



Aloha Educators, gather your flocks!

2024 has been designated as Makahiki o Nā Manu Nahele, the Year of the Forest Bird in Hawai‘i

The Hawai‘i Division of Forestry and Wildlife has assembled resources and is sponsoring activities throughout the year. One of many ways to get involved is the

Nā Manu Nahele Origami Project.

Grade school students across the islands are encouraged to learn about these precious species and join us in creating forest bird origami. We hope to “fly” these student creations publicly on each island, then before the close of the year, move them on to Oah‘u for a display representing birds and students from across the state. Materials and origami skills would best match students in third or higher grades. Materials include concepts of :

- observational skills of animals, plants and habitats, as well as topics around
- conservation, preventing extinction, and
- cultural connections.



Two ways for your students to participate in Nā Manu Nahele Origami Project:

1. <https://dlnr.hawaii.gov/dofaw/manu/> is the Hawai‘i Division of Forestry and Wildlife portal for a range of information, curriculum and activities we are creating for the Makahiki o Nā Manu Nahele. Navigate to the “swag & activities” button: <https://dlnr.hawaii.gov/dofaw/manu/#activities>

In the **Origami Project** folder you’ll see a list of bird information sheets by island. Download one of each species sheet, *from your island, and distribute just one species to each student in your classroom.* Focusing only on the native bird species found on your island, even if they are hard to find, will be more relevant for your students. Each sheet gives information about their particular bird, but it doesn’t give instructions to make an origami of it, that’s up to their imagination!

2. Contact your island’s DOFAW staff to schedule a classroom presentation about the birds from us or a partner:

Kaua‘i: julia@kauaiforestbirds.org

O‘ahu: pua.m.heimuli.researcher@hawaii.gov

Maui: jeff.w.bagshaw@hawaii.gov

Hawai‘i Island:

We’ll come with a brief presentation about the birds and can supply these species information sheets, but not all our staff are practiced in the art of origami! Creating the origami is up to you and your students. On-line videos can provide inspiration for young artists to adapt techniques to resemble our special bird species.



Saving Native Hawaiian Forest Birds Is In All Of Our Hands

Hawai'i was once a land ruled by birds. They filled all ecological niches. Instead of large grazing mammals, 5-foot high flightless geese roamed, trimming the grasses and shrublands. The only predators to the rainbow of bird species were other birds such as eagles, osprey, hawks, even an owl with legs long enough to wade while fishing.



At least 84 species of birds lived in forested areas, eating insects, pollinating and spreading seeds. Extinction of these incredible birds - all only found in the Hawaiian Islands, began with the first arrival of people, but has accelerated in the last 200 years. **Today, only 26 species of native Hawaiian forest birds remain.** Several could go extinct in just a few years. Hawai'i is home to more critically endangered bird species than any other part of the United States.

Most birds we see on a daily basis such as mynahs, sparrows, pigeons, cardinals, are all introduced, non-native. They are not unique, not endangered. While students may not have seen the rare native forest birds on their island, we hope they will be inspired to learn more, teach others and raise awareness of native Hawaiian forest birds by creating the origami.

There are many videos on-line showing how to create flying origami birds - but none showing native Hawaiian forest birds. It's up to you and your students to create the magic, but these may help get you started:

<https://www.youtube.com/watch?v=zW8DkZ11fbo>

<https://www.youtube.com/watch?v=S1b8QVRtpUU>
(good for shorter beaks)

<https://www.youtube.com/watch?v=B-McWwfkSlA>

<https://www.youtube.com/watch?v=gn2iLmwvZPk>
(good for longer beaks)



Submitting your class “flocks” to “fly:”

1. Origami should be in flying position.

Attach a minimum 24” white cotton thread or fishing line to the mid-point of the back of each bird.

2. Origami can be single-sheet (traditional), modular or composite.

Coloring to make the origami bird look as close as possible to the natural bird's coloring is totally acceptable. *Strict adherence to traditional origami techniques is not necessary.*

3. However, students are asked to make their origami resemble the natural bird as closely as possible. If they want to personalize it, they can write their name on an inside fold which is not visible. A class photo of students with their creations in hand would be a great way to preserve the event before they send their origami out into the world. *Student submissions cannot be returned.*

4. Contact your island's DOFAW staff (see above) to arrange delivery or collection of your class “flock.” Public display venues and dates for each island will be announced soon. *Only origami representing native Hawaiian forest birds will be displayed.* Our goal is to collect all island flocks for an all-island public display in Honolulu, before Christmas of 2024.