



Activity #3

Rain Forest Species Presentations

● ● ● In Advance *Preparing for Class Presentations*

- Using the species cards they created in Activity #2, have students prepare for a two- to three-minute in-class presentation using the Student Page “Presentation Preparation” (p. 44). Each student should also write down two questions they think other students should be able to answer after listening to the presentation, as well as the answers to those questions.
- Use colored markers to draw a rain forest scene on two long strips of newsprint taped together—long enough to cover the longest section of open wall that you have available in your classroom. Your scene doesn’t need to be artistic, but it does need to show the distinct sections of the rain forest structure: canopy, subcanopy, understory, and ground cover or forest floor. See “Hawaiian Rain Forest: General Structure and Composition” (p. 43) for an explanatory diagram. Students will place species cards on this representation to show where species fit in the rain forest.
- Prepare for Activity #4: “Rain Forest Trivia” if you wish to use it as an assessment tool after the presentations.

● ● ● Class Periods One and Two *Rain Forest Species Presentations*

Materials & Setup

- Newsprint rain forest representation (see “In Advance,” above)
- Masking tape for posting the newsprint
- Scotch tape for posting species cards on the newsprint rain forest representation

For each student

- Student Page “Presentation Preparation” (p. 44)

Instructions

- 1) Have students do two- to three-minute species presentations. Monitor their times, and give them signals when they have 30 seconds left. Make it clear that these presentations must not exceed three minutes. Sometimes we only have a limited amount of time to convey information, so we need to learn to speak clearly and succinctly.

Do the presentations in the following order:

- 1) Plants: Canopy and subcanopy first, then other plants
 - 2) Invertebrates
 - 3) Birds
- 2) Prior to each presentation, the student should give you his or her two questions. Monitor the presentations to make sure students cover the answers to these questions during their presentations.



- 3) At the end of each presentation, have the student tape his or her species card to the large rain forest drawing in the part of the rain forest where it is most likely to be found.

Journal Ideas

- Was it easy or difficult to keep your presentation to two or three minutes? Describe another situation in which it was important for you to keep your communication brief and to-the-point.

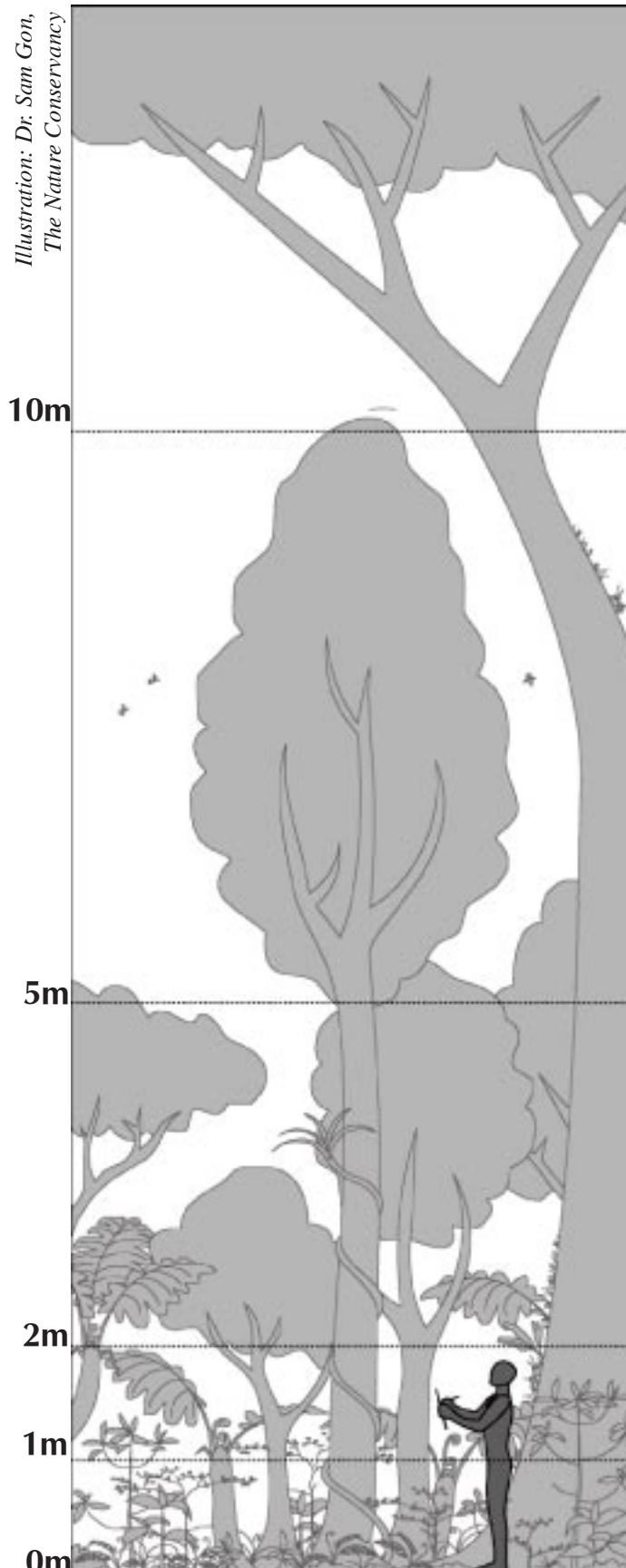
Assessment Tools

- In-class presentations
- Leave about ten minutes at the end of each class period to give a quiz using the questions about the day's presentations. Have students write down their responses and hand in their quizzes. Use the student question and answer sheets to grade the quizzes.



Hawaiian Rain Forest: General Structure & Composition

Illustration: Dr. Sam Gon,
The Nature Conservancy



Canopy

Height above five meters (16 feet) This layer includes the majority of trees, primarily consisting of *Acacia koa* and *Metrosideros polymorpha*. The height of the main canopy layer is usually under ten meters (33 feet). In some places, taller trees emerge above the prevailing canopy height.

Epiphytes and Climbing Plants

Epiphytes are present in all layers, increasing in cover and diversity closer to the ground. Epiphytes include mosses and liverworts, lichens, a variety of ferns, and flowering plants. Vines and climbing plants are most abundant in lower layers, but may extend to the canopy.

Subcanopy Trees and Shrubs

Height, two to five meters (6.5-16 feet)
In this layer, large tree ferns, shrubs, and saplings of canopy trees are present.

Understory

Height, one to two meters (three to 6.5 feet)
Typically, present here are tree ferns, shrubs, and saplings of subcanopy and canopy trees.

Groundcover or Forest Floor

Height, to one meter (to three feet)
Here are found small ferns, small shrubs, herbs, sedges and grasses, mosses and liverworts, and seedlings from all layers.



Presentation Preparation

In class, you will make a two- to three-minute presentation about your species, using the information you gathered as you did research for the species card. Your presentation may be no longer than three minutes, so plan carefully.

As you plan your presentation, think of two important things you want your classmates to learn from your presentation. Write these two things in question-and-answer format. You will hand these in to your teacher before you make your presentation.

In addition to these two points, consider topics such as the following in planning your presentation:

- Where does this species fit in the structure of the rain forest? (Is it a canopy species, subcanopy species, understory species, or ground cover/forest floor species? Is it an epiphyte or climbing species?)
- Is it a native species? (Indigenous? Endemic?) Is it a Polynesian introduction, or an alien species more recently introduced?
- Is it rare? Endangered? Why?
- What are its basic characteristics?
- How is it related to other species in the rain forest?
- Is/was it used or significant in Hawaiian culture? If so, how? (Many of the native plant species cards contain notes about traditional significance. You may research other uses of these plants, specific details or examples of their use, or stories, songs, or chants that mention these plants.)
- Is it still used today?
- Is there current research being done on this species? If so, what are scientists trying to learn?