

MAKAUWAHI CAVE RESERVE

WHERE PAST AND FUTURE MEET

Visitors generally agree that this place is unlike any other public site they have ever visited. At the center of its many educational offerings is Hawai'i's largest limestone cave, the richest fossil site in the islands, and a uniquely preserved archaeological site. The Reserve is a living museum dedicated not just to the past, though, but also to futuristic experiments in native species conservation. On abandoned farmlands and quarry lands surrounding the cave, native plants and animals have returned gloriously in response to innovative restoration techniques. Acres of restored forest land, dune vegetation, and wetland habitat feature almost 100 species of native and Polynesian plants, including many endangered species, as well as endangered waterbirds and even an underground ecosystem of dark-adapted blind cave invertebrates – some of the island's rarest creatures.

PREHISTORIC VIEW

View of Makauwahi Sinkhole from the southwest, as it might have appeared before humans arrived. Your present location is at the center of this picture, on the sinkhole rim. *Extinct species are in brown.*

- 1 On the left side of the mural, a flock of *Tortoise-jawed Moa-nalo* (*Chelychelynechen quassus*) graze kawelu grass (*Eragrostis variabilis*) and the orange fruits of maiapilo (*Capparis sandwichiana*).
- 2 *Pila's Palila* (*Loxioides kikuchi*) and a flightless rail (*Porzana sp.*) are on the ground in front.
- 3 Immediately above, a *Kaua'i O'o* (*Moho braccatus*) is fleeing the owl.
- 4 A flock of the *Medium Kaua'i Goose* (*Branta aff. hylobadistes*) with males fighting in the background.
- 5 On the right of the panel, the *Long-Legged Kaua'i owl* (*Grallistrix auceps*) scatters *Kona Finches* (*Chloridops wahi*).
- 6 Landing on the pond are *Laysan Teal* (*Anas laysanensis*).
- 7 Flying overhead, left to right in the mural, are an *I'o* or *Hawaiian Hawk* (*Buteo solitarius*), *Frigate-birds* (*Fregata minor*), *Newell's Shearwaters* (*Puffinus auricularis newelli*), *Nene* (*Branta sandwicensis*), and a *Hawaiian Petrel* (*Pterodroma hypoleuca*).
- 8 Closeup in the lower right corner on leaves of *Kokia kauaiensis* are a *beetle* (*Blackburnia burneyi*) on the left and a *weevil* (*Rhyncogonus sp.*) on the right.
- 9 On the trunk of the *Pritchardia* palm are a *Hoopoe-billed Akialoa* (*Akialoa upuipirostris*) and a *land snail* (*Carelia sp.*).

Painting by Julian Pender Hume, from *Back to the Future in the Caves of Kaua'i: A Scientist's Adventure in the Dark*, by David Burney (Yale Press, 2010).



Sept. 1, 2010 Color aerial photograph of the **Makauwahi Cave Reserve** and environs, by Ellen Coulombe, Wings Over Kaua'i. For more information about the cave, go to www.cavereserve.org.

IN THE MUD OF MAKAUWAHI CAVE THERE ARE MANY KINDS OF FOSSIL EVIDENCE

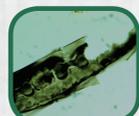
Microfossils



Pollen



Insect Parts



Charcoal Particles



Diatoms

Macrofossils



Bird Bones



Fish Bones



Seeds



Snail Shells

Artifacts



Bone Fishhooks



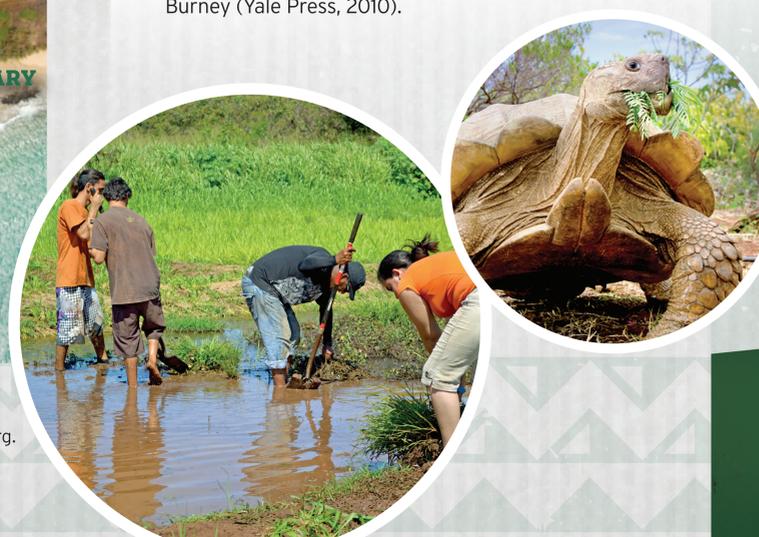
Pearl Shell Fishhooks



Stone Mirror



Canoe Fragments



HAWAII TOURISM AUTHORITY

Funding for this organization was provided through an award from the Hawai'i Tourism Authority.