



The endangered Kauai 'akikiki flits along 'ōhi'a and 'ōlapa branches searching for insects to eat. © Jim Denny

Invigorate forest birds with pilina, or relationship

The Conservancy's work to sustain native forests and reduce populations of invasive, disease-carrying mosquitoes is critical to the survival of Hawai'i's endangered native birds.

Our executive director, Ulalia Woodside Lee, shares another way to invigorate Hawai'i's native plants and animals is to develop and nurture pilina, or relationships, with them. Lee encourages learning about native birds to generate energy and appreciation that can bolster their survival. It's a personal step we can all take to resist extinction. How can we save what we don't know and love?

Before mosquitoes arrived, native birds were found from sea level to the mountaintops. Today, most people in Hawai'i don't live around native birds and thus don't have the easy connections that come with proximity. But there are

many other ways to learn about and develop pilina with them, no matter where you live or where you are from.

Native birds are present throughout Hawaiian mele (song), oli (chant) and hula. Mo'olelo (stories) describe them as the physical manifestations of gods and their messengers. For example, O'ahu's highest mountain, Ka'ala, is the realm of Kaiona, a beneficent goddess of people. In ancient times she sent the O'ahu 'ō'ō, now extinct, to guide people to safety; today she may send another dark bird, the 'iwa, or frigate bird.

In one beloved tale, a kolohe (mischievous) 'elepaio pecks a hole in a man's water gourd, provoking the man to throw a rock which hurts the birds' leg. The 'elepaio flits about trying to gain sympathy from other birds. When they learn what he did, they scoff at him. The 'elepaio learns that hurting

others through your actions leads you to be hurt, as well. The 'iwi pōlena, the juvenile 'iwi bird known for vibrant feathers that change from dark-flecked gold to bright scarlet as it matures, is symbolic of love. It is evoked in many Hawaiian love songs, such as Ipo Lei Manu, Queen Kapi'olani's song for her husband King Kalākaua.

Each of the four birds that are most at risk of extinction—'akeke'e, 'akikiki, kiwikiu, 'ākohekohe—have unique characteristics, from plumage to song to feeding. For example, the Kaua'i 'akeke'e has a multipurpose beak that enables it to both drink nectar as well as pry open buds and flowers to find bugs to eat.

We can all know and appreciate our native forest birds better! To learn more visit www.nature.org/hawaiibirds.



Sediments inundate the Olowalu reef, a primary source of coral larvae for the reefs of Lānaʻi, Molokaʻi and West Maui. © Jon Brito/DLNR

Connecting Mauka-Makai at Olowalu

Fire, drought and severe storms degrade mauka habitats, contributing to high erosion and sediment levels in coastal waters and on reefs. Invasive Axis deer exacerbate the erosion in areas with vulnerable soils. Our approach to building climate and coastal resilience at Olowalu will reduce the sediments while simultaneously restoring coral reefs and other natural coastal ecosystems to better withstand climate impacts.

In consultation with community members, local organizations and government agencies, we have identified more than a dozen priority projects to reduce sediments to the Olowalu reef. For instance, capturing sediment at the base of gulches that contribute the most sediment, and placing additional fire breaks, dip tanks and fences to keep out Axis deer in the uplands, will lead to more effective native plant reforestation efforts that will, over time, reduce fire risks and decrease sedimentation. Restoration of stream banks will hold soil, and restoration of wetlands will improve sediment catchment and filtration, increase habitat for coastal wildlife, and offer opportunities for cultural practices and recreation. We are assessing the interventions to determine which will have the highest potential impacts and return on investment and working with partners to identify and implement priority projects.

Our work with local partners and communities aims to co-develop effective nature-based solutions to coastal erosion and flooding in concert with the highway realignment fronting Olowalu's coastline. And we've partnered with leading marine research organizations to ensure our reef restoration efforts use the most thermally tolerant corals in the places where they are most likely to thrive given warming ocean temperatures and sediment conditions at Olowalu.

Implementing this approach will help to build nature's resilience and to restore healthy mauka-makai connections at Olowalu. Learn more at nature.org/hawaii/palmyra.

NATURE HAWAII & PALMYRA

The Strength of Spirit and Nature

In August 2023, the fires on Maui devastated communities and lives. The world watched as Hawai'i's deadliest fire burned Lahaina and upcountry areas. Anne Carter, TNC Hawai'i and Palmyra board of trustees chair, was among those impacted, but was fortunate to survive with her family and home intact.



Anne Carter © Anne Carter

An organic farmer for 25 years, Carter recalls watching her fields burn. "I was ready to quit farming; between losing crops, the fencing and the irrigation, and the smoke damage to the house—it was just too much."

But she didn't want to give up on her farm, which has some of the richest soil on the island and helps nourish the local community in nearby Pa'ia. In the near term, Carter is rebuilding her farm's infrastructure, including fire-proof fencing to keep out non-native pigs and deer and new irrigation equipment. In the long term, she remains a lifelong conservationist, inspired by TNC's focus on people and nature and building resilience to climate change impacts.

"Anne shares updates with our board regularly about community resiliency and her own resiliency as she adapts her business to new challenges," shares Lori Admiral, Director of Philanthropy. "The tragedy of the fires will remain with us for years to come, but Anne's updates remind us of the strength of spirit and nature and gives me hope that TNC's work can make a difference."