## Mini-Lesson #5: The Immigrant Song

## **Overview of Outcomes**

The verbal presentation for this lesson will emphasize that **native** species arrived in the Hawaiian Islands by their own means (e.g. hitchhiked, blown off course, floated with oceanic currents). The classroom will divide into groups, and each group will be given a photograph and information about a **native** organism in Hawaii. Together, they will come up with a story for how that animal got to the Hawaiian Islands, and the group will collectively present story in front of their classmates (to engage younger students, teachers could instruct groups to "act out" their story). This activity activates their creative processing skills by encouraging students to think critically about the physical characteristics of the animal, specifically features that would assist them in colonizing new territories.

## **Materials**

- 1. Photo resources with species information (http://kauaiforestbirds.org/wp-content/uploads/2019/11/lesson\_5\_materials\_1-3.pdf)
- 2. Paper for writing stories

## **Activity Directions**

- 1) Teacher will give a 5-10 minute presentation on the arrival of species in Hawaii, both natural and human-facilitated (for HS level, terminology such as **vector** and **pathway** for species introductions could be emphasized). Important talking points will be optimal conditions for establishment success, characteristics of species that make them successful colonizers, and temporal scales of establishment (rapid vs. gradual colonizers).
- 2) Classes will be split into groups, with each group given a photograph of an organism that has become established in the Hawaiian Islands and corresponding information about its life history, biology, and geographic range. Students will be prompted to think critically about the characteristics of the organism, with specific regards for its potential as a colonizer. (~10 minutes)
- 3) After discussion with their groups, students will present their organisms to the class, along with their theories on how that organism arrived and became established in the islands.
- 4) Teachers will give a summary presentation with our current understanding of how these species arrived in Hawaii. The diversity of the species chosen for this lesson will demonstrate the variety of introduction pathways that facilitate species introductions.