

A study guide for the film

## THE TREE

Second Edition

MP-112

1980-81

Subject areas: Science, language arts

Grade level: P, EL

Length: 11 minutes

COLOR

### CONTENT

A girl discovers how living things depend on each other — and how much there is to see, just sitting under a tree.

She observes a community of living things (and finds that she's part of it too). Birds, sowbugs, earthworms and people are all important to the tree. And the tree, in turn, depends on these living things around it.

### PURPOSE

To help students to understand the concept of interdependence among living things. To encourage careful observation of living things.

### DISCUSSION QUESTIONS

#### Before the film

Imagine that you are sitting under a tree. What living things could you see there? *Birds, soil animals, insects, etc.* Is the tree useful to any of these living things? How? Can you think of any ways in which these living things help the tree? Are living trees useful to you? How? Are you useful to trees? How?

#### After the film

List things you might see ... just sitting under a tree.

How are trees useful to birds? How are birds useful to trees? Give examples for soil animals, squirrels, people.

What is a community of living things? (*Plants and animals that live together and are useful to one another.*) Are people part of a community of living things?

Can you think of other examples of living things that depend on each other (such as bees and flowers)? What living things do we depend on for our food? What living things do they depend on?

### ACTIVITIES: VISIT A TREE

**Who lives here?** Collect small objects from: under a tree (soil, leaves, parts of insects). Classify according to "once alive"; "never alive". Look for evidence of animal occupation (nests, holes in the bark). Using hand lenses look for insect eggs and

larvae. Hold an open umbrella upside-down under a branch and gently shake the insects down. (What does each one eat?) Replace carefully.

**Conditions for life.** Close your eyes. Can you feel the coolness and moisture under the tree? Use a thermometer to compare the temperature under a tree and on open ground. Measure the amount of light in both places with a light meter. How would variations in temperature and in the amount of light influence where plants and animals live?

### CLASSROOM ACTIVITIES

#### Do earthworms help mix and loosen the soil?

Layer yellow sand and dark loamy soil in a large jar. Wrap with dark paper. Put a few leaves on top, water lightly and add earthworms. After a few days, look for evidence of soil mixing. Can any burrows be seen? Compare worm casts with the original soil. Discuss the ways in which earthworms help plants.

**Do plants put water into the air?** Put two clean, dry jars in a sunny window. Place a leafy twig in one, and close both tightly. Moisture will collect on the inside of the jar with the leaves.

**How do roots take in food?** Sprout radish seeds on a wet blotter. Observe roots as they form. Use a hand lens. Are there root hairs?

**Language arts.** Feel, smell and look at leaves. Think of words to describe shapes, textures, colors, smells.

Think of colorful words to describe the way you feel on a hot noisy city street; under a cool, quiet tree. Use your words to write two contrasting poems.

Write a story titled, "If I were a worm (bird, caterpillar, squirrel)".

**Creative Movement.** Can you make your body move like a tree? Be a tree on a windy day; a hot day; a rainy day. Be a leaf hanging by the tiniest stem; leaves floating to the ground.

**Social Science.** Plants and animals in a community depend on each other. Is our community of people like that? How?

If suddenly there were no trees in the world, what things in this room would not be here (pencils, paper, fruit in lunches...)?

**Art.** Collect different leaves that show veins. Make impressions on clay. Display and compare textures and shapes.

ACSD

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