



The critically endangered 'Ākohekohe is found only on Maui. © Jack Jeffrey

Celebrating Hawai'i's endangered forest birds

Nearly two-thirds of native Hawaiian forest birds are listed under the Endangered Species Act, which turns 50 this year. The Act touts a 99 percent record of success! Some Hawaiian species have recovered and are no longer endangered, such as the nene (Hawaiian goose) and the 'io (Hawaiian hawk). But as the "extinction capital of the world," Hawai'i's rare species face many challenges: In 2021, nine species were declared extinct (one plant and eight birds).

Endangered species can be saved through smart applications of science, funding, innovation, political will and collaborative partnership. It also takes relationship, or *pilina*, a core element of Hawaiian cultural practice. In a powerful demonstration of *pilina*, more than 2,000 students and their teachers championed a resolution this year asking legislators to designate

August 8, 2023, as a day to celebrate and *mālama* (care for) Hawaiian honeycreepers.

Events across the islands brought people together to learn about these



The endangered 'Akiapōlā'au is found only on Hawai'i Island. © Eric VanderWerf

increasingly rare native species. Many people have never seen these birds, which are now found almost exclusively in remote areas such as our native forest preserves. However, it is still possible to establish *pilina* with animals and plants that are

rare or even extinct. Establishing relationships with the natural world is essential in generating support for conservation projects that will help birds and other endangered species survive.

Several native birds are facing extinction in the next one to 10 years due to avian malaria spread by invasive mosquitoes. As temperatures have warmed, mosquitoes have moved upslope into formerly safe havens in forest preserves. TNC is working with partners to reduce mosquito populations using a suppression technique used around the world to combat human health issues. This project uses applied science, partnership and community engagement to give these endangered native birds a fighting chance at survival.

Learn more at nature.org/HawaiiPalmyra.



An 'iliahi (sandalwood) seedling heralds forest recovery at Kona Hema Preserve on Hawai'i Island. © Ryan De Seixas

Restoring an 'Iliahi (sandalwood) forest

TNC's Kona Hema Preserve on Hawai'i Island protects 8,000 acres (nearly 10 times the size of New York City's Central Park) of vibrant, ancient koa-'ōhi'a forest. Endangered species such as honeycreepers, the Hawaiian hoary bat, dragonflies and moths thrive here, sipping nectar and pollinating native trees and plants. Kāhuli (native land snails) are returning, indicating the ecosystem is healthy. Despite our successful restoration efforts, no 'iliahi, or sandalwood (*Santalum paniculatum*), have sprouted in the last 30 years. Thanks to generous donor support, we are now planting hundreds of sandalwood trees. Kona Hema is ideally suited for 'iliahi, with a high altitude, their preferred habitat, and decades of protection and fencing providing a receptive environment.

To grow an 'iliahi orchard, our team identified eight healthy parent trees and began establishing a seed bank. Next, we partnered with nurseries to grow seedlings, then identified locations for outplanting. We also began removing rats, which eat sandalwood seeds and seedlings. We've now begun planting the 'iliahi orchards and the seedlings are thriving.

Bringing back an 'iliahi forest is a generational investment that will leave a cultural and ecological legacy benefitting generations to come.

Celebrating the Year of the Kāhuli

Kāhuli (land snails) are an essential part of a healthy ecosystem and are known as the voice of the forest in Hawaiian culture. Hawai'i's governor declared 2023 the Year of the Kāhuli to bring awareness to these critically endangered mollusks. Kāhuli are thriving in Kona Hema thanks to decades of careful management, including increasing populations of endangered plants like the hāhā (*Cyanea stictophylla*); the kāhuli help the hāhā thrive by eating fungus off their leaves.



Rare native snail on hāhā plant at Kona Hema Preserve © Chris Balzotti/TNC

NATURE HAWAII & PALMYRA

Leading with Heart

John and Fran von Schlegell are connected to the land through properties in Hawai'i and Oregon. Their Oregon ranch provides stream restoration and forest management opportunities.

In Hawai'i, Fran and John look mauka, upland. Visiting TNC's Kona Hema Preserve, they saw a chance to enhance mauka ecosystems by



von Schlegell personal photo

returning the almost extinct native 'iliahi (sandalwood) trees to the landscape.

"Investing in a full restoration project may not be a cost-effective solution. However, sometimes you must lead with your heart," say Fran and John. "We wanted to help re-establish these trees because of their special place in the native forest and contribution to watersheds."

For Fran and John, it's the people in Hawai'i, TNC and the community that give them hope, which is why they are helping to return 'iliahi to the forest.

'Iliahi trees were part of a complex native forest supporting other species like birds and insects, along with capturing moisture from mists, clouds and rain.

Lori Admiral, Director of Philanthropy, reflects, "We are fortunate to have donors like Fran and John, who see the potential for supporting the health of the forest and communities into the future."