

## Saving Native Hawaiian Forest Birds Is In All Of Our Hands

### What is a forest bird?

Most forest birds are smaller than chickens, seabirds or geese, usually just a few inches from the tips of the tail to the bill. Most nest, rest and feed in shrubs and trees. Many are brightly colored and have unique songs.

## What makes them special?

The ancestors of today's Hawaiian forest birds arrived many thousands of years ago by accident, maybe caught up in storms while flying. To survive, they adapted what they ate and over time, even their beaks changed to take advantage of different foods. Without many predators, different species developed, sometimes living in just one area of one island. All of the birds celebrated in the **Makahiki o Nā Manu Nahele** are endemic to the Hawaiian Islands, found here and nowhere else in the world. They are irreplaceable.

## What's happening to them, why are they so rare?

Hawaiian forest birds once lived all the way down to the sea. Mosquitoes spread diseases between birds, so when they were accidentally brought to Hawai'i, the birds could only survive where the mosquitoes could not reach them, high in the mountains. Cats, mongooses and rats eat eggs and kill adult birds. Deer, goats, sheep and pigs destroy forest bird habitats. Hawai'i once had over 84 different species of forest birds. Today only 26 survive, and several may go extinct in just a few years. How can you help?

#### Keep cats indoors!

- Make sure mosquitoes cannot breed in standing water around your home or school.
- Teach each other about our native forest birds.
- Create and fly a flock of origami Hawaiian forest birds to help raise awareness!

# Why do forest birds have different looks and calls?

Forest birds can see colors so bright feathers and patterns help them recognize other birds that may be either friends, mates or competitors. Calls and songs also communicate these things in the forest. Different bill shapes allow each species to eat something different from others.

## What do they do for us?

Honeycreepers that specialize in eating nectar pollinate native flowering trees and shrubs. Seed-eating forest birds help spread seeds. Insect-eating birds control insects and recycle nutrients. Most of them use lichens and mosses for building nests. Their feeding and nesting work helps forests be more productive and healthy, making more oxygen and storing more fresh water – things all creatures need, including people! Hawaiian forest birds are important in Hawaiian *mo* 'oleo, mele, oli, hula. They have long been considered *kinolau*, and some '*amaukua*.

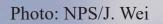


Students across Hawai'i are asked to create one origami of a native Hawaiian forest bird from their island for the **Makahiki o Nā Manu Nahele**, to inspire each community to learn about and care for our precious forest gems!

## How should my 'io origami look?

'*Io* are big, up to 18" from tail-tip to beak. There are two different color phases, but the birds don't change from one season to the next. One is dark brown all over, the other is dark brown above but with a buff-white belly with dark streaking, feet and legs are yellowish. When flying they fan out their tail and wings, and they often hold their wings in a "V"shape.

More on *'io*: https://dlnr.hawaii.gov/wildlife/birds/io/





## **'Io** (Buteo solitarius)

'*Io* are unique to Hawai'i Island, they are endemic. Bones found in lava tubes tell us they may have once lived in wooded areas on Oah'u and Kaua'i. They soar over trees and through forest canopies, looking for smaller birds, insects and even  $n\bar{e}n\bar{e}$  goslings. Since humans brought rodents, they have begun to hunt them as well. They must nest in trees, with both parents attending up to two eggs, although only one chick usually survives. Their forest habitats have shrunk and because they are top-predators, poisons such as those used for rats can accumulate in the hawk's body. '*Io* are found from sea level up to 8,500 feet and can fly over such large areas its difficult to know how big their populations are. They are considered endangered.