The Nature Conservancy

NATURE LAB Educator Resources

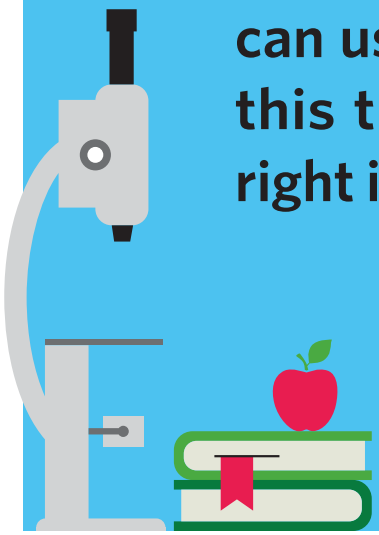
FAMILY TEACHING GUIDE

Protect Land and Water

Standards-based instructional resources for use at home

NATURE LAB
Educator Resources

Nature Lab is intended to share the places, science and conservation stories of The Nature Conservancy with the next generation, with a focus on helping students connect what they see on the screen to actions they can take in their own backyard. Our teaching guides offer educators standards-based instructional resources for classroom use but now you can use our resources at home too! Use this thematic guide to explore nature right inside your home.



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DAY 1 Introduction

Demands on land and water continue to increase, so we must do more, faster.

Globally, only 5% of the natural lands at high risk of development are protected. Demands on land and water continue to increase, so we must do more, faster. We won't survive without clean water and land. We also need healthy, diverse oceans for fishing, working and playing. We have helped protect more than 103 million acres (41.6 million hectares) of land, conserve thousands of river miles and develop more than 100 marine projects. Working with governments, corporations, local partners and you, we can protect more nature between today and 2025 than we have in our history.

DAY 2 Fighting Fire with Fire

? ESSENTIAL QUESTION

Can fire positively impact an ecosystem?

Students will distinguish between a wildfire and a controlled burn, also known as a prescribed fire. They will explore controlled burn scenarios and explain the positive impacts of fire on ecosystems (e.g., reduce hazardous fuels, dispose of logging debris, prepare sites for seeding/planting, improve wildlife habitat, manage competing vegetation, control insects and disease, improve forage for grazing, enhance appearance, improve access, perpetuate fire-dependent species) to compare and contrast how organisms in different ecosystems have adapted to fire.

→ ACTIVITY

WATCH:
Fighting Fire with Fire

“ DISCUSSION

How does fire impact the surrounding community?

Why do fire managers prescribe fire?

How have plants and animals adapted to fire?

What factors must fire managers consider prior to planning and conducting controlled burns?

Identify whether each statement is true or false

- Lightning first became a major source of wildfires in Florida in the 1970s. [false]
- Many Florida organisms expect fire in their environment. [true]
- Fire is not a natural part of an ecosystem. [false]

Review the fire impacts below and create 4 columns on a poster board or piece of paper labeled Humans, Other Animals, Plants, and All Three. Look at the list and identify whether each of the impacts of fire benefits humans, other animals, plants, or all of these. Note responses.

1. Reduce hazardous fuels
2. Dispose of logging debris
3. Prepare sites for seeding/planting
4. Improve wildlife habitat
5. Manage competing vegetation
6. Control insects and disease
7. Improve forage for grazing
8. Enhance appearance
9. Improve access
10. Perpetuate fire-dependent species

Share your findings and reflections with us on social media and help us spread the word!

! TAKE ACTION

Visit the TakeAction site for young people. TakeAction is a campaign that provides resources and projects that benefit young adults, their families and neighbors. You can learn to prepare your **pets** and **horses**—and **yourself!** You can help others through a **community service project**. You can **share our videos** with your friends!

DAY 3 Managing Cattle Populations

? ESSENTIAL QUESTION

How do ranchers and conservationists balance the needs of cattle and wildlife?

We will learn about the necessity of managing the herd size and grazing rights of the cattle in East Africa and how ranchers balance their cattle management with wildlife needs. Overgrazing, water use and habitat degradation by cattle reduces the resources available for the East Africa's wildlife. Wildlife conservation and management has sound economic benefits for ranchers. The challenge for ranchers is to optimize herd size while supporting the needs of wildlife.

→ ACTIVITY

WATCH:
The Value of Grasslands

“ DISCUSSION

What do East African cattle and wildlife have in common?

What issues do rancher's face when trying to maintain healthy herds?

How does knowing about population dynamics help ranchers and conservationists balance the needs of cattle and wildlife that live in the same space?

How do ranchers address common issues in an attempt to maintain healthy cattle populations/herds?

Use a poster or sheet of paper to brainstorm: What are some predator-safe methods ranchers can implement to help keep their cattle healthy?

Possible answers

- Identify the predators on their land so proper methods are used to keep their cattle safe.
- Install kraals to keep cattle in and wildlife out—cattle are let out in the day for grazing and returned to the kraal at night; typically, these are constructed of thorny branches, but wicker, wire fencing, wood, or stone walls can be used.
- Installation of wire fencing with electrical wires around the grazing area—This method is not practical but can be effective in keeping predators out.
- Use guard animals such as dogs or donkeys to protect the herds.
- Keep someone with the herds to scare predators off.
- Practice good herd management—Predators are opportunistic, so when cattle are in good health they are less likely to be attacked.
- Balance the grass/food consumption between cattle and wildlife—Predators are more likely to turn to eating cattle if the primary herbivores in their food chain are unable to survive.

Cattle are grazers and eat grass. Grazing rights is a legal term referring to the right of a user to allow their livestock to graze in a given area. Overgrazing happens when animals or cattle graze excessively, to the point that it damages the vegetation/grass.

When grazing is managed properly grazers help the grassland ecosystem thrive. Even though cattle eat grass they actually play a key role in keeping grassland ecosystems healthy.

How do you think cattle help keep the grass/grasslands healthy?

Possible Answers:

- Their hooves make seed-to-soil contact which helps dormant seeds to germinate
- They break soil crusts that keep seeds from growing
- They trample standing vegetation into mulch to protect soil and keep it moist
- They turn vegetation into high-quality fertilizer
- They prune stale growth keeping forage plants at peak production (also leaves more suitable parts of grasses for wildlife)
- They prune plants which causes roots to self -prune and become soil

Share your findings and reflections with us on social media and help us spread the word!

! TAKE ACTION

One Sentence Summary: Write one sentence in a science journal that summarizes how managing both cattle and wildlife populations benefits ranchers and the grassland ecosystem.

SAMPLE: Cattle herding with sustainable grazing and wildlife management balances the food, water, and land needs of cattle and wildlife and provides ranchers with more income.

Share what you've learned with us on social media **@TNCNatureLab** on **Twitter** and **Facebook** and **@nature_org** on **Instagram** and help us spread the word!

DAY 4 Sounds of Borneo

? ESSENTIAL QUESTION

How can we use science and acoustic technology to care for the land and protect the plants and animals?

We'll learn how experts are using cutting-edge science to find out how healthy the rainforest is—and to discover where it needs some help! Scientists at The Nature Conservancy have developed ways to record and listen to the sounds of the forest to determine how many different animal species live there. Join us on this virtual field trip to see the amazing wildlife of the Indonesian rainforest, explore places many people never go, and learn about innovative scientific methods that are helping protect nature.

→ ACTIVITY

WATCH:
Virtual Field Trip to Borneo: The Symphony of the Rainforest

" DISCUSSION

Q: What is an ecosystem?

A: An ecosystem is a community of interacting organisms and the physical environment in which they live—including biotic (living) and abiotic (nonliving) factors.

Q: What is biodiversity and why is it important for an ecosystem?

A: Biodiversity is the variety of life in a particular habitat or ecosystem. It is important for several reasons including:

- A variety of plants provides food for insects and other animals and those organisms can provide foodfor organisms higher up the food chain.
- A larger number of plant species means more food variety for all organisms, especially if one were to get diseased and/or die out.
- Many medical discoveries have been the result of research into plants and animals and every time an animal or plant goes extinct, we may have lost crucial insight into new medicines for human diseases.
- Healthy, biodiverse ecosystems provide services to humans like clean air, clean water, tourism, food, etc.

Q: Why are scientists using acoustic surveys to learn about rainforest biodiversity?

A: It is very costly and difficult to send a trained crew of researchers into the rainforests to catalogue everything that lives there. Acoustic recorders can be left in place for days to capture all of the sounds of the area and scientists can process those sounds and quickly learn about the animals that live there.

Q: Why are rainforests in Borneo being cut down?

A: The island of Borneo is extensively covered with rainforests, which are being cut down to make way for food production, timber harvesting, and palm oil production—these are all valuable things to the economy and to the people that live there.

Q: Rainforests are often called the lungs of the planet. How much oxygen do rainforests produce globally?

A: Rainforests produce over 20% of Earth's oxygen.

Q: Why do animals communicate at different frequencies?

A: Animals have evolved to communicate at different frequencies so they can hear each other amongst all of the other sounds.

Q: Describe how a healthy forest might sound different than an unhealthy forest.

A: A healthy forest should have a lot of organisms all making sounds at different frequencies. So it might sound more like a symphony with a lot of different instruments. An unhealthy forest will have fewer animals making sounds, occupying fewer frequencies. It would be like a symphony that is missing all of the instruments except violins.

Q: How can the acoustic data collected now be useful in the future?

A: Acoustic data can be used to examine biodiversity across time. In other words, we can take recordings today and then compare them to recordings 10 years from now and see if there has been any change in the organisms are living in an area.

Q: Describe two ways that orangutans help the forest.

A: Orangutans eat fruits and disperse seeds through their feces as they move throughout the forest. They also nest by folding in tree branches at least two times a day, which helps to open up the forest and let light into the forest floor where it can reach seedlings.

Share your stories and reflections with us on social media and help us spread the word!

! TAKE ACTION

In the virtual field trip, you learned about some ways you can help protect rainforests. Pick at least two things you can do to help protect rainforests and their inhabitants and share them with your family, neighbors, and community. Inspire others to join you! Share your commitment with us on social media **@TNCNatureLab** on **Twitter** and **Facebook** and **@nature_org** on **Instagram**!

Possible actions:
You can become a responsible consumer by looking for and purchasing paper products with the FSC logo. This stands for Forest Stewardship Council and it means that the product is made from wood that has been harvested in a sustainable way.

You can also learn more about palm oil and research which products contain it.

You can look for the Certified Sustainable Palm Oil (CSPO) logo on everyday products. As always, reduce, reuse, and recycle are good mottos to live by.

You can also learn more about supporting orangutans by looking into the work that is being done by organizations like the **Borneo Orangutan Survival Foundation**.

DAY 5 Coral Reefs in the Dominican Republic

? ESSENTIAL QUESTION

How are fragile coral reefs being damaged by human activity and climate change and what can we do to help?

Discover the amazing world of coral reefs with coral scientist Joe Pollock, as he takes us on a virtual field trip to the beautiful coastline of the Dominican Republic. We'll dive into the waters of the Caribbean to see how corals form, the way they grow into reefs, and how they support an incredible array of plants and animals.

Covering less than 1% of the ocean floor, coral reefs are home to an estimated 25% of all marine species. That's why they're often called the rainforests of the sea! Explore this amazing ecosystem and learn how the reefs are more than just a pretty place—they provide habitat for the fish we eat, compounds for the medicines we take, and even coastal protection during severe weather.

Learn how these fragile reefs are being damaged by human activity and climate change, and how scientists from The Nature Conservancy and local organizations are developing ways to restore corals in the areas where they need the most help.

→ ACTIVITY

WATCH:
The Secret Life of Corals: A Dominican Republic Adventure

" DISCUSSION

Q: Where can you find coral reefs around the world?

A: Coral reefs form in warmer waters near the equator and between the Tropic of Cancer and the Tropic of Capricorn.

Q: What is coral?

A: Coral is an animal that has a hard skeleton filled with soft, fleshy parts called polyps. The polyps are like mini jellyfish that live together in a colony.

Q: What does symbiosis mean?

A: Symbiosis is when two different organisms live close together and interact in some way. This interaction can be positive or negative. A positive interaction is called "mutualism" because both organisms benefit.

Q: List and describe some of the things that coral reefs do for people.

Answer:

- Coastal Protection: Reefs act as a barrier and help to calm or buffer waves that could be destructive to property on the coasts. They help prevent the coastline from eroding and keep waves from surging onto land and flooding property.
- Habitat for Fish: Reefs provide a home for a wide variety of organisms, including fish that people eat and sell to make a living.
- Tourism: Reefs provide natural beauty to support a tourist-based economy that benefits when people come to dive and snorkel.

Q: In what ways are coral reefs sensitive?

A: Coral reefs are sensitive to temperature change. Reef-forming corals live in waters that are not too hot and not too cold. Slight increases in temperature can cause the corals to expel their zooxanthellae. This is called coral bleaching.

Q: What are some ways that people in the Dominican Republic have worked to save their reefs and protect ocean habitats?

A: Fishing for Parrot Fish has been banned so that these fish can continue helping coral by eating the macroalgae that competes with the corals. Fragmentation and microfragmentation techniques are helping to increase and strengthen coral populations in vulnerable or degraded areas.

Share your findings and reflections with us on social media and help us spread the word!

! TAKE ACTION

In the virtual field trip, you learned about some ways you can help protect coral reefs. Pick at least two things you can do to help protect coral reefs and share them with your family, neighbors, and community. Inspire others to join you!

What are some things that you can do to help coral reefs stay healthy and strong?

Possible Answers: You can be mindful of the fish that you eat and make sure to eat fish that are sustainably harvested by using websites like **NOAA's Fishwatch** to learn which species are okay to eat. Don't purchase jewelry made with coral pieces. If you go snorkeling or diving near reefs, don't touch the corals and be careful not to step on them or hit them with your feet. Don't litter – it might eventually end up in our oceans. Conserve water – the less wastewater you generate, the less likely that wastewater will end up in the ocean. Teach other people what you have learned about corals.

Share your commitment with us on social media **@TNCNatureLab** on **Twitter** and **Facebook** and **@nature_org** on **Instagram** and help us spread the word!

DAY 6 Coastline Erosion Protection

? ESSENTIAL QUESTION

How are oyster reefs beneficial to both people and the environment?

In this activity, we will study methods for protecting coastlines. Coastal erosion is a serious problem, since almost half the U.S. population lives near or along the coast. Hurricanes and other strong storms cause a lot of damage to a beach in a short time. We will learn that continuous waves are a force that the ocean exerts over time and that they can change a landscape as much as a hurricane can. Coastal erosion devalues or destroys property, impacts fisheries, and necessitates expenditures for prevention and remediation. Engineers must first characterize a location in terms of risk. They need to know the wave history of a particular location.

→ ACTIVITY

WATCH:
Nature's Role in Creating Resilience

WATCH:
The Amazing Oyster Reef

“ DISCUSSION

Make a list of the causes and consequences of coastal erosion. Lead students to specific examples, such as coastal erosion being caused by:

- Occasional weather events such as hurricanes and storms
- Extreme tide conditions
- Regular waves over time
- Human activity that alters natural barriers such as oyster reefs and salt or sea marshes

The effects of coastal erosion include:

- Devalues or destroys property
- Impacts fisheries by removing nursery habitats in shallow, low-lying areas
- Causes siltation of economically important waterways
- Necessitates expenditures for prevention and remediation

Discuss:

- What is the main purpose for using a barrier to control erosion?
- List two advantages and one disadvantage of oyster reefs for controlling erosion.
- When is a steel barrier a better solution for controlling erosion than an oyster reef?

Share your reflections with us on social media and help us spread the word!

! TAKE ACTION

The videos urge us to get involved by asking our leaders what our plan is for dealing with coastline erosion. They also urge us to come together so we can adapt to climate change. Contact your local leaders and ask them how they're advocating for nature-based solutions to protect our coastlines.

DAY 7 Protecting Your Watershed

? ESSENTIAL QUESTION

How can students and the community get involved in protecting and improving the health of your watershed?

Understanding a watershed as a whole provides a real-world basis for systems thinking and deeper ecological understanding. It also offers a venue for students to identify and explore different levels and kinds of engagement in science, activism, and policy.

Understanding watersheds as systems is fundamental to the protection the lands and waters on which we depend. A healthy, protected ecosystem helps to ensure that there is enough clean water for all.

→ ACTIVITY

WATCH:
Water: The Source of Life

“ DISCUSSION

Q: What are the primary sources of pollution or contaminants in the water that travels from Chingaza to Bogotá?

A: Agriculture, ranching activities

Q: Why do you think you were shown this video?

Answers will vary:

The video makes it clear that water is connected in a watershed between its source and along its path (where it is used), that upstream and downstream areas are connected. We were shown the video to help us understand that what happens upstream can affect downstream users. Because the city of Bogotá receives the majority of its water from Chingaza National Park, it is important to protect the watershed that provides the city with water so the city can receive a good supply of high quality of water.

Think about what you know about your own watershed. What ideas might you use from the video as inspiration and understanding for exploring or working in your own watershed? Answers will vary.

Share your reflections with us on social media and help us spread the word!

! TAKE ACTION

Develop a plan for watershed protection that involves identifying the primary impacts on water at its source and along its path, to the key stakeholders (water users), and a set of possible mechanisms for protecting and restoring the water.

Share your plan with us on social media at **@nature_org** on **Instagram**, and **@TNCNatureLab** on **Twitter** and **Facebook**!

You've earned it!

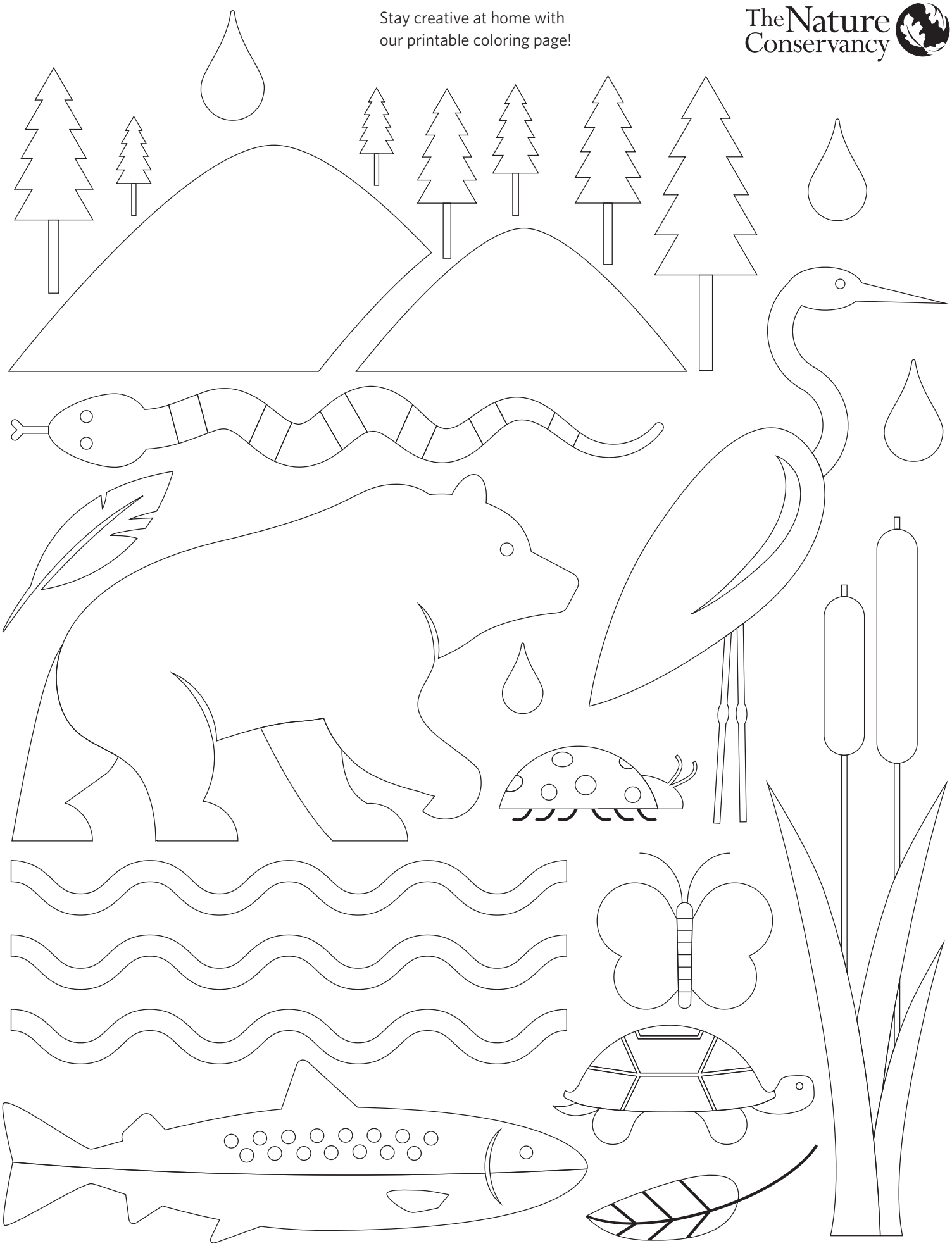
From protecting the rainforest and coral reefs to the benefits of oyster reefs, you've learned a lot about why we need to protect our natural lands and waters and you have much to be proud of!

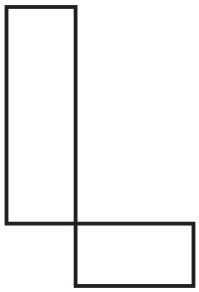
Download your digital climate badge and share your learnings with us on social media.

Tag **@nature_org** on **Instagram** and **@TNCnaturelab** on **Twitter** and **Facebook** so we can celebrate your accomplishment with you!

Stay creative at home with
our printable coloring page!

The Nature Conservancy





NATURE LAB
Educator Resources

The Nature Conservancy

NATURE LAB Educator Resources

NATURE LAB SUMMER CAMP:
Protect Land and Water

Experiential Project Concept:
A diversity of organisms in a garden is important.

Grade Levels: 3-8

Essential Question:

- How does a garden function as an ecosystem?

Introduction:
By identifying and counting the animals in a specific habitat, scientists monitor species populations to determine if ***stressors*** - like drought or competition from other species or pollution - are threatening a species.

It's this kind of scientific field work that enables scientists to identify endangered species, like the Giant Panda in China and the Island Fox in California, and take steps to protect them. Scientists often get data from volunteers when they conduct a species census. Every day there are more and more people serving as "citizen scientists" or ordinary people who collect data to help scientists with research.

In this activity, you will collect data in order to determine the diversity of organisms in a garden in your home or neighborhood and to understand how a garden functions as an ecosystem.

Conduct a Species Census

1. You are about to gather data on animals in a garden by conducting a species census. This will require you to **look very closely** and carefully at every part of the garden, to **take notes** on the different garden inhabitants that you see, and **count** how many of each inhabitant you find. *(Warning: If you are allergic to bee stings, please refrain from this activity)*

2. The tables at the end of this packet will serve as data collection sheets when you go outside. We will transfer these data to the website when the survey has concluded. Each part of the table is explained in detail below:

a. **Organism:** Write in the **common name** of the animal you observe. If you don't know the name, leave this space blank and take a photo of the animal and/or write notes about it in the notes section. You can use a numbered card to hold up in the photo and write the number in the notes section so when you look the photo later, you know which photo corresponds with which notes. After the survey is over, use a field guide to identify the animal.

b. **Quantity:** Keep a count for each different animal. For example, if you see an earthworm, make one hash mark; then, if you see another earthworm, make another hash mark. Do not to count the same animal twice. Some animals, like ants, are hard to count. If you can't count all of the animals, you can estimate and write something like "greater than 50" or "greater than 100".

c. **Type:** Use the code at the bottom of the chart to identify the type of animal you have observed. These are the same types listed on the website. Write the corresponding code number on the table.

d. **Where Observed:** Describe where you observed the animal. Try to include both the general location and exactly where the animal was when you saw it. For example:
   - In the tomato patch, crawling on a stem
   - On a maple tree, sitting on the bark
   - In the squash patch, on the underside of a leaf

e. **Role:** Some animals play a special role in the garden's ecology. Use the code at the bottom of the chart when you observe an animal that plays one of these roles:

   - Pollinators are animals that spread pollen by flying from flower to flower or by crawling into and out of different flowers. Many pollinators are insects, but many birds, such as hummingbirds, can pollinate plants as well.

   - Decomposers usually found in or on the soil, are animals that feed on and help break down decayed organic matter. They play an integral role in the health and productivity of the garden. Worms are an example of decomposers in the garden.

   - Invasive species are non-native organisms that are usually introduced to an ecosystem or habitat from an external source and can play a harmful role in the ecology of the garden. Invasive species can be plants or animals and may disrupt an ecosystem by dominating a region or particular habitat because of the loss of natural controls (predators or other factors in an ecosystem that keep populations of species in check). When introduced to a new ecosystem or non-native habitat, an invasive species can quickly multiply and dominate, negatively impacting native species, because their population is no longer controlled by predators or other factors.

   - Pests also play a harmful role in the garden ecology, but mainly from the gardener's point of view. Aphids and scale insects, for example, which feed on plant sap, can be considered pests when they become so numerous that they weaken or kill a plant. Moles, which burrow through the soil and feed on earthworms, may be considered pests if their burrows disturb plant roots and slow their growth. Gardeners need to be aware of pests like these, so they can protect their plants, and students can categorize an animal as a pest if it seems to be damaging a plant.

f. **Notes:** Use this space to describe organisms you need to identify later and to take notes on animal behaviors — both how the animal interacts with the garden environment (for example, flying from flower to flower on a specific plant, hiding under a leaf, perching on a garden sign) and how it interacts with other animals (for example, attacking or eating another animal, running to hide from another animal). Evaluate how the animal's behavior fits into the garden ecology and what role the animal plays.

g. **Examples of Field Guides for Use in Identification:**
   - **All About Birds** (http://www.allaboutbirds.org/Page.aspx?pid=1189)
   - **BugGuide** (http://bugguide.net/node/view/15740)
   - **eNature.com** (www.enature.com)

COLLECTING DATA IN THE GARDEN

1. Go to your assigned location in the garden. Decide with your family member what measurement of land you will use (i.e- square foot). Make sure you bring the necessary measuring tools.

2. Do not interfere with the animals you observe. No poking, teasing, grabbing, or swatting. Show care for the garden and its inhabitants and try to have the least possible impact on what you are observing so as not to interfere with the data.

3. You will have 30 minutes to collect data in the garden habitat.

4. Keep a detailed and complete record of what you observe – the more consistent and detailed you are in the data you collect, the more scientifically accurate and meaningful the information. If you collect data in a consistent way, you can then compare these data across time periods and to other data you have collected about your garden.

5. Record data on the "Garden" data sheet.

6. After each observation period, you can use the field guides to look up any organisms you couldn't identify. Don't forget to use the numbered card in your photograph of the animal so it's easier to identify later.

COLLECTING DATA OUTSIDE OF THE GARDEN

1. To assess biodiversity in the garden, conduct a test species census using the same method that you used in the garden, in another natural area in your neighborhood. This location could be a lawn or bed of shrubbery where the plant life is less varied.

2. You will have 10 minutes to conduct this survey. Record data on the "Other Location" data sheet.

DATA ANALYSIS

Discuss the following questions:

1. Identify the species that are observed most frequently in the garden. Suggest reasons why we have seen these species so repeatedly.

2. Use your observation notes to investigate the relationship between animals and the plants in the garden.
   - Are certain types of animals almost always seen on or near certain types of plants?
   - Are some species most frequently seen on or near certain parts of plants (leaf, stem, root, flower, etc.)?
   - Are there animals that you observed only when plants are flowering or only when they are have produced a fruit or vegetable?
   - What other patterns did you notice?

3. Compare the number of different species you observed at the second, non-garden site with the numbers you have observed in the garden. What did you notice? Use data to support your answer.

4. Complete the environmental "zones" chart below. Use your observation notes to determine whether certain species are found in a specific zone and list them under the appropriate heading in the table.

Environmental Zone Species Comparison		
Shady	vs.	Sunny
Moist	vs.	Dry

Elevated areas (tree leaves, branches)	vs.	Lower areas (soil, ground)

EVALUATION QUESTIONS

Using the data we have collected as a class, answer the questions below:

1. Based on your habitat survey what can you conclude about the diversity of your school garden? Be sure to use data from your survey in your answer.

2. Use your observation notes to describe how the variety of animals and plants in the garden each contribute to the different ecological functions (e.g. water filtration, food production, carbon cycling, and soil health). Describe the ecological functions of at LEAST three things in your garden.

3. Imagine a scenario in which a pest or disease or severe weather conditions (stressors) weaken or kill the plants in a non-diverse habitat such as a field of corn, an orange grove, or a rose garden (*monocultures*). What might happen in these ecosystems?

4. Describe one way to increase biodiversity in a garden habitat.

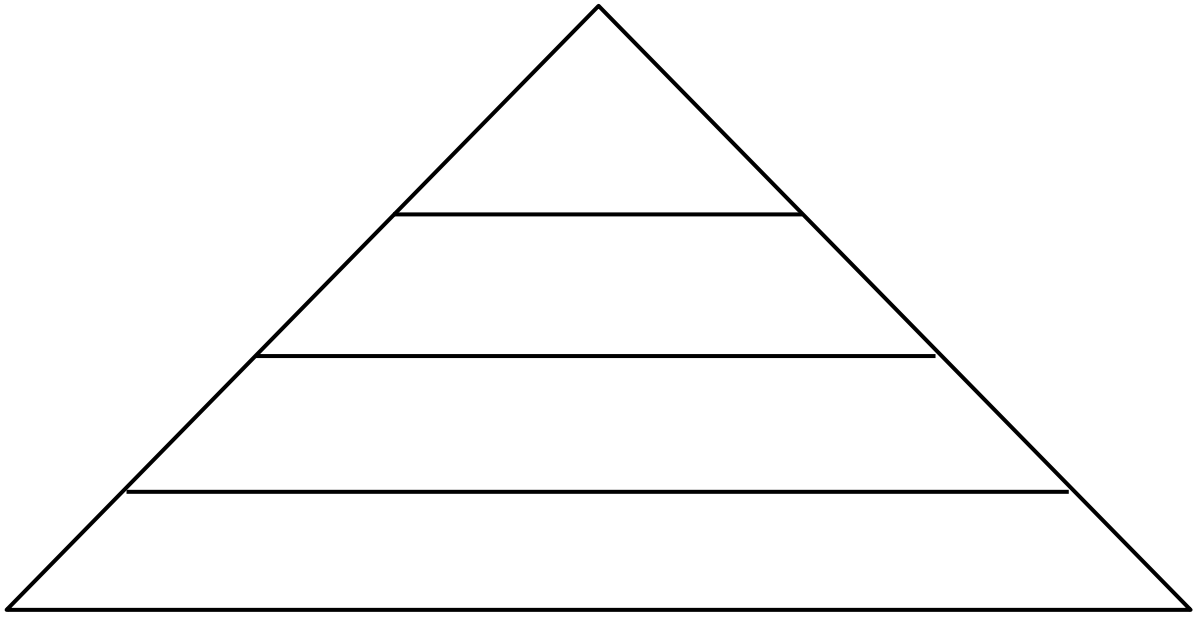
5. Give examples of a producer, a primary consumer, and a secondary consumer in the ecology of a garden habitat.

    - Producer:

    - Primary Consumer:

    - Secondary Consumer:

6. Use your data to create an ecological pyramid depicting the animal and plant life in the garden habitat. An ecological pyramid diagrams energy transfer through an ecosystem, from the producers (plants) at the bottom of the pyramid up through primary consumers (herbivores), secondary consumers (omnivores), and tertiary consumers (carnivores), showing how the amount of available energy and (usually) the number of organisms decreases at each stage.



7. Describe the role of pollinators in a garden habitat.

8. Predict what might happen if all of the pollinators in an ecosystem were wiped out by disease.

9. How does biodiversity at every level strengthen the ecological pyramid and the vitality of the ecosystem?

GARDEN - Habitat Data Collection Sheet

Use this sheet to record your observations of animals in the garden.

Organism – Common Name	Qty	Organism Type	Where Observed	Role	Notes

Organism Type Code:

1. Amphibian
2. Arachnid
3. Bee
4. Beetle
5. Bird
6. Dragonfly
7. Grasshopper/cricket
8. Mammal
9. Moth/butterfly
10. Reptile
11. Slug
12. Worm
13. Other insect
14. Other organism

Role Code:

a. Pollinator
b. Decomposer
c. Invasive species
d. Pest

OTHER LOCATION - Habitat Data Collection Sheet

Use this sheet to record your observations of animals in the garden.

Organism – Common Name	Qty	Organism Type	Where Observed	Role	Notes

Organism Type Code:

1. Amphibian
2. Arachnid
3. Bee
4. Beetle
5. Bird
6. Dragonfly
7. Grasshopper/cricket
8. Mammal
9. Moth/butterfly
10. Reptile
11. Slug
12. Worm
13. Other insect
14. Other organism

Role Code:

a. Pollinator
b. Decomposer
c. Invasive species
d. Pest