

Unit: 'Ōhi'a Love  
Lesson 1

Grade 3

**Concept**

Students will be able to compare and contrast texts by different authors on the same topic.

**Na Honau Maui Ola #3**

Respect for integrity of one's own cultural knowledge and provide meaningful opportunities to connect among diverse Knowledge systems

**HCPS Benchmarks**

3.RI.2  
3.RI.3  
3.RI.9  
3.RL.3  
3.RL.4  
3.RL.7

**Duration**

Part 1- 30 to 45 minutes  
Part 2- 60 minutes

**Source Materials**

<https://keolamagazine.com/culture/ohia-lehua-legend/>

M. Pukui & S. Elbert.  
Hawaiian Dictionary. (1971)  
Univeristy of Hawaii Press.  
Honolulu, HI

McBribe.L. June 2018. Pele  
Volcano Goddess of Hawaii.  
Hilo, Hawaii. Petroglyph  
Press

**Vocabulary**

Compare

Contrast

Analyze

**Compare and Contrast Mo'olelo**

**Summary**

Students will listen to two mo'olelo about the same topic by two different authors. They will compare and contrast the differences in the two stories based on author interpretation.

**Objectives**

- Students will be able to point out the main points of a the story, by referring to the text and see the message or value of the reading
- Students will develop an understanding for the characters in the story through their emotions
- Students will analyze the two stories for their similarities and differences
- Students will be able to see the literal and non literal terms used in the program
- Students will provide support for their views of the the reading based on illustrations.

**Background**

*Mo'olelo*, or stories, help the reader connect with a concept by making it relatable and interesting. The classic *mo'olelo of 'Ōhi'a, Lehua and Pele* can be used to explain the backstory of the physical appearance of this native tree. It blends cultural knowledge to modern day science. 'Ōhi'a is a crucial plant in our watershed in Hawai'i, so having students gain an understanding and building a relationship with this special tree is a large part of today's conservation efforts.

**Materials**

- Collection of Pictures of Pele, an 'Ōhi'a tree, and Lehua flower
- Printed articles of the two mo'olelo stories (enough for each student)
- Writing journal or blank paper
- Pencil and Colored pencils
- Compare/ Contrast Worksheet

**Teacher Prep**

- Copies of the two texts
- Read texts prior to the in class activity to have familiarity
- Printed out copies of Worksheet
- Pictures ready to share the images of Pele, and 'Ōhi'a tree and a Lehua flower

**Vocabulary**

**Compare-** estimate, or note the similarities or differences between

**Contrast-** the state of being very different from something else

**Analyze-** to examine methodically and in details the structure of something for the purpose of examination.

### Procedure Part 1

1. Gather students on the carpet. Tell them we are going to read a mo'olelo about our native tree 'Ōhi'a. Ask them if they know what a mo'olelo is. Give a definition of what it is.
2. Pass out a copy of the mo'olelo to each student. Either teacher read or students take turns reading the text.
3. After ask students how they feel about the text. Have them think-pair-share, can write ideas in a journal
  - a. What is the main theme of the text, advise them to use examples from the text
  - b. How does the story make you feel?
  - c. Who are the main characters of the text? What emotions do they show in the text? What do you think they look like? What are their physical characteristics that stand out?
4. Show the first image of Pele, what about her picture helps describe her personality from the reading. Do the same with an 'Ōhi'a tree image and Lehua flower.
5. Have students refer back to the text of any literal and non-literal terms used to describe what the characters look like (for example: were Pele's eyes really a fiery red)
6. Have students save their work, and let them know we will continue the next day.

### Part 2

1. Gather students on the carpet again. Tell them we will be reading another mo'olelo about 'Ōhi'a, Pele, and Lehua by a different author.
2. Hand each student a copy of the text, and either teacher read or students take turns reading the story.
3. After, have a class discussion.
  - a. What did you like or dislike about this story? Was the main theme different or the same from the previous reading? Advise them to use in-text references
  - b. Did each character have the same traits from the previous story? Do you think the characters look the same from yesterday or different, if so, how?
4. Have the students break up into pairs. Give each student a compare/contrast worksheet.
5. Students can work in pairs using examples from the text to compare/contrast the two texts
6. With additional time, have students draw an image of each of the main character in the story. Have them write three adjectives to describe the personality or physical appearance of the illustration.

### Closure:

1. Collect all worksheets from the students
2. Ask, why they think there are different versions of the story? Is one wrong? How can be open to different interpretations.
3. Share, that even though Pele "destroys" she also creates. Talk about how she didn't kill, 'Ōhi'a she just made him into another form. And today, 'Ōhi'a is one of the most dominant and important native trees in the forest. It is found in all different locations on all the islands.

### Assessment

- Participation and listening skills displayed of the story read-aloud
- In class discussion involvement

- Completed worksheet
- Adjectives used in illustration

### **Modifications**

- Teacher can work in small groups or individually with struggling students
- Provide them a list of adjective to choose from to describe the character (word bank)

### **Teacher Reflection**

- Was the text level grade appropriate
- Did students develop ideas of the characters well from just the reading or should images be shown before the reading to help with character development
- Did students understand the literal versus non-literal terms in the text

## Unit: 'Ōhi'a Love

### Lesson 2

#### Grade 3

#### Concepts

Students will use the scientific text to understand the water cycle and reflect on the role Hawai'i's native ecosystems have in contributing to the water cycle and crucial part of a watershed.

#### Na Honua Maui Ola #13

Promote respect for how the Hawaiian cultural worldview contributes to diversity and global understanding.

#### HCPS Benchmarks

3.RI.3

3.RI.7

3.RI.10

3.W.3

SC.3.8.2

SC.3.5.1

#### Duration

Part 1- 60 minutes

Part 2- 45 minutes

Part 3-45 minutes

#### Source Material

[www.youtube.thewatercycle.nationalsciencefoundation.com](http://www.youtube.thewatercycle.nationalsciencefoundation.com)

Pukui & Elbert. Hawaiian Dictionary (1971) University Press. Honolulu, HI

F.Branley. Down Comes the Rain (1983) Harper Collins. New York

#### Vocabulary

Evaporation

Condensation

Precipitation

Collection

'Ōhi'a

## 'Ōhi'a in Hawai'i's Cycle

#### Summary

Students will get hands-on experience with the water cycle and the vocabulary that pertains to it. Also, they will understand how Hawai'i's watershed works and the role of 'Ōhi'a in our water cycle.

#### Objective

- Students will understand the process and sequence of the water cycle
- Use visual aids in understanding the water cycle
- Understand informational science texts
- Write a narrative with proper sequence
- Students will define 'Ōhi'a and understand the meaning of the word through a watershed perspective, and cultural view of 'ōhia's role in the cycle of water
- Students will understand the physical aspects of a watershed

#### Background

The water cycle is an amazing process and one that all life depends on for survival. In Hawai'i, the parts of the water cycle are easily witnessed due to the geographical and climate or the land. Students will investigate the cycle and investigate where the water goes. How does it go from clouds, rain then into our faucets. What resources are crucial to obtaining clean drinking water. What traits of our forests help the absorption of water into our watershed?

#### Materials

- Device to watch the youtube clip on watercycle by national science foundation
- Worksheet for water cycle Part 1
- Worksheet for water cycle story Part 2
- Colored pencils
- Large glass bowl, cup of hot water, 2 sheets of saran wrap, small bowl, ice cubes, a few small rocks to fit in the small bowl
- Hawaiian dictionary
- Down Comes the Rain Book
- Close up picture of an 'ōhi'a tree's bark
- Picture of a wet forest 'ōhi'a tree
- Picture of moss growing on an 'ōhi'a tree and other epiphytes (If can bring in a moist bag of moss)
- Hawaiian watercycle worksheet

#### Teacher Prep

- Prep materials for the activity (scissors, colored pencils)
- Have video ready to play
- Have a hot water heater reader for the one cup of hot ready
- 3-4 ice cubes still frozen
- Copies of worksheet for each student
- Have pictures of 'Ōhi'a ready to share with the class
- Have Hawaiian dictionary on hand

## Vocabulary

**Evaporation**- the process of turning from liquid into vapor

**Precipitation**- rain, snow, sleet, or hail that falls to the ground

**Collection**- the action or process of collecting someone or something

**Condensation**-water that collects as droplets on a cold surface when humid air is in contact with it.

## Procedure Part 1

1. Gather students on the front carpet and tell them we are going to do an experiment to witness how the water cycle works. Lay out the big glass bowl, hot water, ice, and 2 sheets of saran wrap.
  - a. Pour the hot water in the bowl, label it ocean, river or lake
  - b. Put a small bowl in the hot water bowl filled with small rocks to represent land
  - c. Quickly cover the big bowl with plastic wrap and label it clouds
  - d. Put ice on top of the plastic wrap and label it cold atmosphere
2. Tell students we are going to let the water cycle experiment do it's magic and will check on it in 10 minutes. Have them return to their seats and hand out a small worksheet that pertains to the short movie we are going to watch
3. Watch the youtube video. On the worksheet, there is an activity that helps with listening for vocabulary. Students will begin a tally of everytime they hear the five main vocabulary words, also they will need to record a defintion based on the video for each word.
4. After the film, have students meet back at the front carper to check on the experiment, allow them to bring the worksheet from the film as a reference
  - a. Have students observe the outside of the bowl, is it wet? Dry? If wet on the sides, tell them this represents precipitation or rain.
  - b. Remove melted ice from top of the plastic wrap; and remove plastic wrap from the top of the bowl, being sure not to spill any melted ice water into the bowl. Observe the plastic wrap (clouds) , is it wet or dry? If wet, why is it wet?
  - c. Remove small bowl from the larger bowl. Observe the rocks wet or dry? If so why?
5. Guide students in the sequence and process of the elements in experiment according to water cycle video and new vocabulary words. Have them use the worksheet as a guide. Assist with any questions. On the worksheet have an example picture of water cycle.
6. Read the Book "Down Came the Rain" while still on the carpet. This book will help clarify any questions on the water cycle in. Collect worksheets for assessment.
7. After the book, ask students a few leading questions for tomorrow's lesson, have them think about these overnight (can assign as homework but not necessary).
  - a. What examples have you witnessed in the water cycle
  - b. How do we, in Hawai'i collect the water we use for our daily use
  - c. What types of living things help collect and store water, what traits do these living things have that make them good at collecting or holding water?

## Procedure Part 2

1. Gather students on the carpet. Re-ask the questions from step #7 from yesterday. Gather their thoughts and ideas and write them down on the board.
2. Teach kids a short “hula” about the water cycle using the Hawaiian vocabulary words for each part.
  - a. Draw on the board or have a premade image on powerpoint or large paper of the water cycle with the hawaiian terms, review it with the students
  - b. Have students stand up and demonstrate the motions to each element in the cycle. Nice music can be played in the background. There is no right or wrong way for the motion, just something that symbolizes the actions.
  - c. Have the students do each movement individually, then combine them for the whole water cycle.
3. Have students return to their seats. Now ask the students if they have ever heard of the word *Watershed*
4. Have them get with a partner, and come up with a short definition, give 1-2 minutes to do this. Have a few students share their definition. Remind them to break up the word to see if this helps them gain understanding
5. As a class look up the meaning of the word using a dictionary, read it out loud and write it up on the board. Have students compare and contrast their definition with the one from the dictionary. Come up with a class voted definition that is appropriate for the word
6. Ask students, where/what is our watershed in Hawai’i? Answer: our native forests
  - a. What plants grow in our native forest that help collect the water. See what plants they say. Can break it into categories such as trees, bushes, vines, ferns.
  - b. Show either a picture or bring out the moss, ask if it looks wet or dry? Ask if they’ve ever seen this in the forest. Then ask where do we see moss growing in the forest? Explain that our forest are like a giant sponge, they capture, and hold water.
  - c. See what students say, then show an image of the ‘ōhi’a tree covered in moss. Share with them that ‘ōhi’a is a dominant tree species in Hawai’i and found on all islands and all kinds of ecosystems.
  - d. Have students observe the picture for a full minute or so, have them record in notes physical traits of the tree, for example, is the tree tall or short, what does the bark look like, what does the leaf look like, can you see the roots, are there other plants living in the tree?
7. Allow the students to pair share their observations, then allow a few to share their observations to the whole group. Write down a few of their observations on the board.
8. Have student’s remain in their pairs and, a have them write the word ‘Ōhi’a on a sheet of paper or journal. Give each group a hawaiian dictionary or online resource to a Hawaiian dictionary. In this activity have them:
  - a. Explain that in Hawaiian culture, a lot of the time names are given based on observations and characteristics of the thing or place and what role they play with their environment. Let them know we will examine the name ‘ōhia, and why it was gifted this name.
  - b. Break the word ‘Ōhi’a up into sections (‘ō, ‘ōhi, hi’a, and ‘ōhi’a)

- c. Look up all the Hawaiian meanings of the individual words
- d. From the definitions found, have them in pairs relate these meanings to our watercycle and watershed.
- e. Can have groups share in a class discussion

### Procedure Part 3

1. Have students return back to their individual seats. Tell them we are now going to write a fun story about a raindrop and it's journey in Hawai'i's water cycle.
2. Give them a copy of the water cycle image on top of the worksheet and with six boxes like a comic strip on the bottom
3. Let them know, now the first box will be for an introduction to their rain drop (give name, personality)
4. Second box the raindrop will be precipitation, falling from the sky. Have students provide dialogue and setting.
5. Third box: the raindrop's adventure in collection, where does it go when it arrives on land or sea
6. The fourth box: evaporation of the rain drop back into the atmosphere
7. The fifth box: condensation
8. The sixth box: back to precipitation
9. Have students illustrate their boxes for homework
10. The next day have them share their comics with a partner.
11. Turn in their comics to teacher

### Assessment

1. Part one vocabulary worksheet
2. In class discussion and pair sharing activities
3. 'Ōhi'a connection activity to watershed and water cycle write-up
4. Short narrative story about the Hawaiian rain drop

### Modifications

1. Verbally repeat and write out the vocabulary word definitions throughout the lessons
2. Provide diagrams and more visual aids throughout the lesson of water cycle and 'ōhi'a connection
3. Teacher work one on one or in small groups with struggling students

### Teacher Reflection

1. Is enough time allotted for each activity
2. Is 'ōhi'a's role in our watershed enough or do more resources need to be brought in
3. Are students engaged in all aspects of activities

Unit: 'Ōhi'a Love  
Lesson 3

Grade 3

Concepts

Students will learn about the connections of living organisms in Hawai'i's forest through research and giving a spoken report of their findings

Na Honua Maui Ola #14

Plan for meaningful learner outcomes that foster relationships and interactions among people, time, space, places and natural elements to enhance one's own culture in a global understanding

HCPS Benchmarks

3.RL.1  
3.RI.5  
3.W.8  
3.W.7  
3.W.6  
3.SL.4

Duration

Part 1- 60 minutes  
Part 2-60 minutes  
Part 3-45 minutes

Source Materials

[www.threemountainalliance.org](http://www.threemountainalliance.org)

J. Williams. And the Birds Appeared. (1988) University of Hawaii Press, Honolulu, HI  
IPAD

Vocabulary

Relationship

Plant

Animal

Adaptation

Forest Friends Work Together

Summary

Students will participate in an inter-active game that demonstrates how native plants and animals depend on each other for survival. With the use of technology students will research an assigned native species. They will work in groups to present a short research project to the class using powerpoint that has both images and text.

Objectives

- Students will be able to find answers referring to a text
- Students will use text feature search tools to locate information
- Students will use technology to collect, organize and produce writing and work with others
- Student will complete a short research topic that fosters the care of forest ecosystems

Background

When native species first arrived to Hawai'i that had to adapt and change from their original home sites to better suit their habitat in Hawai'i. This transformed these living beings into Hawai'i endemic species, found nowhere else in the world. Plants and animals that successfully made the journey to Hawai'i and adapted to the habitat learned to work together to make life easier. Plants became dependent on specialized birds that were their main pollinators. These species coadapted together and learned how to thrive in this special landscape.

Materials

- Native species mask from [www.threemountainalliance.org](http://www.threemountainalliance.org)
- Ball of yarn
- IPAD
- Power Point
- Writing journal or paper and pencils
- Scissors
- Colored pencils

Vocabulary

**Relationship-** the way in which two or more concepts, objects, or people are connected, or the state of being connected

**Plant-** a living organism such as a tree, shrubs, herbs, grasses, ferns, and mosses, typically growing in a permanent site, absorbing water and inorganic materials through its roots.

**Animal-** a living organism which feeds on organic matter, typically have specialized sense organs, nervous system and able to respond rapidly to stimuli

**Adaptation-** to make suitable to or fit a specific use or situation

**Endemic-** a species being unique to a defined geographic location

**Native-** A person, plant or animal that arrived to a specific geographic location without the help of humans



1. Read the story ***And the Birds Appeared*** by Julie Stewart Williams
2. Have students at their desk, hand each child a paper mask at random to color in and cut out. Have them read the back of the mask to learn about which native species their mask represents.
3. Once all are done with their mask gather students on the front carpet. Take a tally of how many are animals and how many are plants. Write it on the board. Ask students
  - a. What is our definition of an animal, share the dictionary definition
  - b. What is our definition of a plant, share the dictionary definition
  - c. What is our definition of an element, share dictionary definition
  - d. How are they different and the same
4. After having students split up into two groups, try to have equal amounts of animals, elements, and plants in each group. Each group gets into a circle shape
5. Start with an animal species, have them hold a ball of yarn, this person then throws the ball of yarn to something the student thinks this native species depends on for survival. When the second person gets the yarn have them hold a piece of the yarn then throw the ball to someone else they might depend on for survival (for example, the i'iwi can throw to the lehua, lehua can throw to the water).
6. End the game when each child is holding a piece of the string. The middle of the circle should look like a crazy web. Inform the students that this is how our forest is connected and how each element of the forest depends on each other in some way or another.
7. While students are holding their strings, cut a few with scissors. This represents a species going extinct. Ask the students what species are affected if you take the element of the cut string out of the environment. Did your string feel loose?
8. End the class by having everyone come back to the front rug. Give them a piece of scratch paper and have them write one thing they learned or any thoughts they had about the string web activity. Have them drop it in a hat or box up front anonymously.
9. The teacher can pick a note from the hat and read it to the class, have students raise their hands if they agree with the statement

### **Procedure Part 2**

1. Break students into groups of 3 or 4. Have the names of 5-6 native animal species on a piece of paper ('i'iwi, 'apapane, 'amakihi, kahuli, 'ākepa, happy face spider)
2. Have one student from each group come and select a species name from a hat. Whatever species these students get will be their topic for their short research topic.
3. Using IPADs and other technology resources have students search for information about their species for a short research project
4. To give the students some guidelines have them look at these key questions (Can provide a worksheet with research guidelines and key topics to help direct research with leading questions).
  - a. In what habitat or what environment is the animal found?
  - b. What is the food source, does it have any close and codependent relationship with another native plant species, and if so how?

- c. What does the animal look like? Are there any physical traits that the animal has adapted for the environment they live in?
  - d. Are these species common, rare, threatened and why?
  - e. Any cultural connections in Hawai'i to these animals in mo'olelo or 'olelo no'eau?
5. Students can divide the work in whatever fashion works best for them. Allow them the rest of the time period to research, record and take direct notes from their sources. Check in with all students to make sure all are working on parts of the project.
- \*Remind them that not all information is accurate online, give a brief discussion about what a credible online resource looks like.
- \*\*Talk about plagiarism, discuss how we can put information into their own words.
- \*\*\*Assist students if needed on using search tools

### Procedure Part 3

1. Have students create a Powerpoint presentation based on their research and answers from the five questions mentioned in step #4 from Procedure part 2.
2. The presentation must be at least 6 slides long including a picture of the animal, a picture of its main food source, and a reference page of the sources they used for information (does not have to be a formal source cited page) just a list.
3. Have the last 20 minutes of the class or possibly the next day (an hours time) for each group to come up and present a short presentation of their slideshow, consisting of about five minutes each. All group members must talk at some point during the presentation.
4. Give time for a quick Q&A session after each presentation from peers

### Assessment

- Participation in forest web activity
- Participation in class discussions or sharing activities
- Progress in research
- PowerPoint presentation

### Modifications

- Teacher can assist with struggling students or individuals
- Teacher can demonstrate the use of technology or provide specific links to websites
- Peers can be paired together to help each other overcome any weaknesses

### Teacher Reflection

- Are students engaged in activities
  - Is an IPAD an appropriate tool for this activity
- Did students get enough exposure to their animal and its connection to a native plant

Unit: 'Ōhi'a Love  
Lesson 4

Grade 2-4

**Concept**

Students will create a narrative story based on the understanding of the threats to our native forest due to invasive species

**Na Honua Maui Ola #16**

Cultivate a strong sense of *kuleana* to one's past, present and future to enhance meaningful purpose to bring about joy to one's self, family and communities

**Benchmarks**

3.W.3

Write a narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear events.

**ROD Connection**

- 1.Appreciation for 'Ōhi'a
- 2.Leran about ways to prevent ROD spread in Hawai'i

**Duration:**

45-60 minutes

**Source Material**

[www.rapidohiadeath.org](http://www.rapidohiadeath.org).

**Vocabulary**

Narrative

Environment

Rapid 'Ōhi'a Death

Threat

Transport

## My 'Ōhi'a Mo'olelo

**Summary**

Students will create a narrative about 'Ōhi'a and the threats the species is currently facing with ROD and other environmental issues. The narrative can be about an imagined experience using effective technique, descriptive details and clear event sequences.

**Objectives**

- Students will learn the structure of a narrative writing peice
- Students will gain an understanding of 'Ōhi'a, and how they are connected to it
- Students will excersize their creative skills in storytelling and ways to problem solve through language.

**Materials**

- 2 Picture of a healthy 'Ōhi'a tree
- ROD brochure
- Pencil and writing journal or paper
- Whiteboard and Expo markers

**Making Connections**

Many cultural stories or mo'olelo in Hawai'i mention 'Ōhi'a. This species plays not only a vital role to Hawaiian culture but also to all living beings on Hawai'i as a main tree for watershed collection. Hawaiians used to word *wai* for wealth. 'Ōhi'a is a tree that collects the water from the rains and clouds. How can we make this connection to the students so they grow to appreciate the island's beloved 'Ōhi'a tree. By storytelling, the imagination can play and develop a friendship between the author and characters. With 'Ōhi'a under threat due to ROD and other environmental issues, it is important to students to develop these relationships with our native speicies and gain a sense of responsibility.

**Teacher Prep**

- On board write out the following words:
  - Main character
  - Setting
  - Problem
  - Event
  - Event
  - Solution
- Picture ready to be displayed of:
  - Healthy 'Ōhi'a tree
  - ROD infected 'Ōhi'a tree

**Prerequisites for students**

Knowledge of what an 'Ōhi'a tree is

Some prior background in storytelling (verbal or visual)

Reading of the Rapid 'Ōhi'a Death brochure

## Vocabulary

**Narrative-** a story is a report of connected events, real or imaginary, presented in the sequence of written or spoken words.

**Environment-** all the physical surroundings on Earth are called the environment. Includes everything living or nonliving.

**Rapid Ōhi'a Death (ROD)-** a disease killing 'ōhi'a, Hawai'i's most abundant native tree. ROD disease is caused by two newly introduced fungi.

**Threat-** a person or thing likely to cause damage or danger

**Ungulate-** Four-legged hooved animal (cow, sheep, pig, goat)

**Transport-** the act of moving someone or something or the process of moving

## Procedure Introduction

1. Read the Rapid 'Ōhi'a Death brochure as a class, after ask them:
  - a. Who is the main character in the text ( can be a plant)?
  - b. Where does the main character live?
  - c. What is the problem with the main character?
  - d. What steps can be done to fix the problem (maybe multiple)?
  - e. How is the problem resolved or not resolved?
2. Gather students and display an image of a healthy 'Ōhi'a write on the board:  
The main character, Setting, Problem, Event 1, Event 2, Solution
3. Ask, who / what is this a picture of? Use the answers that the students give and write it under the heading on the board Main Character
4. Now ask the students where the pic of the image is? (Answers could be Hawai'i, in a forest). Write an answer they gave under the heading Setting
5. Tell students that the 'ōhi'a is dealing with a problem. Let them try come up with a problem a 'ōhi'a tree may be facing, have them refer to the reading. Allow students to talk with a partner to discuss for about 1-2 minutes.
6. Allow 2-4 groups share their problem, use this time to gauge the students understanding of ROD and/or threats to our native forests.
7. Under the heading Problem write: This 'ōhi'a tree has been infected with the ROD fungus which will kill it soon in my backyard. I don't want to spread the fungus to the other 'ōhi'a trees in my neighbor's yard, I must figure out a way to not spread the disease to other trees.
8. Have students share with their partner what I can do in order to stop the spread of the fungus to other trees.
9. Write their brainstorming ideas on the board for all to see
10. Under the Event header write: I decide to cut down the tree, but my boots, tools, and gear get covered in the sawdust from the sick tree.
11. Under the second Event header write: Now the weather forecast is predicting high winds, these strong winds can spread the infected sawdust to neighboring 'ōhi'a trees that are healthy but due to the high winds might get broken branches and become more susceptible to fungus infection.
12. Move onto the next header, Solution. Allow 1-2 minutes for kids to brainstorm with their partner a solution to the problem.

13. Have students share and write down their answers on the board
14. Under the solution header write: I will cut down the tree with the help of my neighbors, clean all my gear and tools with 70% rubbing alcohol solution then use the wood for an imu that evening to celebrate my mom's birthday.

### Body of Lesson

1. Now show the students or pass students an image of another healthy 'Ōhi'a tree
2. Hand out the worksheet titled My 'Ōhi'a Mo'olelo. Do not have them fill it in yet, but keep on hand
3. Then have a class discussion asking the following questions under each heading. Students can write their thoughts as the discussion is happening. Write a few of the answers on the board.
  - Main character
    - o What are their names
    - o Are there any sub characters
  - Setting?
    - o What do you see in the background
    - o Describe the setting using creative words
    - o What geography related terms can be used to explain the location
  - Problem
    - o What potential risks does this tree face
    - o ROD, Ungulates, fire, drought, floods, people
  - Event 1
    - o What helps keep this tree alive and not dying due to multiple risk factors
    - o Who visits the tree?
    - o Native species and/or non-native species to Hawai'i
    - o People
    - o Clouds, water, wind
  - Event 2
    - o What type of problem could this tree have
    - o What risks does the tree face that humans cause
    - o What risks does the tree face out of human control
  - Solution
    - o How could humans or nature help keep this tree alive and healthy
    - o How can nature help to keep this tree healthy
4. Allow the students to brainstorm and write out their ideas after the discussion on the worksheet
5. Have them share their graphic organizer with a peer. Have students complete a checklist when reading their peer's story using the 'Ōhi'a Mo'olelo Edits worksheet.
  - o Checking if the story makes sense
  - o Follows a sequence
  - o Has a main character, setting, problem, two main events, and a solution
  - o Grammar/ Spelling

- o Good use of describing words
- 5. After the Peer review allow students to create their story, should be no longer than 1 page
- 6. Collect and use as an assesment

#### Assesment and Evaluation

1. Students will complete the essay
2. Participation in class discussions
3. Peer review

#### Modification

1. The teacher can work one on one or in small groups with those needing extra assistance or clarification.
2. Students can depict illustrations that tell the story, Imagine a comic strip theme
3. Students can verbally tell their narrative to the teacher.

#### Teacher Evaluation:

1. Are students aware of the threats to Hawai'i's native forest
2. Do they feel a need to help or inspiration to make a change
3. Can students create a comprehensive narrative story based on the proper sequence

#### Extended Activity

1. Students can plant 'Ōhi'a seeds to care for in the class, have them journal about the experience during and after.

**Unit: 'Ōhi'a Love**  
**Lesson 5**

**Grade Level 3**

**Concept**

Students will understand the threats native species face in our modern world. They will write a persuasive letter to a local politician to voice their opinion about the subject

**Duration:**

Part 1- 45 minutes

Part 2- guest speaker (60 minutes)

Part 3- 60 minutes

**Na Honua Maui Ola #5**

Provide a safe haven to support physical, mental, social, emotional, and spiritual health of the community

**HCPS Benchmarks**

3.RI.6

3.RL.6

3.W.1

3.L.6

**Source Materials**

[www.threemountainalliance.org](http://www.threemountainalliance.org)

[www.rapidohiadeath.org](http://www.rapidohiadeath.org)

[www.merrian-webster.com](http://www.merrian-webster.com)

L.Matsumoto. Beyond 'Ōhi'a Valley (1996). Lehua Inc, Hawaii

**Vocabulary**

Ungulate

Invasive

Deforestation

Ecosystems

Endangered

**A Voice For My Home**

**Summary**

Students will learn about the threats facing our current native ecosystems through fiction and scientific articles. They will also learn about the efforts by organizations that are helping to rebuild and preserve Hawai'i's natural resources. Through this understanding, students will form an opinion on environmental issues in Hawai'i. They will write a persuasive essay to their local government official about their thoughts on protecting Hawai'i's native forests.

**Objectives**

- Students will form an opinion different or the same from the author of the text
- Students will follow the sequence in writing a persuasive essay
- Students will connect with the cultural and native ecosystem threats facing Hawai'i today

**Background**

Hawaii has more endangered species than any other state in the U.S.. Due to its unique geographical location and isolation many native species in Hawai'i are endemic, meaning they are found nowhere else in the world but here. These native species are a huge part of Hawaiian culture and help define a society in the past, present and hopefully for the future. With effective preservation or rebuilding of these precious natural resources, Hawai'i's native species will stand a chance against the growing number of threats they face every day.

**Materials**

- Beyond 'Ōhi'a Valley Book
- Map/brochure of the DLNR protected lands, watershed protected lands and national park lands
- Laptop or computer for each student
- Writing journal and pencil/pen
- Persuasive writing guided worksheet
- Slide or visual showing amount numerical amount of endangered species in Hawai'i
- Picture/Slides of a pig, cow, sheep, mongoose, rat, feral cat, pasture, cityscape, mosquito
- Teacher written example of a persuasive essay on native forests

**Teacher Prep**

- Research local organizations doing conservation work in the area. Contact them for resources, plan a service learning field trip or an in-class visit to have students learn about their efforts
- Copies of Persuasive writing guided worksheet
- Have endangered species visual display ready
- Have slides of invasive species ready to display

## Vocabulary

**Ungulate-** a hoofed animal

**Invasive-** plants, disease or animal that spreads fast and harmfully

**Deforestation-** the act of clearing a wide area of trees

**Ecosystems-** a biological community of interacting organisms and their physical environments

**Endangered-** a plant or animal in serious risk of extinction, being gone forever

## Procedure Part 1

1. Gather students in the front carpet area. Read to them the story “Beyond ‘Ōhi‘a Valley”
2. After the story write the five vocabulary words on the board, ask students to go back to seats and get out a journal and write the words down the vocabulary words.
3. Provide in depth definitions to each word with specific examples from the story. See if they can also provide examples from the story that help support these definitions
4. Share with students the slide about endangered species in Hawai‘i. Ask them :
  - a. what they feel when they see these numbers?
  - b. Ask what types of behaviors do they think might have led to this high number. Have them think-pair-share.
5. Tell them that although this information is not very happy, there are many people and places that are still healthy native forests.
6. Show them the slide of the protected conservation lands in Hawai‘i Island
7. Get their input on places they can think of in their community that are still a healthy ecosystem. Ask:
  - a. Why are these areas still pristine, how are they protected
  - b. What types of threats, according to the story are these native species facing
  - c. What do these places have in common or based on the map, how are they different?
8. Ask them what types of jobs are there at these places
9. Show an image of the brochures/maps/slides/pictures of these pristine ecosystems.
10. Share with them that in the next class we will be having a guest speaker come in to talk about these protected places and their job. Assign each student to come up with two questions or comments they may have for this person regarding conservation.

## Procedure Part 2

1. Gather students in the front of the room. Remind them this is the day of the Guest speaker. Have them share their questions for the speaker with a partner.
2. Have students help in organizing a gift for the speaker (lei, gift basket, card)
3. When speaker arrives have students greet the person. Have each student introduce and share something about themselves.
4. Let Speaker present, provide any additional support as needed
5. At the end allow students to ask a few of their questions
6. In closing, having students present the *makana* to the speaker
7. When the speaker leaves ask the students a question for them to write in their journals. Give them about 10 minutes to free-write.



- a. Question: Do you think Hawai'i's native forest should be protected from all the threats they face in today's world? If so why or why not, please give at least 2 examples.

### Procedure Part 3

1. Hand out a worksheet titled How to write a persuasive essay. Go over the sequence of the worksheet.
  - a. At the top Label the Topic
  - b. Part 1- Introduction to your opinion on topic and who you are, why do you care?
  - c. Part 2-Give one reason why you believe in your opinion and a reason to support it
  - d. Part 3- Give another reason why you believe in your opinion and a reason to support it
  - e. Part 4- Closing argument and restatement of opinion
2. As a class, work together on the worksheet, provide examples based on the book and guest speaker
3. Hand out a copy of your persuasive essay on Native forest protection. Read it out loud as a class. Go over the sequence and have students highlight or underline the key points of the essay
4. Tell students they are going to write their own essay about native ecosystem protection. Their essay will be mailed to a local politician so be sure to write about something they are passionate about and want to see change or be protected. Have students write out a rough draft either on paper or a computer. Remind them to use the proper sequence, stay on point, give good support examples and write clearly.
5. Collect all essays, review and hand back to students to edits
6. Have students complete a final draft. Collect and review, mail them in to a local government official

### Assessment

1. Listening skills and reference to the story in class discussions and pair sharing
2. Sequence and development of persuasive writing, with strong topic opinion
3. Finished Persuasive writing piece with proper spelling and grammar

### Modifications

- Students can use pictures to help with inspiration
- Students can audio record their persuasive argument about the native forest
- Teacher can work one on one or in small groups with struggling students

### Teacher Reflection

- Are students linking the story and speaker presentation to their essay argument
- Is the guest speaker connecting with will students and making it relevant to them
- Do students have enough background information to form an opinion

### Extended Activity

- Plan a field trip to a protected land area where service learning can occur
- Have another guest speaker come in to the class about the same topic, have students compare and contrast all the different jobs in the conservation field

## Images for Lesson 1: Compare and Contrast



**Pele**



**‘Ōhi‘a**



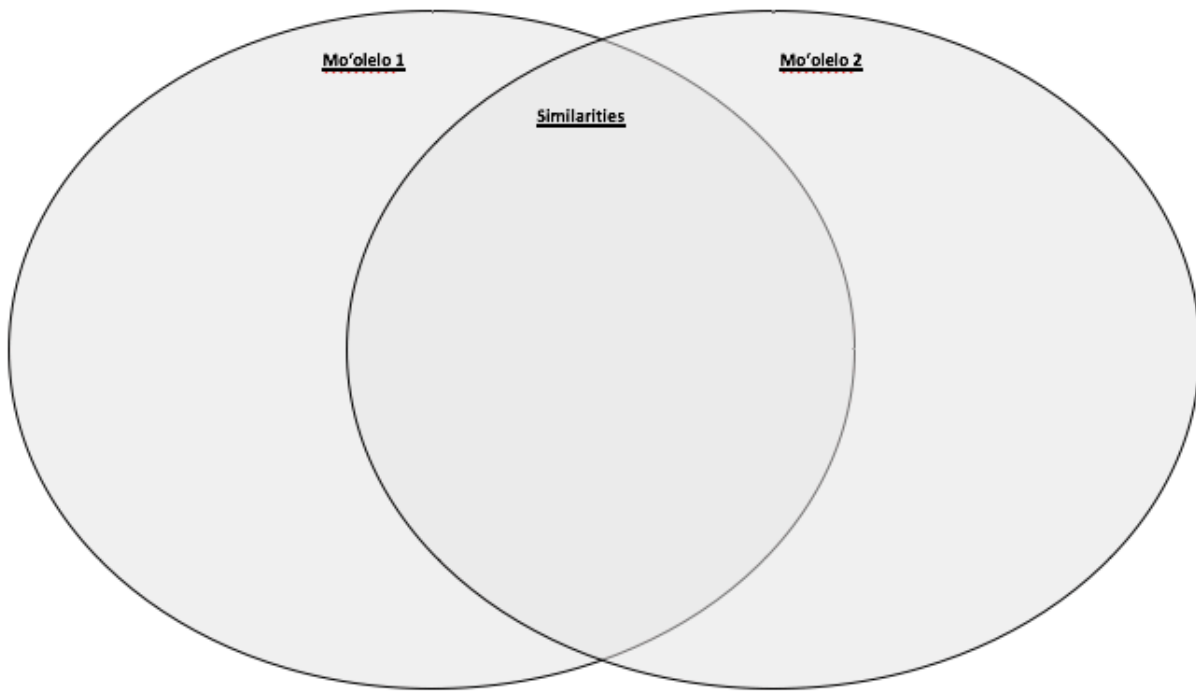
**Lehua**

## Worksheet for Lesson 1: Compare and Contrast

Name \_\_\_\_\_

### Compare and Contrast

Make a list of the differences in each story in the circle, then make a list of the similarities where in the circles intersect



## Lesson 1: Compare and Contrast Worksheet for Character Development

Name\_\_\_\_\_

Name of Character_____	Name of Character_____	Name of Character_____
<p>Describe your illustratin in 3 words</p> <p>1. _____ 2. _____ 3. _____</p>	<p>Describe your illustratin in 3 words</p> <p>1. _____ 2. _____ 3. _____</p>	<p>Describe your illustratin in 3 words</p> <p>1. _____ 2. _____ 3. _____</p>

## Water Cycle Vocabulary

Can you define these terms:

Evaporation: \_\_\_\_\_

\_\_\_\_\_

Condensation: \_\_\_\_\_

\_\_\_\_\_

Precipitation; \_\_\_\_\_

\_\_\_\_\_

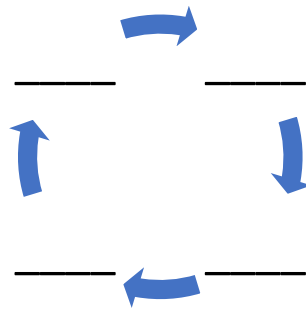
Collection \_\_\_\_\_

\_\_\_\_\_

Make a tally mark for every time you hear these words!

Evaporation	Condensation	Precipitation	Collection

Label the parts of the water cycle



Name \_\_\_\_\_

**What does 'Ōhi'a mean???**

Look up the Hawaiian meaning of the name and then break it apart!

'Ōhi'a- \_\_\_\_\_

'Ō	'Ōhi	Hī'a	I'a

Look up alternate meanings with or without the okina or kahako

O -

la-

'O -

lā-

Ō -

Hia-

Ohi-

**1. How does the name 'Ōhi'a describe the tree's role in the forest?**


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**2. How does 'Ōhi'a help our water cycle?**


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**3. How does the physical traits of 'Ōhi'a support the flow of water?**


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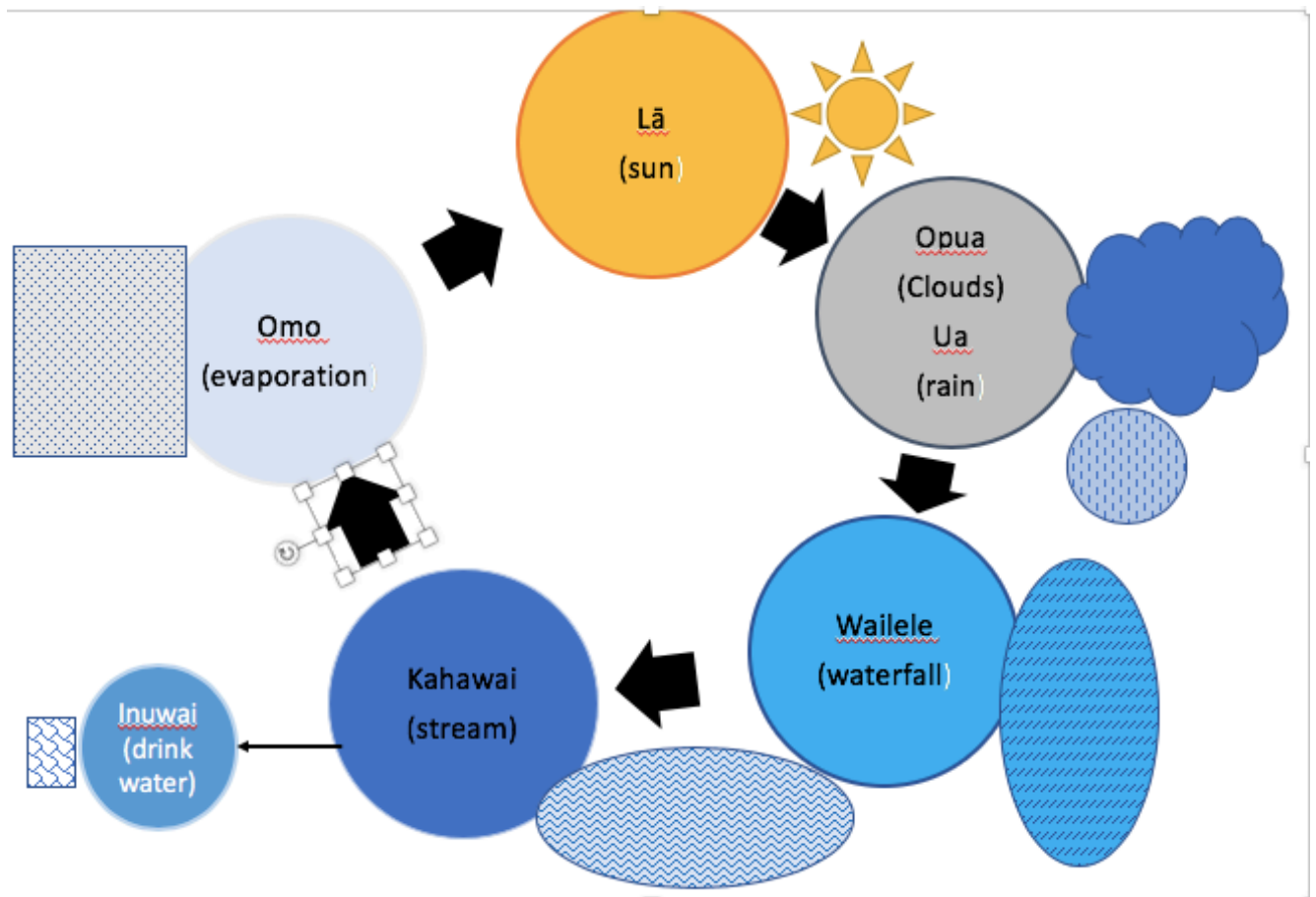
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## Lesson 2: 'Ōhi'a in Hawai'i's Cycle

### Image of water cycle with Hawaiian vocabulary





**Name:** \_\_\_\_\_

### **My Raindrop's Excellent Adventure!**

Hi I'm a raindrop and I'm ready to go on an adventure! Can you help lead the way? I can change my form if needed and just remember the sky is the limit! Fill in my trip details below.

1. What is my name, what do I look like, and where does my adventure start?
  
  
  
  
  
  
  
  
  
  
2. I think I'm falling from the sky?!? Am I falling fast or slow? Am I alone as I fall or with friends? Is it hot or cold? What does the day look like outside?
  
  
  
  
  
  
  
  
  
  
3. I finally landed! Where am I? What do my surroundings look like?
  
  
  
  
  
  
  
  
  
  
4. It's getting hot in here! I feel my body changing...what's going on? I think I may be flying. Please describe what I'm going through?!?
  
  
  
  
  
  
  
  
  
  
5. I know where, I am! This is my start of my adventure? What does my cloud look like?
  
  
  
  
  
  
  
  
  
  
6. Looks, like a storm is brewing....what will my next adventure be?

## My Raindrop's Excellent Adventure

1	2	3
4	5	6

Name \_\_\_\_\_

## My 'Ōhi'a Mo'olelo Outline

Main Character Paragraph 1	Setting Paragraph 1	Problem Paragraph 2	First try to solve the problem and outcome Paragraph 3	Second try to solve the problem Paragraph 4	Solution Paragraph 5

Name \_\_\_\_\_

Edited by \_\_\_\_\_

**‘Ōhi’a Mo’olelo Edits**

Check the box that marks the your view on your partner’s paper. Please add notes of encouragment and ways to improve!

Question	Yes	Kind of	No	Notes
Is the main character and setting detailed and form a clear image of the character?				
Does the problem make sense and fit the situation?				
Do the solutions to the problem fit with the story?				
Is the solution conneted to the events?				
Was spelling, grammar and punctuation appropriately used				

Name \_\_\_\_\_

**My Way or the Highway!** A guide for writing a persuasive essay

TOPIC-

\_\_\_\_\_

PURPOSE-

\_\_\_\_\_

Who are you?

\_\_\_\_\_

State your opinion clearly:

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**USE LINKING WORDS AND PHRASES TO CONNECT YOUR INTRODUCTION TO YOUR OPINIONS**  
**SUCH AS:** Because, therefore, since, for example, and for instance.

Reason 1 for your opinion	Reason 2 for your opinion

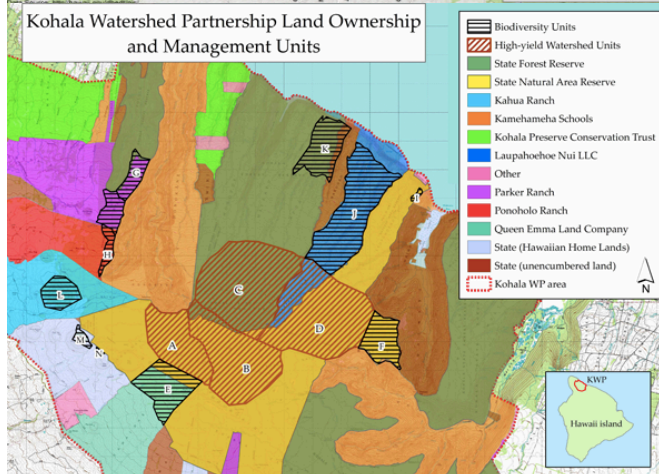
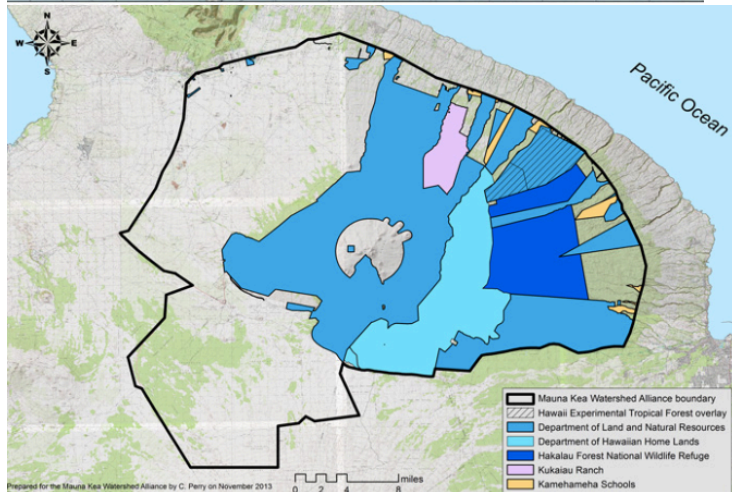
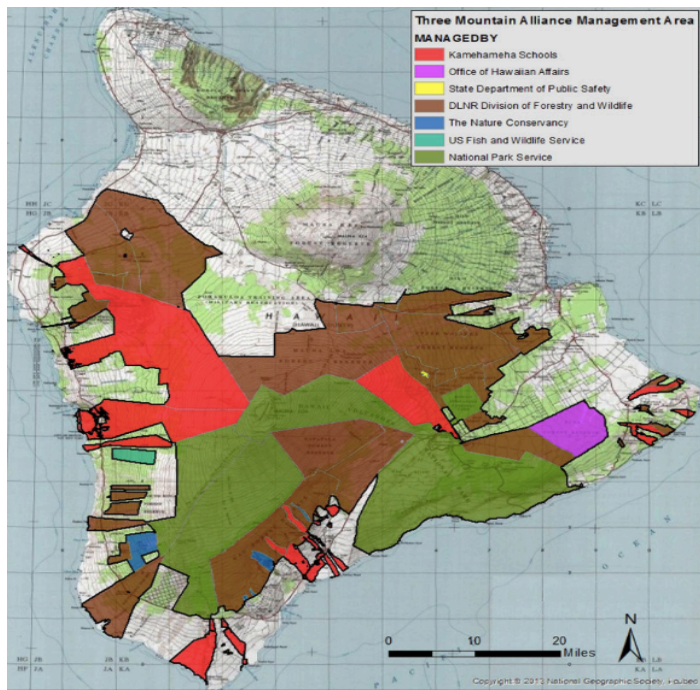
Concluding Statement (restate opinion and purpose).

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# MAPS OF CONSERVATION LANDS ON HAWAI'I



To Whom it may concern,

My name is Lauren DeMent, and I work with students from Kamehameha Schools in the third grade. This year we are focusing on Hawai'i's native rainforest. In teaching this subject, I realized that protecting our native species is very important to our culture and way of life here on an island. I believe that more people should understand how our forests work and how they help us.

One reason I believe protecting native species is so crucial is because of the water and life these species bring. From our rain forest, water is collected and put down into the aquifer. This supplies all of our drinking water for the entire state. If we lose the forest, we lose our source of water. Water is needed to grow food, drinking, and countless other things.

Also, our native species were here before humans. When people came to Hawai'i, their culture and way of life evolved based on the plants existing here. The Hawaiian culture is linked directly to these native species. They are found in mo'olelo, oli, and hula. If the native species are lost, a huge part of Hawaiian culture is gone also. As a person living in Hawaii, this would be devastating.

I would like to conclude, by stating that saving Hawai'i's native species is an important service to the land and people living here. The rainforests offer so much to us humans, in culture and providing us with the needs to survive. By learning about the forest, many can gain an appreciation for all that it has to offer and why we should protect it.