

Educational Activities for the
City and County of Honolulu's
SUMMER FUN PROGRAM 2024

EXPLORING URBAN AND COMMUNITY FORESTS IN HAWAI'I



PRESENTED BY Clever Keiki Hawai'i and Mālama Learning Center for:



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Exploring Urban and Community Forestry in Hawai'i

General Information & Introduction

Welcome to a lesson on Urban and Community Forestry! In this session, we'll explore the fascinating world of trees in our towns and cities and the vital role they play in our urban environments. Before we dive in, let's ensure everyone understands how to navigate through our age-appropriate materials.

First you'll find links embedded within the content. These links serve as gateways to additional resources, videos, and activities that complement the lesson. Click on them to delve deeper into specific topics or to gain a more visual understanding of key concepts. Feel free to explore these links at your own pace.

Secondly, we've tailored the content to be engaging and accessible for students in grades first through six. Concepts are presented in a clear and concise manner, with age-appropriate language and examples to ensure comprehension and retention. From short videos to group activities every element of the lesson is designed to captivate young minds and spark curiosity about urban forestry.

By following these directions and actively engaging with the materials provided, you'll embark on an enlightening journey through the urban forest, gaining valuable knowledge about the importance of trees in our cities and the ways in which we can contribute to their preservation and sustainability. Each site will be provided a hard copy of the Urban and Community Forestry lesson plan. This urban and community forestry lesson packet is a comprehensive set of resources to educate students about the significance of trees in urban settings. The packet includes a class outline featuring outdoor and indoor activities, tree trivia, true/false questions, a variety of resources, vocabulary lists, a fun Kanu (Plant) Bingo game, printable activities, and comprehensive printable packets to enhance learning.

To help aid in this topic of Urban and Community Forestry in Hawai'i, we have an in person course geared towards students fourth through sixth grade. The immersive class dives right into the what , where and why urban and community forestry is such a vital aspect of our environment here in Hawai'i. Students will be equipped with tools to monitor heat in different areas, plant a ma'o seed and learn about the endemic tree species found in Hawai'i's tree top canopy system and in our cities.

Urban and Community Forestry Index:

- Class Outline - with Clever Keiki Hawaii
- Introduction
- Kanu (Plant) Bingo
- Indoor/Outdoor Activities
- Printable Activities
 - Printable Packets
 - Resources
 - Tree Trivia
 - True False
 - Vocabulary

This lesson packet is intended to cultivate curiosity and gain knowledge of the importance of urban and community forestry and its benefits for our islands. Most importantly, it encourages keiki to have fun, learn new things, and spark a deeper knowledge of our islands & communities we call home. If you have any questions or need help with additional resources please contact Jessica Bates of Clever Keiki Hawaii @ cleverkeikihawaii@gmail.com and/or info@malamalearningcenter.org.

Kanu (Plant) Bingo

ALL GRADES

Kanu (plant) bingo is an engaging and interactive game that not only fosters enjoyment but also facilitates learning about various plant species. By actively searching for and identifying different plants during the game, children develop familiarity with plant names, characteristics, and habitats. This increased plant recognition can translate into a deeper appreciation for the natural world and an enhanced ability to advocate for urban forestry initiatives. Through kanu bingo, children cultivate essential skills for understanding and preserving green spaces, ultimately empowering them to become informed and proactive advocates for sustainable urban environments.

Instructors:

Preparation: Distribute the kanu bingo cards to each participant. If there are more than 25 kids, encourage them to pair up. Ensure that each card has a unique combination of plant images arranged randomly. Gameplay: Explain the rules of bingo to the participants: The goal is to mark off five squares in a row, either horizontally, vertically, or diagonally, before anyone else. The game caller will randomly draw and announce plant names. Participants should mark off the corresponding plant images on their bingo cards if they have them.

Types of Bingo:

Regular Bingo: The first participant to mark off five squares in a row calls out "Bingo!" and wins the round.

Four Corners: The first participant to mark off all four corners of their card calls out "Four Corners!" and wins the round.

X Marks the Spot: The first participant to mark off an X shape on their card, connecting the corners, calls out "X Marks the Spot!" and wins the round.

Blackout: The goal is for participants to mark off every square on their card. The first participant to achieve this calls out "Blackout!" and wins the round.

Time Limit: Set a time limit for each round based on the number of participants and the pace of the game. Typically, 10-15 minutes per round is sufficient.

Prizes: Consider offering small prizes for the winners of each round to make the game more exciting and rewarding for the participants.

Fair Play: Encourage participants to play fair and refrain from covering squares that haven't been called out yet.

Remind everyone that the primary goal is to have fun and learn about plants in an interactive way! By following these instructions, the instructors can effectively organize and run the plant bingo game for grade schoolers, ensuring an enjoyable and educational experience for all participants.

WORDS:

Banana tree	Plumeria	Bougainvillea	Areca palm
Ohia	Bee	Bird of paradise	Aloe vera
Hibiscus	Mango tree	Breadfruit tree	Fern
Roots	Coconut Palms	Taro	Palm tree
Pineapple	Orchid	Ginger	Ti plant

Kanu (Plant) Bingo Cards

20 FREE Downloads for Kanu Cards

<https://bingocard.my.canva.site/kanu1>

<https://bingocard.my.canva.site/kanu2>

<https://bingocard.my.canva.site/kanu3>

<https://bingocard.my.canva.site/kanu4>

<https://bingocard.my.canva.site/kanu5>

<https://bingocard.my.canva.site/kanu6>

<https://bingocard.my.canva.site/kanu7>

<https://bingocard.my.canva.site/kanu8>

<https://bingocard.my.canva.site/kanu9>

<https://bingocard.my.canva.site/kanu10>

<https://bingocard.my.canva.site/kanu11>

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<https://bingocard.my.canva.site/kanu15>

<https://bingocard.my.canva.site/kanu16>

<https://bingocard.my.canva.site/kanu17>

<https://bingocard.my.canva.site/kanu18>

<https://bingocard.my.canva.site/kanu19>

<https://bingocard.my.canva.site/kanu20>

Urban Forestry Indoor/Outdoor Activities

ALL AGES/GRADES

Here are three engaging activities to teach children about urban forestry and plants.

These activities not only educate children about the importance of urban forestry and plants but also encourage them to develop a deeper appreciation for nature and become active stewards of the environment.

These activities also integrate KILO: to watch, observe, examine or forecast. (Kilo also references a Hawaiian observation approach during which practitioners focus on the less obvious, more subtle things in their environment).

Therefore by providing opportunities for active engagement, interaction, and application of knowledge, we empower children to discover, imagine, and learn about urban forestry and plants in a meaningful way.

1. Tree Identification Walk: Take the children on a nature walk around the school or local park. Encourage them to observe the different shapes, sizes, and features of the trees and try to identify them using the guides. Discuss their findings and observations as a group.

2. Nature Journaling: Provide each child with a blank journal or sketchbook and encourage them to document their observations of plants, trees, and other natural elements in their surroundings. Encourage each student to draw pictures, write descriptions, or collect leaves and flowers to paste into their journals. Discuss their findings and observations as a group.

[Nature Journaling Resources – blog](#) — ideas, lesson plans, printable worksheets, books, links, and other ideas about nature journaling and outdoor education in Hawai'i by local artis Kate Righter @ <https://katerighter.com/>

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Urban Forestry Indoor/Outdoor Activities

ALL AGES/GRADES

3. **Leaf Rubbing Art:** Collect a variety of leaves from different tree species and provide the children with paper and crayons. Encourage them to place the leaves under the paper and gently rub the crayon over them to create leaf imprints. Discuss the different shapes, textures, and patterns of the leaves and the trees they came from. Discuss their findings and observations as a group.

Leaf art links for ideas:

<https://youtu.be/-2frUcgQ8UQ>

[Autumn Leaf Crafts and Activities for Kids - Woodland Trust](#)

Heat Absorption Experiment

Instructions:

1. Fill one jar with sand, one with water, and one with dirt.
2. Place a thermometer in each jar.
3. Put the jars in a sunny area and measure the temperature.
4. Move the jars to a shaded area and measure the temperature.
5. Record your observations in the table below.

Hypothesis:

What do you think will happen to the temperatures of the jars in the sun and in the shade?

Observations:

Temperature in the Sun (°C)

DIRT	
WATER	
SAND	

Temperature in the Shade (°C)

DIRT	
WATER	
SAND	

Conclusion:

What did you learn from this experiment? Did the results match your hypothesis?

Urban & Community Forestry Video Resource & Printable Activities

ALL AGES/GRADES

The below information provides links & offers valuable resources for teaching children about urban forestry across various grade levels. Incorporating these links into your curriculum can enhance students' understanding of the importance of trees in urban environments. For younger students, the interactive content and colorful visuals will engage their curiosity and foster an appreciation for nature in cities. Older students can explore the links to deepen their knowledge of environmental sustainability and the role of trees in mitigating climate change. Encourage students to explore the resources independently or incorporate them into classroom activities to spark discussions about conservation and community involvement. By integrating these links into your lessons, you can empower students to become stewards of their local environment and inspire a lifelong love for nature.

Urban forestry explained :

https://youtu.be/E3QOre0CZeY?si=Z_kleOGumJHCfI9

Fast Break : Urban Forest

https://youtu.be/jAnIzROgU9s?si=wIFei_2pXurYY0cU

Miacademy : Forest

[Tell me about Forest](#)

<https://youtu.be/ST6-4YWDPEs?feature=shared>

Coconut Rhinoceros Beetle :

[Coconut Rhinoceros Beetle — Oahu Invasive Species Committee \(OISC\)](#)

Palm Pest IN Hawai'i :

https://alohaarboret.com/wp-content/uploads/2015/03/Pests-of-Trees-and-Palms-in-HI_handout-6-per-pg.pdf

Hawaii Trees:

[Hawaiian Trees: Native to Hawaii By Location, 52 Type \(Flowering, Evergreen\)](#)

Urban & Community Forestry Video Resource & Printable Activities

ALL AGES/GRADES

Community Forestry Program:

https://www.honolulu.gov/rep/site/dpr/duf_docs/Community_Forestry_Program_K-5_Educational_Activities.pdf

Aloha 'Āina Packet : Ma'o Plant:

📄 Kilo Journal ('Āina Packet #2)_color.pdf

Grade 1st-3rd Video links

To enhance children's understanding of urban forestry, please utilize the provided resource links. These materials offer comprehensive insights into various aspects of urban forestry, including its importance, challenges, and solutions. Integrating these resources into your lesson plans will enrich students' learning experiences and foster a deeper appreciation for the role of trees and green spaces in our urban areas.

Honolulu Theatre for Youth

[The HI Way Season 4: Trees](#)

Sesame Street

<https://youtu.be/Y-O1RR-Pmdc?feature=shared>

Maka The Tree Snail

<https://youtu.be/syYyn9S5MEQ?feature=shared>

Video Resources Grade 4-6th

To enhance children's understanding of urban forestry, please utilize the provided resource links. These materials offer comprehensive insights into various aspects of urban forestry, including its importance, challenges, and solutions. Integrating these resources into your lesson plans will enrich students' learning experiences and foster a deeper appreciation for the role of trees and green spaces in our urban environments.

Videos :

Ted Talk : What Happens When You Cut Down All The City's Trees

<https://youtu.be/zarll9bx6FI?si=Atk7aRGqfF6Y4KaR>

Trees For Honolulu's Future : Heat Index

[Trees for Honolulu's Future | Planting More Trees around Urban Honolulu](#)

Honolulu Theatre for Youth

[The HI Way Season 4: Trees](#)

Birds Eye view :

[Region 5 - State](#)

Info sheet :

[shutterstock_2007593324-scaled.jpg 2,304×2,560 pixels](#)

Word Search 1-3rd Grade

By following these instructions, you can effectively orchestrate the word search activity and enhance students' engagement and comprehension of the lesson material on urban forestry.

1. **Introduction**: Start by explaining to the students that they will be doing a word search activity to reinforce their understanding of key vocabulary words related to the lesson.
2. **Word List**: Provide the list of words they need to find in the word search puzzle. You can either write the words on the board or distribute a printed list to each student.
3. **Instructions**: Explain the rules of the word search:
 - **Students need to find each word in the puzzle.**
 - **Words can be hidden horizontally, vertically, or diagonally, and may be forwards or backward.**
 - **As they find each word, they should circle or highlight it on the puzzle grid.**
 - **Encourage students to work quietly and independently.**
4. **Timing**: Set a time limit for completing the word search based on the complexity of the puzzle and the age group. For younger students, aim for around 10-15 minutes, while older students may have up to 20-30 minutes.
5. **Monitoring**: Walk around the classroom to provide assistance and guidance as needed. Encourage students to ask questions if they're unsure about a word or need help finding it.
6. **Completion**: Once the time is up, instruct students to stop and review their word searches. Ask volunteers to share some of the words they found and their locations in the puzzle.
7. **Discussion**: Lead a brief discussion about the vocabulary words and their meanings, reinforcing their understanding of the concepts introduced in the lesson.
8. **Closure**: Conclude the activity by summarizing the key points learned and emphasizing the importance of the vocabulary words in understanding the topic.

MALAMALOHA
CITIESPLANT
INGKOAISLAN
DOHIALEHUAA
NDMENDEMICL
UCSANDALIFE
ENDANGEREDT
RMAURBANFOR
ESTRYAAONEP
ACEDRCOTTON
TECOSYSTEMN
MBBMCREKOAT
REEAEDESNEY
TOPTREETOPC
ANOPYBIODIV
ERSITYNDEKL
IANPMAOETNC
IIDESNDNLAL
ANAMEECCOMMG
YECOSYSTEMI
NDUSTOOSALO
HADEMTTETSE
DENDEMICURB
ANRO

Directions: Find the following words in the word search puzzle: Malama, Urban forestry, Koa tree, Ohia Lehua, Ecosystem, Tree top canopy, Endangered, Community, Aloha, Planting, Cities, Endemic, Biodiversity, Island, Mao, Hawaiian cotton.

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Tree Trivia Questions 1-3rd Grade

1. How do trees provide food for animals and people?
2. What do trees do to help prevent soil erosion?
3. How do trees help cool down the temperature in cities?
4. What do we call the process by which trees absorb water from the ground and release it into the air?
5. What is the term used when trees are put in cities?
6. What is the name of the state tree of Hawai'i?
7. Name two plants/trees commonly found in Hawai'i with large, colorful flowers?
8. The Hawaiian word for taking care of the land and natural resources?
9. Which tree is known for its ability to grow in lava fields?
10. How do trees in Hawai'i help provide habitat for wildlife?
11. What is the name of the season when trees lose their leaves?
12. Why are trees important in cities?
13. What part of a tree helps it drink water from the ground?
14. What do we call the upper part of a tree where the leaves and branches grow?
15. Why is the treetop canopy important for animals?
16. How do trees help clean the air in cities?
17. Can you name three animals that live in trees?
18. Why is it important to plant trees in cities?
19. What is the name of the hard, outer covering of a tree's trunk?
20. What do trees do to help animals and people breathe better?

Trivia Answers 1-3rd Grade

1. Trees provide food by growing fruits, nuts, and leaves.
2. Trees help keep soil in place with their roots so it doesn't wash away.
3. Trees make cities cooler by giving shade and letting out water vapor.
4. Transpiration. The roots take up the water.
5. When trees are planted in cities, it is called urban forestry.
6. The state tree of Hawai'i is the kukui tree.
7. Hibiscus and plumeria trees have big, colorful flowers.
8. Malama 'āina means taking care of the land in Hawaiian.
9. The 'ōhi'a lehua tree can grow in lava and shows strength.
10. Trees in Hawai'i give homes and food to animals.
11. The season when trees lose their leaves is called fall.
12. Trees give shade, clean the air, and make places look nice.
13. The roots help a tree drink water from the ground.
14. The top part of a tree with leaves and branches is called the canopy.
15. Trees are a place to live and find food for animals.
16. Trees clean the air by taking in dirty air and giving out clean oxygen.
17. Answers may vary.
18. Trees help keep the air clean, make it cooler, and give us shade.
19. The hard, outer covering of a tree's trunk is called bark.
20. Trees help us breathe better by making oxygen.

Tree Trivia Questions 4-6th Grade

1. What is the term for the science and practice of managing trees and green spaces in cities?
2. How do trees in cities help improve air quality?
3. What is the name of the upper layer of foliage formed by the crowns of trees in a forest?
4. Why is the treetop canopy important for urban ecosystems?
5. What term describes plants that are native to a specific geographic area and nowhere else?
6. Can you name an example of an endemic tree species found only in certain regions?
7. What is the term for plants or animals that are not native to an area and can cause harm ?
8. How can invasive species negatively impact urban forests?
9. What can communities do to prevent the spread of invasive species in urban forests?
10. How does urban forestry contribute to community well-being?
11. What are some benefits of green spaces and trees in urban areas for human health?
12. How do trees help reduce the urban heat island effect?
13. What can individuals do to support urban forestry in their communities?
14. How does urban forestry contribute to climate change mitigation and adaptation?
15. Can you name an example of an endemic tree species found only in Hawai'i?
16. What is the name of the tree known as the state tree of Hawai'i?
17. Name a tree commonly found in Hawaii's rainforests?
18. What is the Hawaiian term for taking care of and protecting the land and natural resources?
19. Name a tree species that was introduced to Hawai'i and has become invasive in areas.
20. How do urban forests in Hawai'i contribute to the state's culture and identity?

Tree Trivia Answers: 4-6th Grade

1. Urban forestry.
2. They absorb pollutants like carbon dioxide and release oxygen through photosynthesis.
3. Treetop canopy.
4. It provides habitat for wildlife, regulates temperature, and reduces stormwater runoff.
5. Endemic species.
6. Answers may vary. Example: The giant sequoia trees in California's Sierra Nevada Mountains.
7. Invasive species.
8. They can outcompete native species, disrupt ecosystems, and reduce biodiversity.
9. Conduct regular monitoring, remove invasive species, and plant native species.
10. It enhances property values, reduces energy costs, and provides recreational opportunities.
11. They reduce stress, improve mental well-being, and encourage physical activity.
12. They provide shade, which reduces the temperature of the surrounding area.
13. Plant native trees, participate in tree planting events, and advocate for green space preservation.
14. Trees capture carbon dioxide, and reduce the impacts of extreme weather events.
15. The 'ōhi'a lehua tree (*Metrosideros polymorpha*) is an example of an endemic tree species found only in Hawai'i.
16. The kukui tree (*Aleurites moluccanus*) is the state tree of Hawai'i.
17. The 'ōhi'a and Koa tree are commonly found in Hawaii's rainforests.
18. Mālama 'āina is the Hawaiian term for taking care of and protecting the land and natural resources.
19. Answers may vary. Example: The strawberry guava tree (*Psidium cattleianum*) was introduced to Hawai'i and has become invasive in some areas.
20. Urban forests in Hawai'i provide shade, support biodiversity, and are integral to Hawaiian cultural practices and traditions.

T/F Directions

By following these directions, instructors can engage students in active learning and foster a deeper understanding of the subject matter through collaborative exploration and discussion.

1. Provide each student with a True/False activity sheet containing statements without disclosing that all statements are true.
2. Instruct students to individually evaluate each statement and decide whether they believe it is true or false based on their understanding of the content.
3. Encourage students to think critically and provide reasoning for their choices.
4. After students have completed the activity individually, facilitate a group discussion to review each statement.
5. During the discussion, reveal that all statements are actually true and guide students in understanding why this is the case.
6. Encourage students to reflect on their initial perceptions and discuss any misconceptions or areas of confusion that arose during the activity.
7. Reinforce key concepts and encourage further exploration of the topic as needed.

T/F Activity 1-3rd Grade

1. Trees in cities help us breathe fresh air.
2. Trees are homes for birds and insects.
3. Trees make cities quieter by blocking loud sounds.
4. Trees need water to grow big and strong.
5. Trees make the air clean and healthy to breathe.
6. Planting trees makes the earth healthy.
7. Trees make homes for birds, bugs and butterflies.
8. We need trees to live because they give us oxygen to breathe.
9. Trees improve our health.
10. Planting fruit trees helps people and animals.
11. Trees can get up to 40 feet tall.
12. Some trees have roots above the ground.
13. Coconuts come from a tree.
14. 'Ulu is a fruit tree.
15. Planting trees makes cities have shade.
16. Planting more trees in Hawaii's cities makes them greener and nicer to live in.
17. Hawai'i has special trees, like the ohia tree, that only grow there and help keep the island healthy.
18. Some trees in Hawai'i, like the koa tree, are going away because people are building on lands where they grow and other plants are taking over.
19. Hawaiian trees are important for food, medicine, and stories, and they help make Hawai'i a special place to live.
20. There is a Hawaiian cotton plant, called ma'o.

T/F Activity 4-6th Grade

1. Urban trees provide oxygen for us to breathe.
2. Trees help reduce air pollution by absorbing harmful gas.
3. Trees help keep cities cooler by providing shade and reducing the heat island effect.
4. Planting trees in cities can help reduce flooding by absorbing excess rainwater.
5. Trees can improve your well-being.
6. Trees help reduce noise pollution by absorbing sound waves.
7. Trees help to filter and clean the air.
8. Some trees have medicinal properties and are used in herbal remedies and traditional medicine.
9. Many trees come in many different shapes, sizes, and colors, adding diversity and interest to city landscapes.
10. Trees create green spaces for recreation and promote biodiversity.
11. Caring for urban trees strengthens communities and enhances civic pride.
12. Planting trees supports efforts to combat climate change.
13. Hawai'i needs more Urban tree areas.
14. Many island urban trees are endemic or native species, adding to the unique makeup of the region and supporting local ecosystems.
15. Trees provide habitat and food sources for various birds, insects, and other wildlife, enhancing urban biodiversity.
16. Trees in cities help lower energy costs by shading buildings.
17. Proper management and preservation of island urban trees are essential for maintaining the resilience of island communities against climate change.
18. There is a Hawaiian cotton plant
19. Urban forestry improves Hawaii's environment and life quality by planting trees in cities.
20. Some native trees like the koa are decreasing in Hawai'i due to habitat loss.
21. Protecting Hawaiian trees, like the 'ōhi'a lehua preserves biodiversity and culture.
22. The niu, or coconut tree, is used for food, water, oil, and materials.
23. The 'ulu tree, or breadfruit tree, provides a starchy fruit used as a staple food.
24. Koa trees have strong wood prized for making surfboards and canoes.
25. Koa trees face threats like habitat loss and climate change.

Urban Forestry VOCABULARY 1-4th Grade

These definitions aim to provide clear explanations tailored to the understanding level, while maintaining accuracy and relevance to the topic of urban forestry.

1. **Āina**: Āina is a Hawaiian word that means the land, the earth, and everything that grows on it. It's like our big home that we need to take care of and protect.
2. **Aloha**: Aloha is more than just saying hello and goodbye; it's a way of living with love, kindness, and respect for everyone and everything around us. It's about sharing joy and taking care of each other like family.
3. **Biodiversity**: Biodiversity means having lots of different plants and animals living together in one place. It's like having a big family of living things that depend on each other to survive.
4. **Community**: A community is like a big family made up of people who live, work, and play together in the same place. We help each other, learn from each other, and make our community a better place for everyone.
5. **Ecosystem**: An ecosystem is like a big team of plants, animals, and other living things that work together in a special place, like a forest or a pond. They all depend on each other to stay healthy and happy.
6. **Endangered**: When a plant or animal is endangered, it means there are only a few left in the world, and they need our help to survive. We need to be kind and protect endangered plants and animals so they don't disappear forever.
7. **Endemic**: Endemic means something is special and unique to a particular place. It's like having a treasure that you can only find in one special spot.
8. **Environment**: The environment is everything around us, like the air we breathe, the water we drink, and the ground we walk on. It's important to take care of the environment so it stays clean and safe for everyone.

Urban Forestry VOCABULARY 1-4th Grade

9. ****Invasive****: When a plant or animal is invasive, it means it's like a sneaky guest that comes into a new place and takes over. It can crowd out other plants or animals and cause problems for the environment.

10. ****Mālama****: Mālama means taking care of something special, like a garden or a beach. It's about showing respect and love for the things around us and making sure they stay healthy and beautiful.

11. ****Native****: Native plants and animals are like the original residents of a place. They've been living there for a long time and are well-adapted to the environment.

12. ****Treetop Canopy****: The treetop canopy is like a big umbrella made of tree branches and leaves. It's where the tops of the trees meet and form a shady, leafy roof over the forest below.

13. ****Urban Forestry****: Urban forestry is like taking care of a big outdoor home for trees in cities. It's about planting, caring for, and protecting trees so they can stay healthy and happy where people live and play.

Urban Forestry VOCABULARY 4-6th Grade

These definitions aim to provide age-appropriate explanations of key concepts related to ecosystems, environmental stewardship, and cultural values, while fostering an understanding of their significance in everyday life.

Aloha: Aloha is a fundamental Hawaiian value that embodies love, compassion, and harmony. It encompasses mutual respect, kindness, and generosity towards others and the environment, fostering a sense of interconnectedness and unity.

Biodiversity: Biodiversity refers to the variety of living organisms in a particular habitat or ecosystem. It encompasses the richness and abundance of different species, as well as the genetic diversity within those species.

Community: A community refers to a group of individuals who share common interests, values, or experiences and interact with one another within a specific geographic area or social network. Communities can be diverse and inclusive, providing support, collaboration, and a sense of belonging for their members.

Ecosystem: An ecosystem is a complex network of living organisms (plants, animals, and microorganisms) and their physical environment (such as soil, water, and air) interacting as a functional unit. It includes both biotic (living) and abiotic (non-living) components and is characterized by energy flow and nutrient cycling.

Endangered: When a species is endangered, it means it's at risk of becoming extinct, or disappearing from the Earth forever. Factors like habitat loss, pollution, and overhunting can threaten the survival of endangered species, and conservation efforts are needed to protect and preserve them.

Endemic: Endemic species are plants or animals that are found exclusively in a particular geographic area and nowhere else in the world. They are often unique and have evolved distinct traits or adaptations in response to their isolated habitats.

Environment: The environment encompasses the sum total of all external factors and conditions that influence the life, development, and survival of organisms. It includes natural elements like air, water, and soil, as well as human-made components such as buildings, roads, and pollution.

Urban Forestry VOCABULARY 4-6th Grade

Invasive: An invasive species is a non-native organism that spreads rapidly and disrupts the balance of ecosystems. Invasive plants or animals can outcompete native species, reduce biodiversity, and cause ecological harm.

Mālama: Mālama is a Hawaiian value and practice that emphasizes stewardship, responsibility, and caring for the land, environment, and community. It involves actively engaging in sustainable practices and respecting the interconnectedness of all living beings.

Native: Native species are organisms that naturally occur and have evolved in a specific region or habitat. They are adapted to local environmental conditions and play important roles in maintaining ecosystem health and functioning.

Treetop Canopy: The treetop canopy is the upper layer of foliage formed by the crowns of trees in a forest. It serves as a critical habitat for birds, insects, and other wildlife, as well as a key component of the ecosystem's structure and function.

Urban Forestry: Urban forestry is the science and practice of managing trees and green spaces in cities. It involves planting, maintaining, and protecting trees to improve the urban environment, enhance air quality, and promote the well-being of communities.