

A Changing Landscape at Nānākuli Wetland

By Mālama Learning Center

The wetland or marsh near Zablan Beach in Nānākuli (often referred to as “Stink Pond”) looks nothing like it did in ancient times. Stories from kūpuna tell us how this place was used as a muliwai to catch fish to feed families. The plants that today dominate the wetland were all introduced to Hawai‘i after 1800. Pickleweed, the short shrub that borders the stream and dominates the center of the marsh, was first recorded in 1859 at Prison Island (Sand Island), O‘ahu; it has since invaded many of Hawai‘i’s wetlands and coastlines. Buffelgrass, an African grass that borders the pickleweed at Zablan, was introduced by ranchers around 1932 as drought-adapted feed for their cattle. *Kiawe*, the alien tree with a Hawaiian name, was introduced by Father Bachelot in 1828 as a shade tree for a then hot and dusty Honolulu. Later, people and cattle spread the tree throughout the Islands.



Mālama Learning Center and the Ahupua‘a O Nānākuli Homestead have joined forces to begin to restore the wetland at Zablan to its ancient appearance and function. In fact, Ahupua‘a O Nānākuli Homestead has received a permit from the City’s Adopt a Park program to do this. We have already started using community volunteer muscle, largely from Nānākuli-Wai‘anae students, to eradicate the pickleweed and buffelgrass.



Hand-removal, however, may not be a permanent solution as pickleweed can re-grow easily. We may need to apply an herbicide called Rodeo that has been safely used for decades in areas like this by conservation professionals to restore wetlands without harming aquatic animals and microorganisms such as fish, crabs, shrimp, etc. It also rapidly breaks down into even more benign chemicals. If we need to do this, we

will be sure to follow the right protocols and inform people with signs. (<https://www.conncoll.edu/media/website-media/offices/ehs/envhealthdocs/Rodeo.pdf>).

We are not only removing weeds. Volunteers are planting native Hawaiian plants that either still exist at the wetland (e.g., 'aki'aki) or very likely grew there in the past (for example, 'ahu'awa, 'ākulikuli, pōhinahina). We will leave some areas barren to entice native Hawaiian wetland birds such as ae'ō, 'alae 'ula, and 'auku'u to return to this place. In fact, we have seen the 'auku'u make an appearance every now and then!



We have been pruning the kiawe trees to make the path to the marsh more people-friendly. In the future, we will seek permission from the City to gradually replace the kiawe trees, which use up a lot of groundwater, with native Hawaiian trees such as kou, milo, and loulou. These trees were once commonly found on our island and we would like to bring them back.

We are also studying water quality. Using scientific equipment, students are learning about the health of the stream and ocean, and how they are connected. In order to make the waters healthier, we need to know what is happening regarding changes in the water quality and even the sand and soil.

We hope you will support and become part of our efforts to restore the wetland at Zablan to the place it was many years ago, a Hawaiian place in every way.

Please visit our website (www.malamalearningcenter.org) or contact us at (808) 305-8287 or info@malamalearningcenter.org to learn more and get involved. *Mahalo.*



Since its inception in 2004, Mālama Learning Center has worked to unify schools, residents, and businesses in West O'ahu through education that incorporates art, science, conservation, and culture. Mālama Learning Center uses a hands-on approach to learning, preparing its participants for diverse real-world experiences and 21st century careers.