



Rain Forest Species Cards

Species card instructions

Based on your research, fill in your blank species card using the following suggestions and questions as guidance. The answers to all of these questions are not readily available for every species, so work with the information you can find.

Species type and names

These appear on your species assignment card. Include common, Latin, and Hawaiian names, where appropriate.

Status

Is this an endemic or indigenous species? Where else in the world is this species found? Is it common, rare, threatened, or endangered? Why? Is it threatened by alien species? If so, how?

Description and characteristics

What does the species look like? How does it behave? What could you tell others about this species that would help them identify it?

Where in the rain forest?

Where does it fit in the structure of the rain forest? If it's a plant, is it a canopy species? Subcanopy? Understory? Ground cover or forest floor? Epiphyte, vine, or climbing shrub? If it's an invertebrate or bird, where would you be most likely to find it?

Rain forest relationships

How does this species interact with other rain forest species? What is its habitat?

Think about it...

A thought-provoking question about this species

Did you know?

A fun fact about this species (This could be a native Hawaiian cultural use, a unique characteristic, or something else that interesting.)

Sources of information

Citations for the information source(s) you used in creating this species card

Species image

An image of the plant or animal that you draw, colorize, or photocopy



A Beginning List of Resources for Research

Available through your teacher

Hawai‘i Audubon Society, *Hawaii’s Birds*, 5th ed., Hawai‘i Audubon Society, 1997.

Medeiros, Arthur C., and Lloyd L. Loope, *Rare Animals and Plants of Haleakalā National Park*, Hawai‘i Natural History Association, Hawai‘i National Park, 1994.

Moanalua Garden Foundation, *Forest Treasures* (CD ROM), 2000.

Stone, Charles P., and Linda W. Pratt, *Hawai‘i’s Plants and Animals; Biological Sketches of Hawaii Volcanoes National Park*, Hawai‘i Natural History Association, National Park Service, and University of Hawai‘i Cooperative National Park Resources Study Unit, Hawai‘i National Park, 1994.

Websites

Bishop Museum Natural Sciences Department at <www.hbs.bishopmuseum.org>. Click on Natural Sciences Department under the Research and Collections icon.

College of Tropical Agriculture and Human Resources at <www.ctahr.hawaii.edu>. Click on “forests” under “environment,” or the “ornamentals and flowers” subsection.

Hawai‘i Biological Survey at <www.hbs.bishopmuseum.org/hbsl.html>.

Hawaiian Ecosystems at Risk at <www.hear.org>.
Contains links to many other informative websites

Native Hawaiian Plant Society at <www.philipt.com/nhps>.

The Nature Conservancy at <www.tnc.org/hawaii>.

University of Hawai‘i Botany Department, “Hawaiian Native Plants” at <www.botany.hawaii.edu/faculty/carr/natives.htm>.

Includes photos of many native Hawaiian plants

U.S. Fish and Wildlife Service, Pacific Islands Ecoregion, “Hawaiian Endangered Species” at <pacificislands.fws.gov/wesa/endspindex/html>.

Also, try doing Internet searches through a search engine, using the common or Latin name of your species.



Check the library or friends and family for these additional resources
Abbott, Isabella Aiona, *Lā'au Hawai'i: Traditional Hawaiian Uses of Plants*, Bishop Museum Press, Honolulu, 1992.

Hadfield, Michael G., "Extinction in Hawaiian Achatinelline Snails," in E. Alison Kay (ed.), *A Natural History of the Hawaiian Islands; Selected Readings II*, University of Hawai'i Press, Honolulu, 1994, pp. 320-334.

Howarth, Francis G., and William P. Mull, *Hawaiian Insects and Their Kin*, University of Hawai'i Press, 1992.

Krauss, Beatrice H., *Native Plants Used as Medicine in Hawai'i*, Harold L. Lyon Arboretum, Honolulu, 1991.

Polhemus, Dan and Adam Asquith, *Hawaiian Damselflies: A Field Identification Guide*, Bishop Museum Press, Honolulu, 1996.

Pratt, H. Douglas, *A Pocket Guide to Hawai'i's Trees and Shrubs*, Mutual Publishing, Honolulu, 1998.

Wagner, Warren Lambert, and S. H. Sohmer, *Manual of the Flowering Plants of Hawai'i*, University of Hawai'i Press, Honolulu, 1999.



Sample Species Card

‘Ōpe‘ape‘a or Hawaiian hoary bat (*Lasiurus cinereus semotus*)
Order Chiroptera, Family Vespertilionidae

Status

- Endemic subspecies to the Hawaiian Islands (Other members of this species are found in temperate areas of North and South America, and several island groups including the Galapagos archipelago.)
- Hawaiian hoary bat populations were probably never very large, and there are now approximately a few thousand left. They are less common on Maui than on Kaua‘i and Hawai‘i.

Description and characteristics

- This small reddish-gray bat weighs just over half an ounce.
- A nocturnal animal, the bat hunts at night and roosts during the day.
- It uses high-pitched cries and sonar to locate its food—flying insects.

Where in the rain forest?

- It clings to tree branches or rocks to roost upside down during the daytime.

Rain forest relationships

- It feeds on flying insects.
- It can be found in native ‘ōhi‘a and koa forests. It has also adapted to human-altered landscapes, sometimes roosting in nonnative macadamia and eucalyptus trees.

Think about it...

One hundred years ago, there were proposals to introduce nonnative bat species to the Hawaiian Islands to help keep insect pests in check. If they’d been successfully introduced, what effects might these nonnative species have had on the native Hawaiian bat?

Did you know?

The Hawaiian name, ‘ōpe‘ape‘a, may come from the Hawaiian word *pe‘a* which means “cross-shaped” or “sail-shaped.”

Sources of information

Medeiros, Arthur C., and Lloyd L. Loope, *Rare Animals and Plants of Haleakalā National Park*. Hawai‘i Natural History Association, Hawai‘i National Park, Hawai‘i, 1994, pp. 3-5.



Illustration: Nanci Sidasas



Blank Species Card

Species type

Species name (common and scientific)

Status

Description and characteristics

Where in the rain forest?

Rain forest relationships

Think about it...

Did you know?