



LESSON 7

Sustaining Our Forests

BIG IDEAS

- All citizens have a responsibility to be stewards of the environment that sustains human life. This includes making informed decisions about forest resources. (Subconcept 53)
- A citizen, acting individually or as part of a group, can make lifestyle decisions and take a variety of actions to ensure the sustainable use of our forests. (Subconcept 54)

OBJECTIVES

Upon completion of this lesson, students will be able to:

- Define the terms “steward” and “sustainable.”
- Explain that citizens have a responsibility to be stewards of the environment.
- List choices they can make to sustain our forests.

LESSON/ACTIVITY TIME

- Total Lesson Time: 100 minutes
- Time Breakdown:
 - Introduction.....10 minutes
 - Activity 115 minutes
 - Activity 245 minutes
 - Conclusion.....30 minutes

SUBJECT AREAS

Arts, Language Arts, Social Studies

TEACHING SITE

Classroom

FIELD ENHANCEMENT CONNECTIONS

This lesson ties closely with Field Enhancement 3, *Caring For the Future of Forests*.

NUTSHELL

In this lesson, students listen to an adaptation of Aesop’s Fable, *The Hen That Laid the Golden Egg*, and discover what it means for something to be sustainable. They define the word steward and brainstorm ways that Wisconsin’s citizens can participate as forest stewards. As a group, students read about situations facing our forests and determine which actions would help sustain them. Upon completion, students are sworn in as forest stewards and make a shield or family crest that shows why our forests are important and what they can do to sustain them.

BACKGROUND INFORMATION

Wisconsin’s forests play an important role in maintaining the quality of life we all enjoy. Forests provide support for us ecologically, economically, and socially. Our worldwide systems depend on these same benefits of forests. As our world population continues to grow, needs for these benefits will grow. Our ability to sustain not only Wisconsin’s forests, but also all world forests, will dictate the quality of life and perhaps basic survival of generations to come.

Since we all benefit from forests, we all play a role in their future. This role may be positive or negative based on our efforts to understand and use this resource wisely. All citizens have a responsibility to be **stewards** of the resources that sustain human life. To be a forest steward requires becoming knowledgeable on forest topics and issues and making informed decisions. As members of organizations and communities, or as individuals, we have a stake in how our forests are sustained. We can influence how forests are managed by volunteering, raising funds, voting, participating in planning processes, and consumer choices.

VOCABULARY

Steward: A person who takes responsibility to make decisions and take actions today that will allow resources to be maintained in a healthy manner.

Sustainable: The ability for something to be maintained for use today and in the future.

We must also be conscious of the finite quantity of the resource at any given time. Changes in usage of Wisconsin forests without reciprocal changes in lifestyles, means that forests elsewhere must fill this void. For instance, if we decide not to harvest forests in Wisconsin, but continue to use the same amount of forest products, those products have to come from forests elsewhere. In our worldwide economic, ecological, and social systems, any changes in the use of Wisconsin's forests will affect forests elsewhere, including tropical rainforests.

PROCEDURE INTRODUCTION

Tell your students that you once heard a very wise story (see story on page 132, *A Very Wise Story*), and you would like to share it with them.

Ask your students if they had owned the hen, what they would have done. (*Answers may vary. Some will probably say they would have left the hen alone so she could lay a golden egg a day.*) Tell the students that for the farmer, it would have been great if the hen had continued to lay these golden eggs forever. Ask them if they think this would have been possible. (*No, the hen would have eventually died of old age.*)

Ask students if they have ever heard of the term sustainable. Ask students to give their ideas of what the word means. Discuss with your students that **sustainable** means that something can be maintained as it is today, forever. Again ask if

MATERIALS LIST

FOR EACH STUDENT

- Piece of paper (11" X 17")
- Crayons or markers
- Scissors

FOR THE CLASS

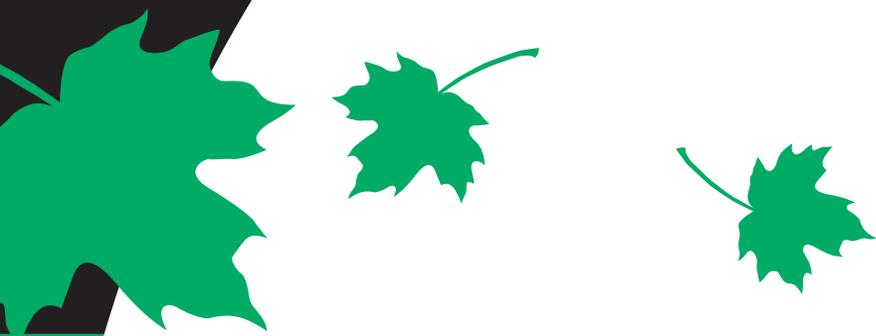
- Chalk/marker board
- One or two copies of Student Pages
✍️ **1A-C**, *Situation Cards*

TEACHER PREPARATION

- Copy and cut out two sets of Student Pages
✍️ **1A-C**, *Situation Cards*

the hen could have laid golden eggs forever. (*No.*) Tell the students that you have another version to the end of the story (see below).

The farmer went back home and told his wife that the jeweler had told him that each one of those eggs was worth about \$100. They realized that if they could figure out a way to keep this lasting forever, they and their children and their children's children and their children's children's children would never be without money. They moved the hen into her own henhouse, fed her better food, and introduced a rooster to the hen. They let the hen sit on her eggs, and soon chicks were hatched. Within a year, the hen died, but by now, several of her chicks were laying golden eggs. Planning for the future allowed the farmer to sustain the family income, thanks to golden eggs.



A VERY WISE STORY

There once was a farmer who raised chickens. He had red ones, and white ones, and some black ones. The chickens were laying hens. That means the hens laid eggs that the farmer collected and sold. One day as the farmer was collecting eggs, he reached in and pulled out a very heavy egg. It was a funny color. Not white like the other eggs. When he got the egg outside the henhouse, he threw it in the bushes.

This went on for about a week. Every day he pulled out another heavy egg. And every day he threw it under the bushes. One day his young son was playing near the henhouse and found the heavy eggs. He thought they were funny rocks, so he stuffed them in his pocket and took them in the house. Once in the house, he washed them like he did with all the rocks in his collection.

Much to his amazement, the rocks glistened in the kitchen light. These rocks, which we know were eggs, were so shiny that the boy decided to show them to his mom and dad later that evening. His dad wanted to know where he had found them and soon realized that the eggs were indeed the ones he had been throwing under the bushes.

His mom was sure that these must be gold, so the next day the father took them to a jewelry store in town to see if they were indeed gold. The jeweler used his magnifying lens, his scale, and some other instruments. Much to his amazement, the jeweler found that, indeed, the eggs' shells were made of gold. The inside of the eggs were like any other eggs containing yolks and egg whites.

The farmer went back home and told his wife that the jeweler had told him that each one of those eggs was worth about \$100. Why, they already had seven of these eggs, so they started to think of all the ways they might spend the money. As they did, they became greedy. They figured since the hen was laying golden eggs, she must be filled inside with gold. So they killed the hen and opened her up to take the gold from her insides.

Much to their surprise, the hen's insides were no different than any other hen. There was no gold, and their gold-egg-laying hen was now dead.



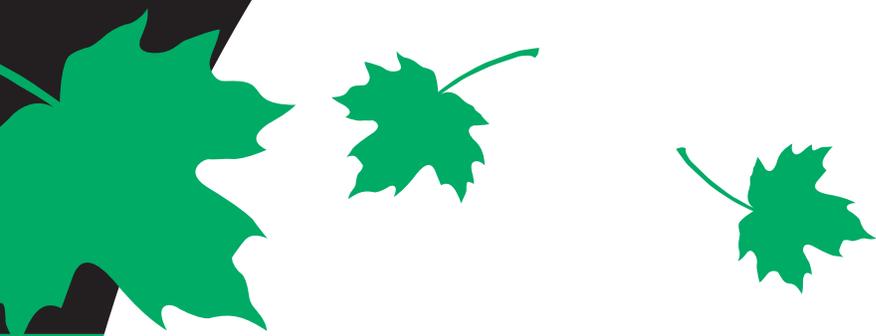
ACTIVITY 1

1. Ask your students to imagine what forests were like in 1848, when Wisconsin became a state. How were the forests like a golden egg for Wisconsin's citizens? (*Our forests provided building materials, jobs, and money for the economy.*) Ask the students how what happened to our forests between 1848 and 1910 was similar to what happened in the first version of the story. (*We cut down all of our forests, just like the farmer killed the hen.*)
2. Ask your students to recount some of the steps that were necessary to re-establish our forests in Wisconsin after the cutover. (*Established nurseries, planted seedlings, suppressed forest fires, educated public, established county/state/national forests, staffed by Civilian Conservation Corps.*) Remind the students that thanks to the efforts of many during the past century, we once again have great forests. Ask your students to recount why our forests are currently important. (*Ecologically: wildlife habitat, oxygen, use carbon dioxide, erosion control; Economically: jobs, products, tourism; Socially: relaxation, recreation.*) Ask your students if they think that our forests will be any less important in the future. Won't people still need forests for their ecological, economic, and social benefits? (*Yes they will.*)
3. Tell your students that since forests are extremely important to our lives, we must work together to sustain our forests. List on the board the following heading: **Things We Can Do to Sustain Forests**. Tell students that you would like them to think of ways that people can help sustain forests. Tell them that you would like to brainstorm, as a class, a list of ideas. Write down your students' ideas. (**NOTE:** You may have to prompt them with additional questions to get them to come up with a variety of answers. *Ideas may include*

but are not limited to: recycle paper, buy things with less packaging, plant trees, raise money for conservation, buy a trail/park sticker, buy a hunting license, harvest trees, plant trees, fight forest fires, build and maintain recreation areas, develop better ways to utilize trees.) Once you have your class list, you may want to have students identify the things they can do personally. After you have completed your list, ask if they think there are ways that they and other citizens might influence what others can do. (*They can ask for laws to be changed, vote for politicians that support sustainable efforts, provide informed public input at hearings, alter their consumption of an item and persuade others to do the same.*)

ACTIVITY 2

1. Recap with students that it is indeed important to sustain our forests for future generations and that all of them play a role. Tell them that we will be faced with a variety of situations where we have to make decisions about how to sustain our forests. Tell the students that you have some cards that describe different situations on them. They will work in groups to identify what they would do in each situation. Their answers should reflect good choices for sustaining forests.
2. Organize a jigsaw to read through Student Pages **1A-C**, *Situation Cards*. Divide your class into small groups. There are five cards. Depending on the group size you choose, more than one group may have the same card. Give each group a card to read and have them make a decision as to which alternative(s) would lead to sustaining our forests. After all the groups have finished discussing, go over each card as a class. Have the smaller groups share their thoughts.

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3. Recap with the students how they have a role in sustaining our forests. Tell them that if we didn't have a role, then who could we count on to take care of our environment? Ask if anyone has ever heard of the word "steward" before. Can anyone define it? (*Someone who takes care of or maintains something.*) Tell students that they are all stewards of our environment and responsible to take care of our forests, lakes, air, water, land, and all other aspects of our environment.

CONCLUSION

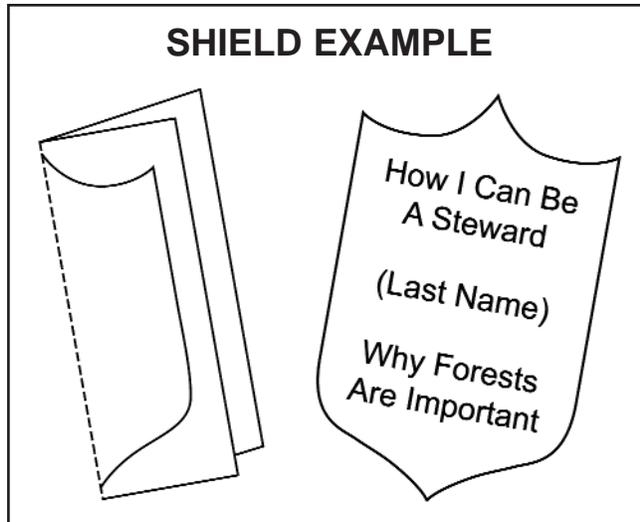
Tell your students that as stewards of our forests they also help defend them so that they will be able to provide ecological, economic, and social benefits for generations to come. Tell them that just like medieval times, you are going to knight them as stewards of our forests. As a knight, they will need a shield. Tell the students that they are going to make their own shields to help them sustain Wisconsin's forests.

Hand out a piece of 11" X 17" inch paper to each student. Tell students that they should fold their paper in half, and much like cutting out a valentine heart, they should cut out a shield (see shield example). You may want to draw an example on the board. Once they have cut out the shield, tell them they should decorate their shield so that it has the following information: their last name across the center; below their name represent why forests are important to our ecological, economic, and social well-being; and on the top half represent ways that they, as stewards, can help sustain our forests. Once students have completed the shields, have them share their shields with the class and place them on the wall in your classroom.

CAREERS

The career profile in this lesson is about Sandy Lotto, Environmental Educator, Trees For Tomorrow. Career Profile 3G.EE is found on page 136. A careers lesson that uses this information begins on page 140.

SHIELD EXAMPLE



SUMMATIVE ASSESSMENT

1. Have your students write a fable several paragraphs long that relates some prized possession or item a person needed to live and how they took care (were stewards) of that item.
2. Have students write a poem or song that tells their role as stewards of the forest.

REFERENCES

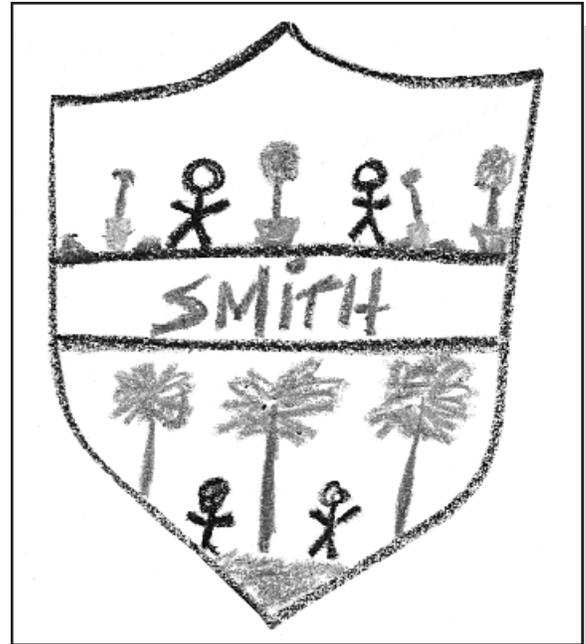
Aesop's Fables Translated by George Fyler Townsend. World Wide Web:
www.textlibrary.com/download/aesop-f.txt

RECOMMENDED RESOURCES

●●● WEBSITE ●●●

EEK! (Environmental Education for Kids)
Wisconsin Department of Natural Resources
www.dnr.state.wi.us/eeek/

Follow the links to "Our Earth" and "Environmental Heroes" to find descriptions of people in Wisconsin's history who made a difference by being stewards.



SANDY, ENVIRONMENTAL EDUCATOR



Sandy (left) enjoys teaching people about forest critters like this wood frog.

Meet Sandy Lotto. Sandy is a forester and environmental educator. She works at Trees For Tomorrow (TFT) in Eagle River, Wisconsin. School groups from all over Wisconsin go to TFT for outdoor education classes. Sandy teaches topics like tree identification, animal tracking, and pond study. She also hires and trains interns who think they might like a job like Sandy's but want to try it out for a while. Sandy teaches adults about natural resources too. These groups include school teachers and people who want to learn new skills like cross-country skiing and rustic furniture making.

Sandy has a college degree in Forestry from the University of Wisconsin-Stevens Point. You don't have to be a forester to get a job like Sandy's, though. You can study wildlife, water, environmental education, and more. Sandy started working at TFT as an intern right after college.

Sandy says her favorite part of her job is teaching people skills that get them to spend more time outside. She hopes this encourages them to be good stewards and make wise decisions about the land.

If you think Sandy's job sounds like something you'd like to do, she has some suggestions. Learn how to use field guides to identify plants and animals. Spend as much time outdoors as you can. Sandy also says, "Try to find a job that you love doing regardless of what it pays."

SITUATION CARDS

FUN AT THE PARK

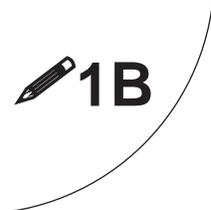
You enjoy visiting a state park and often hike and camp there. The Department of Natural Resources (DNR) is making a plan for how to manage the forest for the next 10 years. It is considering things such as harvesting trees, trail development, and building of additional campgrounds. What could you and your family do to see that the forest provides more opportunities to hike and camp?

- There is nothing you can do.
- Contact the DNR for a copy of the plan, read it, and let the DNR know what you like and don't like.
- Find a new forest to hike and camp in.
- Write a letter to your local newspaper encouraging others to get involved.
- Attend a public meeting that the DNR will hold and speak to the group on your thoughts.
- What else could you do?

FAST FOOD CHOICES

It's lunchtime and you are hungry. You go with your family to a fast food place. You notice that they want to give you large plastic cups and want to put everything in a bag. You are concerned about the waste of paper and plastic used to make these items, especially when they will go in the trash as soon as you are done eating. What could you do?

- Ask for a paper cup instead. A paper cup is made from a renewable resource.
- Take your food and hide in the corner where no one can see you.
- Ask to not have a bag.
- Take the bag and cup home and reuse them.
- Nothing, you are only one family, so what good will it do?
- Don't eat there in the future.
- What else could you do?



SITUATION CARDS

GREEN SPACE IN THE CITY

A person has recently donated a piece of land to the city. Some of the land is forest; some is just weeds. A group called Citizens for Green Space is asking the city to make the land into a park and nature center. You like this idea. What could you do?

- Find out more about the group and if you agree with their ideas, join the group and help them.
- Call your city council member and tell them you would like the park.
- Nothing, someone else will do it.
- Write a letter to the local paper supporting the idea of a park.
- Nothing, you don't have the time.
- What else could you do?

SHOULD THEY SELL IT?

Your school owns 20 acres of forest. Nothing has been done with the forest for years. Someone has asked the school to sell them the property. The school board has been looking for money to build a new soccer field and is considering selling the forest to help pay for the field. What could you do?

- Call a school board member and encourage them to sell the property. You like soccer.
- Ask the school for permission to visit the property. Look at the property and decide in your mind what should be done after you have seen the property and collected other facts.
- Attend a school board meeting and tell the board how you feel.
- If a school board election is coming up soon, find out who supports your view and have your parent(s) vote for that person.
- Do nothing, the school board will just do whatever they want.
- What else could you do?

SITUATION CARDS

CHOOSING WHAT TO BUY

You have gone to the grocery store with a parent. You are buying food and helping to pick out the items. You notice that everything seems to come in the single serving size. You have concerns over the usage of extra packaging. What other kinds of items could you buy?

- Even though those little cereal boxes look fun, hey, we've got bowls at home so let's buy the big box.
- Buy whatever looks cool.
- Wow, that's a whole sack lunch in a box – it's got everything – juice, meat, cheese, crackers, cookies.
- Buy the big bag of potato chips and some reusable Ziploc® bags to put my chips in.
- Hey, I want some juice boxes. In fact, I can drink three in one sitting.
- What else could you do?