

Activity Guide
**Tripping with
Terwilliger**



**Classroom and Field Activities
for the
Five Nature Education Films
featuring
Elizabeth Terwilliger
Educator and Naturalist**

Oak Woodland

Content

Children explore an Oak Woodland habitat, led by world renowned naturalist, Elizabeth Terwilliger. Together they examine the hidden world under a log and learn how the log, through decay, becomes a part of the earth - ready for new plants to grow. The film emphasizes the importance of the interrelationships of all creatures and plants. In her delightful, entertaining way, Mrs. T. introduces viewers to "Mother Nature's scrub brush and towel," "Mr. Bullfrog," mistletoe, mushrooms, and filaree. She makes a crown for a child of bed straw, "fit for a princess." The film concludes around a campfire with songs written and performed by Dan Whittemore that underscore the theme of the film.

Purpose

To take the outdoors and its creatures to children in classrooms. To create in children an awareness and appreciation of Nature so that, as adults, they will be able to make responsible decisions to protect, preserve and restore the natural environment and wildlife habitats.

Vocabulary

bed straw	egg cluster	owl pellets
black oak	filaree	polliwog
black-widow spider	great horned owl	ring-necked snake
bull frog	live oak	scorpion
California newt	millipede	slender salamander
centipede	mistletoe	termite
cricket	moss	white oak
darkling beetle	mushroom	

Related Activities

1. "Who Is It?"

Think of a statement or question about one of the creatures in the "cast." Be sure it reflects an important characteristic or property of the subject.

Example:

"Who eats wood, as very few could?"

"Somersaults, back flips, over I go. Who am I, I bet you'll know!"

"I have five toes, and a big fat nose!"

"Who carries a big red sign that says, 'Visitors Beware'?"

"Who gives back fur and bones after every meal?"

"What is Nature's Scrub Brush and Towel?"

2. "Do You Remember?"

How many days a termite can fly?

Which species of the oak tree loses its leaves?

Which oak species is evergreen?

Who nibbled on the mistletoe?

How many toes did the bullfrog have?

Were his front feet the same as his hind feet?

How should you hold a snake?

Why did the bark of the tree grow around the barbed wire?

3. "Classified Creatures"

Try sorting some of the cast into categories.

Example:

Furry	Feathery	Bumpy	Smooth	Or (no legs, two legs, four legs, more legs; Vertebrate, Invertebrate, Herbivore, Carnivore, etc.)
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4. "Mystery Guests"

Scramble the letters in the names of some of the "Cast." The children will enjoy unscrambling the letters to discover the "Mystery Guest"

Example: grof = frog

5. "Together, Together"

Choose any two members of the "cast." Try to demonstrate a relationship between them. (Are they dependent upon each other? How are they alike/different?) Look for interrelationships.

Example:

Rocks provide a sheltered area, higher in humidity, for those living below.

NOTE: Always replace rocks when you look beneath them. It takes a year or more for these populations to become re-established.

Redwood Forest, Stream, Ocean Beach & Monarch Butterfly Trees

Content

"Look around you and say, I'm on my way, outside happy and free," so the song goes. A vicarious journey through Mother Nature's wonderlands, guided by naturalist, Elizabeth Terwilliger. In the spirit of "Canticle to the Sun" and Francis of Assisi, we learn to enjoy nature by using our five senses. Walk in a redwood forest, follow a rushing stream down to the ocean beach and to the foot of butterfly trees. We are introduced to "Mr. Poison Oak," "Mrs. Black Widow Spider," "Mr. Sea Gull," and all their neighbors who graciously host our visit.

Purpose

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Vocabulary

anemone	garter snake	rattlesnake
banana slug	gooseneck	redwood tree
bark	barnacle	seaweed
beach	monarch butterfly	sea gull
black-widow spider	mushroom	seeds
buckeye	pelican	starfish (sea star)
fireweed	poison hemlock	toadstool
	poison oak	turkey vulture

Related Activities

1. Bring inexpensive digital cameras on a nature discovery walk and record what you find. Lessons in language arts can be built around these images.
2. Compare beaks and feet of different birds. What do they eat? Where do they live? Do they compete with other animals?
3. Using books like *Animal Hotel* by Jean Garrigue or *Animal House* by Aileen Fisher, develop parallel reading experiences and child-authored stories written or dictated.
4. Discuss why it is important to leave an animal in its natural habitat and not bring it back into an artificial environment.
5. Using only the sound track of the film, have the children illustrate parts of the film. The drawings can be made into their own nature filmstrips.
6. Read related children's stories and discuss or compare them to the experience in the film, eg., *Tales of Uncle Remus*, by Joel C. Harris; *Just So Stories*, by Rudyard Kipling; *Rabbit Hill*, by Robert Lawson.
7. Encourage children to write short poems, or haiku, and illustrate.
8. How many songs about animals and nature do we know? Can we make up any songs of our own?
9. Make a classroom "feelbox." (See center page)
10. Make sentences using the natural science vocabulary.
11. Hold simple discussions about the balance of nature...
12. What does "Mr. Banana Slug" have for lunch? Who preys on the banana slug? Develop other food chain examples.
13. Pantomime bird flight patterns -- "straight out for a hawk," "V for vulture," "1,2, 3, 4, 5, 6, 7 hold" for a pelican.
14. Discuss various means of seed dispersal...fireweed carried by wind, other seeds cling to animal fur, clothing, and shoes, etc.
15. Identify sea shells. Did you see the limpet and turban shells in the film?
16. To learn more about poisonous plants and animals in your area, go to: <http://ehs.okstate.edu/links/poison.htm>

Wildlife Advisory: If you find a sick or injured animal, contact your local wildlife rehabilitation center. Find it at: www.tc.umn.edu/~devo0028/ (click on: ★★Locating a Wildlife Rehabilitator). See * on last page.

Bay Tidelands

Content

Using the theatre of the mind, you are taken on a journey into Nature guided by Elizabeth Terwilliger, naturalist. Passing through the magic door of discovery, we follow "Mr. Raccoon" to a salt water marsh and bay tidelands at low tide. We visit "Mr. Clam" and see "Mr. Snowy Egret," "Mr. Coot" and "Mr. American Egret" and meet their neighbors. We make "Indian chewing gum" from fennel seeds. When we turn over a rock, we see "Mrs. Crab" and the pouch in which she carries her eggs. As we leave the shorebirds and return through the magic door, we are aware of the encroachment of man upon nature's wildlife environment.

Purpose

To take the outdoors and its creatures to children in classrooms. To create in children an awareness and appreciation of Nature so that, as adults, they will be able to make responsible decisions to protect, preserve and restore the natural environment and wildlife habitats.

Vocabulary

amphipod	fennel	periwinkle
barnacle	gum plant	pickleweed
beetle	isopod	pintail duck
canvasback duck	licorice	raccoon
clam	meadow lark	sandstone
common egret	migrating	spider
coot	mouse	snowy egret
crab	mussel	

Related Activities

1. Discuss the importance of tidelands to the food chain. Draw a pyramid on the blackboard starting at the bottom with clams and microscopic creatures living in the mud. Shorebirds feed on these, and larger fish and birds feed on small fish, and man is at the top of the food chain.
2. Compare beaks and feet of different shore birds. What and how do they eat? Where do they live?
3. Learn about Fish and Game laws and how they are related to conservation.
4. What migratory wildlife can be found in your area?
5. Compare man's need for dwellings to those of animals.
6. Read *Pagoo*, by Holling C. Holling, the story of the hermit crab, *Kermit the Hermit* by Bill Peet, or *A House for Hermit Crab* by Eric Carle. Have the children write or dictate further adventures based on the creatures in the film.
7. Discuss why it is important to leave an animal in its natural habitat and not take it into an artificial environment.
8. Listen to the sound track and have the children illustrate parts of the film, and create drawings that can be made into their own nature filmstrip.
9. Encourage children to write short poems, or haiku, and illustrate.
10. How many songs about animals do you know? Can we make up any songs of our own?
11. Take a nature walk for the pure joy of it.
12. Bring a camcorder on a nature walk. Capture natural sights and sounds and make commentary on the trip.
13. Use the vocabulary as a basis for language art activities or spelling enrichment.

Plant Advisory: "Indian chewing gum" - Make certain a naturalist or botanist has identified the seeds as fennel - and not poison hemlock. Point out the difference between the two plants. One is edible, one is poisonous!

HOW TO MAKE A "FEELBOX"

1. Cut a child's hand-size square in the end of a shoebox.
2. Attach a cloth curtain on the inside so that it hangs down and covers the opening.
3. Secretly place a variety of natural objects, with different textures inside (shell, pinecone, feather, rock, bark, leaf).
4. A child puts a hand inside and describes what the object feels like (Is it rough, is it smooth? Is it round or square), then guesses what it is.

Grassland, Chaparral and Fresh Water Pond

Content

"Got a minute? Life is full of beautiful things." Take a vicarious trip from the sparse greenery of the city to the great outdoors of the country. Our journey of discovery first takes us through chaparral as we uncover some of Mother Nature's secrets by tasting, seeing, and feeling. On to the grassland and a marvelous feeling of sharing as wildflowers in a vast array of colors and shapes unfold. Finally, the freshwater pond where tules provide nesting materials and shelter for birds. The three wildlife habitat areas reveal to children some of the creatures who live there, feed there, and pass by.

Purpose

To bring the outdoors and its creatures to children in classrooms. To create in children an awareness and appreciation of Nature so that, as adults, they will be able to make responsible decisions to protect, preserve and restore the natural environment and wildlife habitats.

Vocabulary

air cells	footsteps-of-spring	poison oak
alligator lizard	gopher snake	pollen
blue-bellied lizard	grassland	poppies
bracken	hawk	redtop
buttercup	hound's tongue	red-winged blackbird
cattails	huckleberry	sage brush
ceanothus	Indian Paintbrush	salamander
chaparral	Indian warrior	scrub jay
chaparral pea	jack rabbit	shooting star
chaps (chaparejos)	Johnny-jump-up	sun cup
checker bloom	lupine	tapaderas
chickweed	madrone	tick bush
coyote bush	mallard duck	tules
deer snack bar	manzanita	turkey vulture
deer trail	miners' lettuce	wrentit
Douglas iris	mission bells	zigadene
erosion	mule ears sunflower	

Related Activities

1. Compare the three habitats: chaparral, grassland, and fresh water pond. Describe the different food chains and types of animals common to each and their adaptation to their surroundings. How has man adapted to these surroundings in his clothes, his transportation?
2. Discuss why it is important to leave animal life in its natural state and not bring it back into an artificial environment.
3. Play an identification game by describing certain qualities of a plant or animal and having another guess, i.e., "a head like your finger, and a tail like a pencil point." What is it?
4. Take a walk. Make up songs like the one in the film. "Who sees a _____?" Ask children to answer, "I do, I do." And respond with "I see a _____."
5. Refer to wildflower books, or take a camera walk and then have children illustrate various flowers to make their own "book" of those they have seen. Discuss why we never pick wild flowers!
6. Cut out pictures in nature magazines and have children write a description or story about the picture.
7. Discuss the reasons for certain names such as "gopher snake" and "miners lettuce" and other names on the vocabulary list.
8. Divide the natural science vocabulary into categories. Choose some of the words to tell a story.
9. Alert the senses with sound identification activities and make a classroom "feelbox." (See center page)
10. Pantomime bird flight patterns - "straight out for a hawk" and "V for vulture."
11. Note leaf adaptations for water conservation in the chaparral. Why is this necessary and important?
12. Examine mouse and/or gopher hole entrances/exits for evidences of inhabitation (seeds, tracks, droppings). Consider who else might inhabit a mouse hole after it is deserted (spiders, bumblebees, wasps, snakes). Look for "mouse streets."
13. Discuss protective adaptation of animals (placement of eyes to see front, sides, and back; coloration, camouflage, etc.).
14. Show your class the parts of a flower. Cut out different colored pieces and use with felt or magnetic board, peeling off petals, etc.
15. How are flowers pollinated? (i.e., wind, insects, birds, self). How are seeds dispersed? (i.e., wind, water, birds' feet and droppings, people's socks and shoes, animals' fur.)
16. Find examples of erosion taking place near your home or school. Make a soil exhibit with one side planted, one side bare. Show the difference in water color after it filters through the soil.

Sights and Sounds of the Seasons

Content

People move from place to place because of their family needs - a better job, weather, home, living conditions. Many animals and birds migrate during the year for some of the same reasons. A family has just moved from the East Coast to California and neighborhood children introduce them to Mrs. Terwilliger. She shares exciting experiences with them, magically showing the four seasons of northern California. We see migrating waterfowl on the Pacific Flyway and the annual migration of gray whales along the Pacific Coast. Children experience the seasonal changes of flora and fauna indigenous to these areas.

Purpose

To encourage children to use their five senses in being aware of their immediate surroundings and the changing seasons. To take the outdoors and its creatures to children in classrooms. To create in children an awareness and appreciation of Nature so that, as adults, they will be able to make responsible decisions to protect, preserve and restore the natural environment and wildlife habitats.

Vocabulary

Alaska	coyote	migrate	sea lions
autumn	dogwood	migrating	seasons
badger	evergreen	waterfowl	senses
bark	fog	oceanic	shoveler duck
baja	fox	oak	sierra
bear	Golden Gate	Pacific Flyway	snow goose
beets	grasshoppers	piglet	spawn
calla-lily	gray whale	pollen	spring
calves	gull	potatoes	summer
Canada	Halloween	Pt. Reyes	sunflower
goose	hay	National	surf scoter
cattails	herring	Seashore	tassel
cinnamon	kid	pumpkin	vine
teal duck	killdeer	pup	weasel
corn stalks	lamb	raccoon	whistling swan
colt	mallard duck	salmon	widgeon duck
coot	maple	sandhill crane	winter

Related Activities

1. Discuss the characteristics of California's "seasons." How are they similar to other areas? How different? Which of them are common in the area in which the viewers live?
2. Study pictures in nature magazines. How can you tell which season it is by looking at the pictures? What clues do you find?
3. Discuss why it is important to leave animal life in its natural state and not bring it back into an artificial environment.
4. Play an "identification game" by describing a plant or animal, as was done in the film, and ask "what is it?"
5. Capture as many natural sounds as possible by bringing a tape recorder on a nature walk. Use these later for identification games to relive the experience.
6. Make use of the natural science vocabulary - grouping, making stories, etc. - all based on the vocabulary list.
7. Alert the senses with sound identification, and make a classroom "feelbox." (See center page)
8. Play matching games between species and their young. For example, whale-calf, seal-pup, goose-gosling, etc.
9. In your schoolyard, select a special tree and draw a picture or take a photograph of it in every season.
10. A variety of activities can be a cooperative effort - painting, diorama, or murals, showing seasonal changes.
11. Make simple maps designating Northern California regions: Point Reyes, Pacific Flyway, San Francisco Bay, Golden Gate.
12. Make rubbings or laminate leaves to illustrate seasonal changes.
13. To reinforce what the children learned, replay the films without the sound - and have the children narrate.
14. Find out where the birds in your area go when they migrate. Get a map and trace the route. What is the climate like there? Compare the habitats. Why is it important to preserve wildlife marshes, open space and preserves? Look at the Pacific Flyway, north and south migration routes on your map.
15. Check out the role of the U.S. Fish and Wildlife Department in providing marshlands, food, etc., for migrating waterfowl in your area. What do the birds eat?

***Wildlife Advisory:** These films showcase the pioneering multi-sensory teaching methods of renowned environmental educator Elizabeth Terwilliger. The California Department of Fish and Game now discourages the handling of wild animals which may carry and transmit diseases that are harmful to humans.



Films Produced by Joan Linn Bekins
Directed and Edited by William E. Cohen
Cinematography by Sam Lopez Sound by Will Harvey
Songs Composed and Performed by Dan Whittemore
DVD Compilation and Design by David M. Gotz

Educators praise *Tripping with Terwilliger*

“Using Mrs. T’s teaching methods, I learned new ways to hold my students’ attention. I recommend these 15 min. films to all elementary school teachers.”

“The Activity Guide helped me meet our science curriculum standards.”

“My language challenged students enjoyed and understood the films – because of Mrs. T’s visual instruction.”

“The children cast in these films represent ethnic backgrounds that our students can identify with.”

“The films teach children to take responsibility for their actions – they see ‘cause and effect’ examples in Nature – from poison oak to crabs on the beach.”



Order DVD, VHS & download
Activity Guides at:
www.TerwilligerFilms.org
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