

Tennessee 4-H Youth Development

Nobody Trashes Tennessee

Environment

Skill Level

Intermediate (Grades 6th- 8th)

Learner Outcomes

The learner will be able to:

- Use scientific literature to identify the impacts of litter on the environment.
- Describe the ways litter affects different animal species.
- Present findings using public speaking skills.

Educational Standard(s) Supported

Science	ELA
SPI0607.Inq.4	6.RI.KID.1
SPI0707.Inq.4	7.RI.KID.1
SPI0807.Inq.4	8.RI.KID.1
	6.RI.RRTC.10
	7.RI.RRTC.10
	8.RI.RRTC.10

Success Indicators

Learners will be successful if they:

- Summarize information about the effects of litter on animals.
- Describe how litter harms animals.
- Create a public service announcement about the impact of litter on animals.

Time Needed

30 Minutes

Materials List

- Create tangled messes by tangling together plastic drink can holders and fishing line. You could also use trash such as fast food wrappers or balloons.
- Student Handout “Nobody Trashes Tennessee: Environment” (one per student)
- Scientific Articles (one front/back article for each group of four students)

Introduction to Content

Litter is a major environmental problem worldwide, and the latest “Nobody Trashes Tennessee” campaign from the Tennessee Department of Transportation empowers citizens to make positive changes in their communities to create a safer, more beautiful state.

Introduction to Methodology

Students will try to untangle a mess of plastic drink holders and fishing line and then imagine how it would feel to be stuck in the tangled mess. Then, they will learn about a group of animals negatively affected by litter by reading an article and summarizing it. Students will share what they learned with the class and then answer two questions about the ways litter impacts the environment. The lesson concludes with students completing a RAFT (Role, Audience, Format, & Topic) activity about litter harming the environment.

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Terms and Concepts Introduction

The Tennessee Department of Transportation wrote, “Every year, it costs Tennessee more than \$15 million to clean up roadside litter. It’s time to put an end to this. Keep your trash to yourself and our roadways clear. Because nobody trashes Tennessee.” This lesson is the first of two lessons to teach students about the environmental, economic and social consequences of litter in Tennessee.

Setting the Stage and Opening Questions

Before the lesson, take the plastic drink can holders and the fishing line and tangle them together. You could also put trash like plastic food bags or balloons in the tangled mess.

Start the nature sounds video: tiny.utk.edu/naturesounds

Pass out the student worksheet “Nobody Trashes Tennessee: Environment.”

Ask students to write what they think, hear and feel about the nature sounds. Allow two minutes for students to complete this reflection.

Divide students into groups of four and give each group a tangled mess. Tell students, **“In Tennessee, we can find tangled messes like this in our rivers and lakes.”** Give each person in the group 30 seconds to attempt untangling the mess. Only one person at a time can touch the tangled mess, but the other group members can give advice or instructions.

When everyone has tried untangling, ask them to write on their handout what feelings they had while trying to untangle the mess. Then, ask how they would feel differently if their body was tangled in the mess.

Say, **“Today, we will do the following: Use scientific literature to identify the impacts of litter on the environment, describe the ways litter affects different animal species and present findings using public speaking skills.”**

Experience

The Supplemental Information contains four different sets of articles: Aquatic Animals (Marine Litter: More Than a Mess), Penguins (The Top 5 Threats to Penguins — And What You Can Do to Help), Whales (Tangled Whale Freed From Buoys, Fishing Gear; Bahamas: Crisis in the Checkout Line), and Wildlife (The Deadly Truth About Trash). Each is one sheet when copied front/back. Pass out one article to each group. Try to divide them evenly among the entire class.

Say, **“Tangled messes and other trash in water supplies around the world affect all kinds of animals. Today we will learn about how trash affects aquatic animals, whales, wild animals and penguins. Each group has a different set of scientific articles that tell us about these animals. These scientific articles tell about animals that tangled messes and other trash in water affects. Look through it and see what you can discover about the animals. We are especially interested in learning how litter affects them.”**

Say, **“Now that you have learned about the animals, work with your group to summarize the article.”**

Allow ten minutes for this part of the lesson.

Share

Rearrange students into groups of four so that each group has one “expert” in each of the four topics.

Students will be responsible for educating their new group members on their expert topic.

Encourage students to share and explain their information, not simply read or copy each other’s sheets.

Students should record the key points from each expert on their handout.

Process

Ask students to answer the following question:

“Based on what you learned today, what is one way that human activity affects the environment?”

Generalize

Ask students to answer the following question:

“How could you prevent litter and protect animals?”

Apply

Say to students, **“Imagine you are the County Mayor, and you are trying to reach senior citizens with a radio advertisement. Using the scientific articles, work with your group to create a 30-second commercial that encourages listeners to prevent litter in your community. Your topic is, ‘Litter Hurts.’”**

Students will then assume the role of the County Mayor and create their advertisement.

After they complete the radio advertisement, each group should present their work to the class.

Allow at least 15 minutes for this part of the lesson.

Life Skills from TIPP for 4-H

6th Grade

- Send and receive information using speech, writing, gestures, and artistic expression. (Heart Relating)
- Use basic reading, writing, arithmetic, and mathematical skills. (Hands Working)

7th Grade

- See the difficulties as a problem that can be endured or resolved. (Head Managing)
- Demonstrate the ability to communicate a vision for a given problem or situation. (Hands Giving)

8th Grade

- Communicate accurate information on a given topic to someone else. (Head Thinking)
- Demonstrate characteristics of good character: accepting, compassionate, respect, dignity, honesty, humility, social justice. (Health Living)

Supplemental Information

Educational Standards Met

Standards

SPI0607.Inq.4 Draw a conclusion that establishes a cause and effect relationship supported by evidence.

SPI0707.Inq.4 Draw a conclusion that establishes a cause and effect relationship supported by evidence.

SPI0807.Inq.4 Draw a conclusion that establishes a cause and effect relationship supported by evidence.

6.RI.KID.1 Analyze what a text says explicitly and draw logical inferences; cite textual evidence to support conclusions.

7.RI.KID.1 Analyze what a text says explicitly and draw logical inferences; cite several pieces of textual evidence to support conclusions.

8.RI.KID.1 Analyze what a text says explicitly and draw logical inferences; support an interpretation of a text by citing relevant textual evidence.

6.RI.RRTC.10 Read and comprehend a variety of literary nonfiction throughout the grades 6-8 text complexity band proficiently, with a gradual release of scaffolding at the high end as needed.

7.RI.RRTC.10 Read and comprehend a variety of literary nonfiction throughout the grades 6-8 text complexity band proficiently, with a gradual release of scaffolding at the high end as needed.

8.RI.RRTC.10 Read and comprehend a variety of literary nonfiction at the high end of the grades 6-8 text complexity band independently and proficiently.

Sources

<http://www.learningtogive.org/units/global-garbage/traacherous-trash>

http://www.seagrantfish.lsu.edu/pdfs/factsheets/litter_mess.pdf

http://www.nbcnews.com/id/11387974/ns/us_news-environment/t/tangled-whale-freed-buoys-fishing-gear/#.WWzRBsaZPhM

<https://www.nature.org/ourinitiatives/regions/caribbean/bahamas/howwework/whale-and-plastics.xml>

http://www.humanesociety.org/news/magazines/2009/07-08/the_deadly_truth_about_trash.html

<http://oceana.org/blog/top-5-threats-penguins---and-what-you-can-do-help>

<https://nobodytrashestennessee.com>



Nobody Trashes Tennessee: Environment

While listening to the Sounds of Nature video, what sounds do you hear?
What do you think about those sounds? How do they make you feel?

What did you feel while trying to untangle the mess?
Imagine you are a small duckling. How would you feel if you were tangled in the mess?

How does litter hurt the animal your group read about? Write a summary here.

Nobody Trashes Tennessee: Environment

Write three major points from each animal expert in this box.

Imagine you are the County Mayor, and you are trying to reach senior citizens with a radio advertisement. Using the scientific articles, work with your group to create a 30-second commercial that encourages listeners to prevent litter in your community.