island and have pictures of most of them yet there is a lack of full information of where native plants are and when they flower. More information could help increase understanding. Challenges: Native plant identification for/by the public (name of plant, basic information, status) Allowing reporting back to DLNR Need to be able to identify endemic plants, protected, endangered, invasive, etc).
Data	 Excel spreadsheets with plant distribution data. Plant database - data and images
Ideas	Geotag/Location-based reporting, Photo identification, tagging Hawaii's hiking trails, Gamification, Machine Learning, Alerts based on location