



# HOW CONVINCING ARE THE FACTS?

**TIME:** 1 Hour

**OBJECTIVE:** To understand the difference between emotional argument and factual argument in decision making.

**MATERIALS:** Information about a forest's contribution to the environment  
Role-playing handouts  
Writing materials

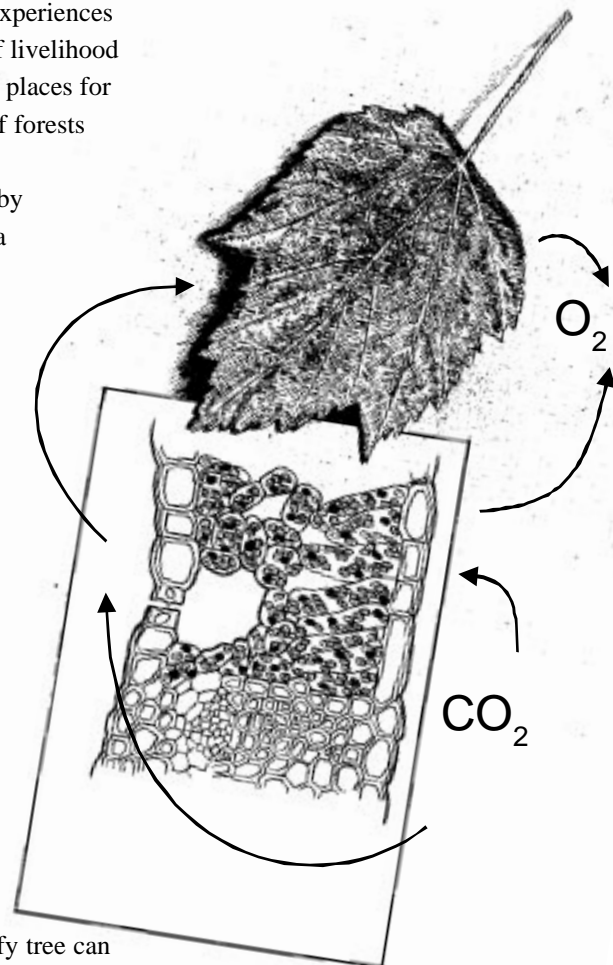
## BACKGROUND:

We all have different opinions about the present and future of forests in North Carolina. These opinions are influenced by our past experiences and whether we are rural residents who see forests as sources of livelihood or wildlife refuge, or we are urban dwellers who view forests as places for recreation. Our opinions are also the result of our knowledge of forests and their role in our natural environment.

We benefit from forests, from the wildlife habitat created by the trees and plants, and from the cleaner air and water that is a direct result of the forest environment.

By exchanging gases and by catching pollution on their leaves and bark, trees and plants cleanse the air we need to sustain life. Trees and plants create the oxygen needed by humans by converting the carbon dioxide which we exhale into oxygen. Trees and plants remove many airborne pollutants. Common pollutants include man-made auto, heating and industrial emissions and naturally caused ozone. Trees can remove such natural pollutants as dust by catching it on their leaves and bark. This is evident from the appearance of trees near unpaved roads or construction sites.

Through the process of transpiration, trees cleanse and cool the environment by absorbing gases and "sweating" moisture through their leaves. In this manner, a large shade tree can "sweat" 100 gallons (860 lbs.) of water on a hot summer day. Trees further contribute to the environment by absorbing and filtering water that is seeping through the soil, thus cleansing the water of pollutants before it reaches the ground water or another water source. A healthy, large, leafy tree can absorb 2000 lbs. of water from the soil every day.



**Plants transform carbon dioxide to oxygen through photosynthesis**

## BRANCHING OUT The NC Forest Stewardship Activity Guide

A good understanding of the benefits provided by trees and plants allows informed citizens to make wise decisions about the use and preservation of forest resources. Wise decisions are necessary to reduce some of the conflict between population growth and the need to protect North Carolina's natural environment.

### BEFORE THE ACTIVITY:

- Gather any available resource information.
- Prepare role-playing handouts.

### LEAD-IN:

Whether a forested area is 2,000 acres or two acres, it provides some specific benefits to us. These areas clean our air and water, provide wildlife habitat, and provide us with wood and paper products.

Think of your relationship with forested areas. Consider these questions:

Do you live near a forested area?

Do you live near a park?

What benefits do you get from living near these areas?

What benefits do you receive even though you may not live near one of these areas?

Can you describe the air when you go to the beach? The mountains?

What is the difference between that air and the air in towns and cities?

If you have just one acre of trees in your neighborhood, those trees can remove ten tons of carbon dioxide from your air in one year.

What would happen to us if all the trees and plants were removed from our environment?

Let's do some role-playing.



Large shade trees can transpire as much as 100 gallons on a hot summer day.

## BRANCHING OUT: The NC Forest Stewardship Activity Guide

### BUILD IT WHERE? (for three players)

Speaker #1: Guess what? I heard the city is going to build a new school over near Holden Creek Park.

Speaker #2: Really? I wouldn't mind going to a new school. This building is old and I'm tired of going to class in a trailer.

Speaker #3: Wait a minute! What about the trees and the plants that will be cut down? What about the animals? Won't everything be ruined forever?

Speaker #2: Wow, I hadn't thought about that part of it. Maybe they shouldn't build it. After all, I heard you can't replace a park.

Speaker #1: C'mon. It's just trees and bushes. What have they got to do with us?

Speaker #3: I don't know. I think it's important to have green things, but I can't remember exactly why they're important.

### ACTIVITY:

1. After the role-playing, ask "Would this conversation be different if the people had scientific information about forests and trees?"  
Option - Make up your own skit - Each group member have a role. —developer , —concerned neighbor , —Realtor, —fast food owner, —naturalist.
2. Of the statements made during the role-playing, which statements could have wrong information? (Each statement could have misinformation.)
3. Divide class into small groups and have groups rewrite the play with correct information.
4. Repeat the role playing with the revised dialogue.
5. When arguments are made about the environment, what role does emotion play in the argument? What role does science play? What role does economics play?
6. Are you more likely to believe an emotional argument or a factual argument?

### BRANCHING OUT:

1. Ask students to read the newspaper or magazines and bring in articles about environmental issues. Are the arguments emotional or factual?
2. Have groups write the dialogue for role-playing about the newspaper or magazine articles. Based on the role-playing, what decisions would the students make? Do students respond with "NIMBY" (not in my backyard)?