



Wednesdays in the Woods Activity: Transpiration Bag

Materials Needed:

- Clear plastic bag
- String or twist tie
- A tree or plant

Instructions:

1. Find a leaf or bunch of needles on a tree. Place the plastic bag over the leaf or needles and tie it closed with the string or twist tie. Make sure no insects are trapped inside the bag. The seal should be as tight as possible.
2. Leave the bag on the tree for a few hours or overnight. Return and observe what happened inside the bag.

Reflective Questions:

- What do you think you will observe happening in your transpiration bag?
- How do plants participate in moving water around on Earth?
- How is transpiration (tree breathing!) similar to and different from human breathing?

Extensions of this activity:

- Try placing transpiration bags on the leaves of several different species of trees or plants. What do you think will happen with each tree compared to the others?
- Try leaving the bags on trees or plants in full sun and full shade and/or for varying amounts of time. How does changing some variables in this experiment affect changes inside the bag?

Transpiration bag



Photo by Hannah Raymond