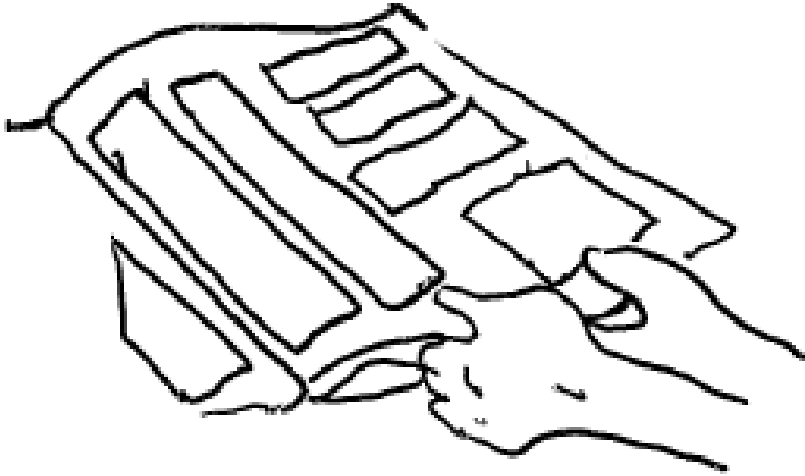


Knowing is Acting



Key Groups:
School groups,
families, Boy
Scouts (ages 12-
15)

Subject: Natural
Resources

Duration: 1 hour-
two class periods
(school groups)

Abilities:
analyzing,
comparing and
contrasting,
discussing,
evaluating,
researching,
public speaking,
writing

Materials: “The
Man Who Planted
Trees” by Jean
Giono (book or
video), pencil,
index cards,
magnifying glass
and/or
microscope, field
guide for plants
and rocks

Vocabulary:
natural resource,
zoning laws,
development
(building), cut
bank, fill bank,
point bar, mid-
channel bar, lake
delta, improper
harvest,
urbanization

Background:

Natural resources, such as minerals, trees, and water, are materials that occur in nature and can be used by human beings. Some of these resources are crucial for survival of both people and animals, whereas others are only used to fulfill our wants. Everything in the natural world is connected, thus the health of our environment determines our quality of life and the life of wild animals. Trees and plants provide shelter, food, tools, paper, oxygen, and many other

things. Many of our choices may affect the environment, for better or for worse. It is important to be aware of how our actions affect our natural world so we can minimize harmful effects and maximize beneficial effects. This way our children and our grandchildren can also benefit from the sustainable resources and also enjoy their aesthetic qualities. Developing a good conservation ethic and practices at a young age will help kids build a foundation that will last a lifetime and

encourage them to make a positive influence on the world.

Method:

Pre-activity: Complete the scrapbook attached at the end.

Start by telling the kids a person can't care about something or form an opinion until they understand it. They cannot take a stand until they care one way or the other.

Next have the kids write down all the many ways humans and wildlife use natural resources within their environment.

Ask:

What outdoor recreational activities are you involved in?

What products come from the forest?

Obtain a copy of the book, "The Man Who Planted Trees," by Jean Giono. Read the book to the kids or watch the video. After you finish the book...

Ask:

Why do you think Elzeard acted the way he did?

What was the environment like before and after Elzeard planted trees?

What was the author trying to teach about the power one individual can have?

Activity #1: Students will role-play a meeting of a county commission regarding land usage.

The hypothetical situation to be copied and passed out to the kids:

A ranching-logging community is home to 20,000 people. A lumber company wants to enlarge its undertakings, which will create 200 jobs. A 150 home subdivision has been put forth for a 60 acre plot of undeveloped land on the north side of town. The forest is bordered by a stream on the east, but each home would have its own septic system. The stream gives people the chance to fish. Fifty species of birds have been spotted in the area, including some endangered ones. In the fall and spring, waterfowl and deer need resources for food. Many nongame animals, such as squirrels, live in the forest. Currently, the plot of land is used for agriculture and forestry and would have to be rezoned as residential by the county commissioner's vote.

Here are the roles students will play (what they will volunteer for):

1. Chairman (the teacher will play this part): introduces everyone at the meeting, and maintains order.
2. County Commissioners: listens to the different points of view at the hearing, votes on a course of action and gives their reasons for the decision.
3. Local Residents (ranchers, recreationalists, etc.): write a letter defending a particular point of view and prepares/asks questions at the hearing.
4. Business People (grocery store, owners, realtors, logger, banker, etc.): write a paper describing their circumstance and how their business will be affected by the proposal, and prepares/asks questions at the hearing.
5. Reporters: writes an article about the proposal and everyone who's involved, and prepares/asks questions at the hearing.
6. Outside Experts (environmental specialists, developers, etc.): prepares technical reports about impacts of the proposal and

answers questions at the hearing).

Anticipated schedule:

-1st Day: Read and pass out the background information. Select roles to play and make nametags. Prepare presentations (letters, papers, articles, reports). Have presentations become homework if necessary.

-2nd Day: Have the hearing: The chair man (you) introduces everyone and then everyone takes turns giving their presentation, asking questions, and answering questions. At the end of the meeting, the county commissioners will vote and explain why they made their decision. Once the results are in, the outcome will be determined and discussed as a group.

Activity # 2: Kids complete the naturalist catalog attached at the end to learn about forest elements, how we use them, and how they are affected. After they have finished with the catalogue, explain to them that having the knowledge is not enough. With their learning comes action. They can use what they learned to plan and implement a project to enhance the environment. Working in small groups or one large

group, they can come up with a goal, write out the steps needed to accomplish the goal, the process to implement their idea, and record their progress and result.

Assessment:

- Activity # 1: What are zoning laws? List the different ways zoning laws affect people and the environment. Describe how zoning laws are passed.
- Activity # 2: How are natural resources used by people and animals? Why is it important to take care of them?

Further Learning:

- Let the kids form opinions about environmental issues by completing the attached paper at the end.
- Have the kids come up with individual or group projects to better the environment.
- Write a letter to your congressmen and address an environmental issue you are concerned about.
- Research an environmental job and find out the education, training, and experience needed for it.

Works Cited

Irving, C. (n.d.). *The Effects of Littering on the Environment and Animals*. Retrieved June 27, 2013, from ehow:

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Scheid, J. (n.d.). *Littering the Environment*.

Retrieved June 27, 2013, from love to know green living:

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The Free Dictionary. (n.d.). Retrieved June 27, 2013, from natural resources:

<http://thefreedictionary.com/natural+resources>

Belief Statements

Rate between 1 and 10 (1- totally disagree, 10- totally agree)

- 👉 If it comes down to protecting people or animals, we should protect the people first.
- 👉 Natural resources should not be left unused if they could improve the quality of life for people.
- 👉 The government is doing a good job of safeguarding our country's wild places.
- 👉 People should be able to do whatever they want with their own land.
- 👉 Conserving natural resources is mainly the government's responsibility.
- 👉 Everyone has a right to clean water and air.
- 👉 We have a responsibility to protect all natural resources on Earth.
- 👉 Human overpopulation is the biggest aspect that causes environmental damage.
- 👉 People should preserve the environment even if most people will never visit the area.
- 👉 Natural resources are there for us to use. We cannot afford to preserve these resources.
- 👉 Environmental damage is the largest issue humanity faces in our day and age.
- 👉 Our current laws are enough to maintain pollution and make sure future generations have clean water and air.
- 👉 We will someday create new technologies to deal with issues regarding natural resources.
- 👉 Recycling is the best way for people to protect the environment.
- 👉 Our future is connected to other living organisms. If we are to thrive, we must look after all species and their habitats.



Knowing is Acting:

A

Naturalist's

Catalog

Tree Name:

Characteristics:

Habitat Description:

Drawing:

Tree Name:

Characteristics:

Habitat Description:

Drawing:

Tree Name:

Characteristics:

Habitat Description:

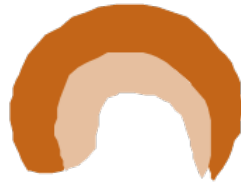
Drawing:

Tree Name:

Characteristics:

Habitat Description:

Drawing:



Rock Type:
Origin:
Characteristics:

Drawing Under Magnifying Glass or Microscope:

Rock Type:
Origin:
Characteristics:

Drawing Under Magnifying Glass or Microscope:

Rock Type:
Origin:
Characteristics:

Drawing Under Magnifying Glass or Microscope:

Rock Type:
Origin:
Characteristics:

Drawing Under Magnifying Glass or Microscope:

Drawing:	Drawing:	Drawing:	Drawing:	Drawing:	Drawing:	Drawing:
Plant Name:	Plant Name:	Plant Name:	Plant Name:	Plant Name:	Plant Name:	Plant Name:
Habitat:	Habitat:	Habitat:	Habitat:	Habitat:	Habitat:	Habitat:



<p>Cut Bank: Sediment Grain Size Found There: Identified on the Stream: Yes No</p>	<p>Drawing:</p>
<p>Fill Bank: Sediment Grain Size Found There: Identified on the Stream: Yes No</p>	<p>Drawing:</p>
<p>Point Bar: Sediment Grain Size Found There: Identified on the Stream: Yes No</p>	<p>Drawing:</p>
<p>Mid- Channel Bar: Sediment Grain Size Found There: Identified on the Stream: Yes No</p>	<p>Drawing:</p>
<p>Lake Delta: Sediment Grain Size Found There: Identified on the Stream: Yes No</p>	<p>Drawing:</p>

To our Economy (products):

Explanation:

Protection and Enhancement of Soil:

Explanation:

Clean Water:

Explanation:

Forest Contributions to our World

Clean Air:


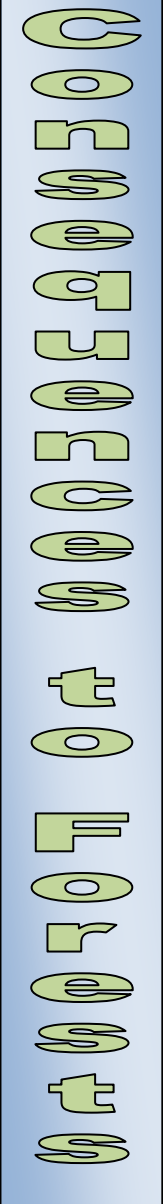









Explanation:

Protection and Enhancement of Wildlife and Fish Habitat:

Explanation:

Our Social Well-being (i.e. recreation):

Explanation:

<p> Wildfire: Explanation:</p>	<p>Drawing:</p>		<p> Absence of Fire: Explanation:</p>	<p>Drawing:</p>
<p> Insects: Explanation:</p>			<p> Tree Diseases: Explanation:</p>	
<p> Air Pollution: Explanation:</p>			<p> Overgrazing: Explanation:</p>	
<p> Wildlife Overpopulation: Explanation:</p>			<p> Improper Harvest: Explanation:</p>	
<p> Urbanization: Explanation:</p>			<p> Land Pollution: Explanation:</p>	