

IMPACT ON THE LITTLE HOUSE

Teacher's Guide

Subject: Life Science
Topic: Land Restoration and Maintenance

Summary:

Utilizing a long-loved children's book, *The Little House* by Virginia Lee Burton -- not to be confused with the "[Little] House on the Prairie," by Laura Ingalls Wilder -- students will be introduced to the concepts of natural and human impacts on ecosystems. In a fun and interactive manner, students will explore environmental change and collect information to create their own book.

Objective(s):

After completing the field lab, students will be able to:

- 1) Compare and contrast the impacts that humans and nature have on the local ecosystems.
- 2) Identify impacts that humans have had on the ecosystem of the Florida State Park that they are visiting.
- 3) Define and provide examples of restoration and maintenance within the state park.

Ecosystem(s):

Dependent upon the state park.

Equipment:

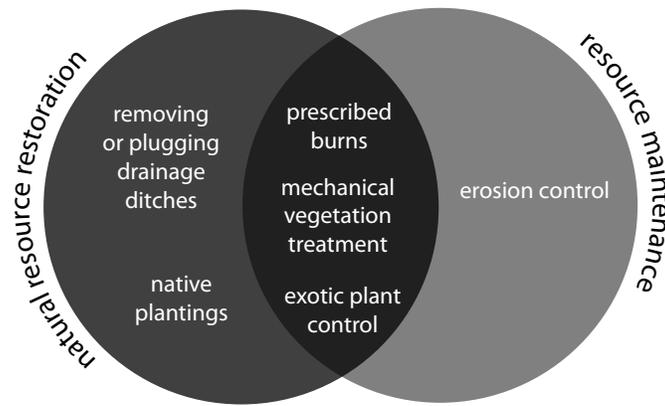
Camera or a cell phone with photo feature, *The Little House* by Virginia Lee Burton

Background:

- Vocabulary: restoration, maintenance, deforestation, urbanization, erosion, air and water quality, changing the flow of water.
- Reference Material: www.dep.state.fl.us/parks/bncr/natural.htm
www.swfwmd.state.fl.us/about/isspapers/publicuses.html
- Equipment Training: Ensure that students know how the camera features work.

Procedure (Engage, Explore, Explain):

- 1) Introduce the book *The Little House* by Virginia Lee Burton (Obviously a children's book, but familiarity with the book is critical for setting up this exercise.)
- 2) Discuss the impacts that humans had on the environment of the Little House, as stated in the book.
- 3) Ensure that students recognize the processes of urbanization, deforestation and erosion.
- 4) Have students discuss, in small groups, the above terms and relate those terms to the story.
- 5) Utilize a graphic organizer (Venn Diagram) to aid the students' comprehension. Compare and contrast the effects that humans had on the Little House vs. those changes caused by nature.
- 6) Introduce, based on the graphic organizer, the difference between natural resource restoration and natural resource maintenance. Both restoration and maintenance of natural resources are human activities which help the environment vs. urbanization and deforestation which hurt the environment. Utilize the references in this lesson to create a Venn Diagram, comparing and contrasting natural resource restoration and natural resource maintenance. As shown in the sample diagram: planting native trees and native groundcovers, and removing or plugging drainage ditches (changing the flow of water) are exclusive to natural resource restoration; erosion control is exclusive to resource maintenance; and prescribed fire, fire, mechanical treatment of vegetation and exotic plant control are common to both.



Note: The definition of maintenance should not be confused with park or school ground regular maintenance i.e. trash pick-up, painting buildings, planting decorative plants, etc.

- 7) Discuss the possible natural resource restoration actions and natural resource maintenance processes that could occur for the Little House

These items can be done at the school site or on location:

- 8) Introduce the students to the state park and set up the hike with the following concepts:
 - We will be looking for human impacts, just like we did with the Little House.
 - We will be looking for natural impacts, just like we did with the Little House.
 - Be prepared to discuss natural resource restoration actions and natural resource maintenance processes for the state park.
- 9) Assign groups of three; insure that each group has a cell phone with the camera feature or a camera.
- 10) Take a hike around the state park looking for examples of human impacts, natural impacts, restoration or maintenance that are occurring in an effort to keep the state land balanced between humans and nature,
- 11) Groups should take pictures of the following items throughout their hike:
 - human impacts that create change
 - natural impacts that create change
 - natural resource maintenance occurring in the state park
 - natural resource restoration occurring in the state park
- 12) Upon returning to school, have the students print out their pictures and create a children’s book like the story “The Little House” or recreating the story of the “The Little House” in their own words and pictures. Utilize the Student Data Sheet – Story Board -- to assist the students in organizing their thoughts for the layout of their books.
- 13) Encourage students to draw pictures or use clip art/magazine clippings, in addition to the photographs captured at the park, to fully illustrate their stories.
- 14) Have students share their final products – their own “Little House for _____ State Park” books - with children at the local elementary school library so the younger students can learn the impact humans have on those systems.

Sunshine State Standards:

Science: SC.7.E.6.6
 Language Arts: LA.7.3.1.1, LA.7.3.1.3
 Social Studies: SS.7.G.2.3, SS.7.G.5.1

Student Story Board

Full Name: _____

Date: _____

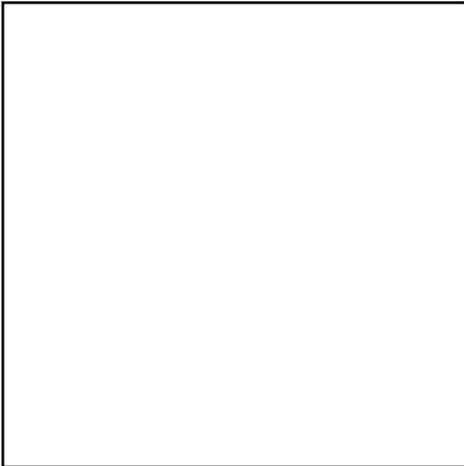


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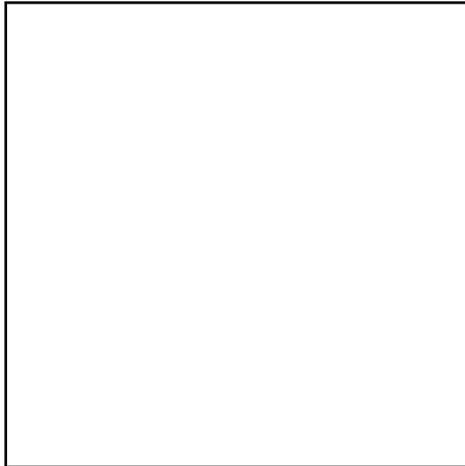


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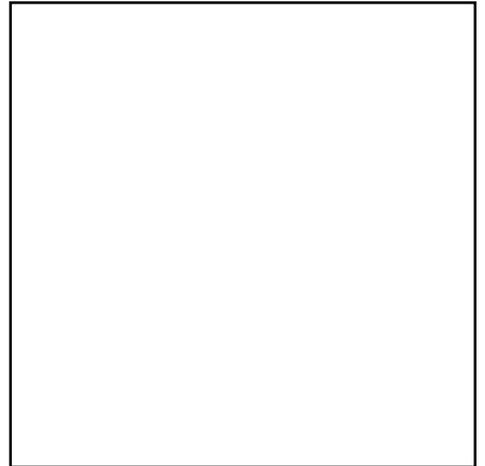


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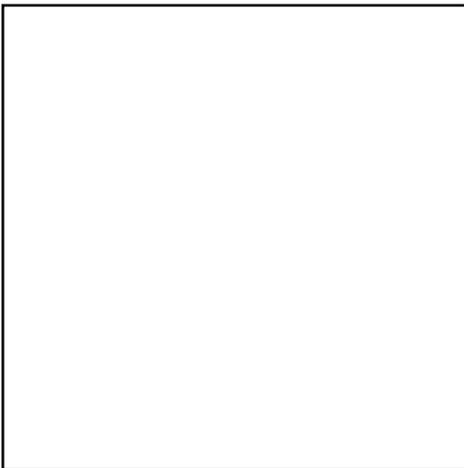


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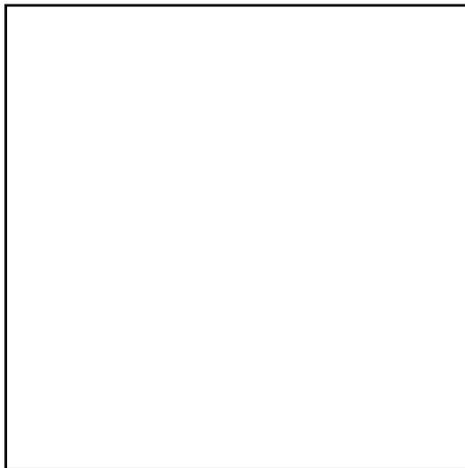


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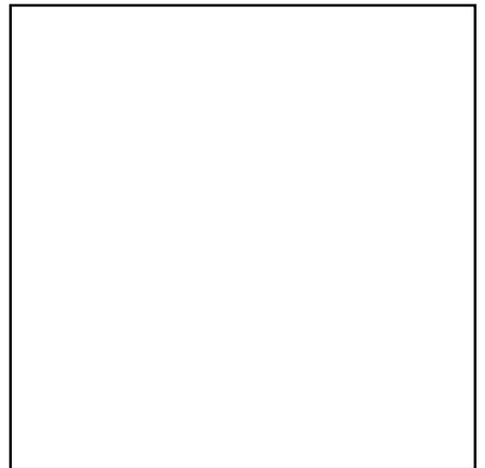


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Assessment:

The final product of the children's book will serve as the assessment for this project:

	0	1	2	3
Grammar & Spelling	Book was obviously not edited and grammar and spelling errors are numerous.	More than 5 grammar and spelling errors	2 to 5 grammar and spelling errors	No more than 1 spelling or grammar error
Graphics & Pictures	Book has less than 2 appropriate photos and graphics	Book has 2 to 3 appropriate photos and graphics	Book has 4 to 5 appropriate photos or graphics	Book has 6 or more appropriate photos or graphics
Natural & Human Impacts	There are no references to natural or human impacts within the story	Student has demonstrated 1 natural and/or human impacts	Student has demonstrated 2 natural and/or human impacts	Student has demonstrated 3 natural and/or human impacts
Restoration & Maintenance	No examples are given	Student provides one example	Student provides some examples	Student has completely and effectively provided examples

