

HOW MUCH CARBON?

Oregon's forests store approximately 3.2 billion metric tons of carbon in the soil, live trees and dead plant material. During photosynthesis, trees absorb carbon dioxide from the atmosphere and turn it into solid carbon, which is stored in wood. Use the Tree Carbon Tape (on following pages) to estimate the amount of carbon in nearby trees.

Directions:

1. Identify five trees to measure with the Tree Carbon Tape.
2. Determine the circumference of each tree: Hold the tape at about 4.5 feet (1.4 meters) from the ground and wrap it once around the tree trunk. Find the measurement to the nearest 3 inches and record the result below.
3. Use the tape to find the approximate carbon dioxide equivalent (CO₂e) contained in each tree. Record below.
4. Use the tape to find the approximate number of miles driven in a car that would emit the same amount of carbon as there is stored in the tree. In growing to that size, the tree can "offset" the emissions from driving that number of miles.

	Location	Circumference (in inches)	Approximate carbon dioxide equivalent (pounds CO ₂ e)	Approximate car miles offset by tree
TREE 1				
TREE 2				
TREE 3				
TREE 4				
TREE 5				

CALCULATE:

What is the average circumference of this group of trees? _____ inches

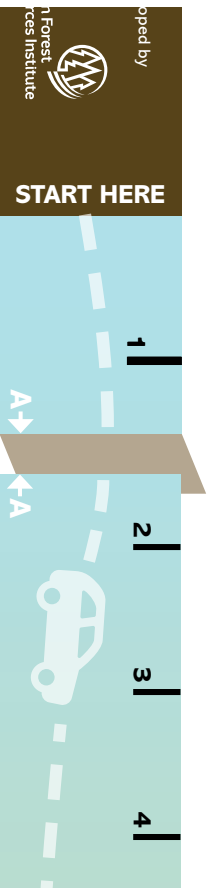
What is the average pounds CO₂e of this group of trees? _____ pounds

About how many total car miles are offset by this group of trees? _____ miles

TREE CARBON TAPE

Making Your Tree Carbon Tape:

- Print out these two pages on 8-1/2" x 11" paper at actual size (100%).
- Cut out all nine sections along the black dotted lines.
- Glue, staple or tape the sections together as shown. The finished tape measure should be 72 inches long.



TREE CARBON TAPE

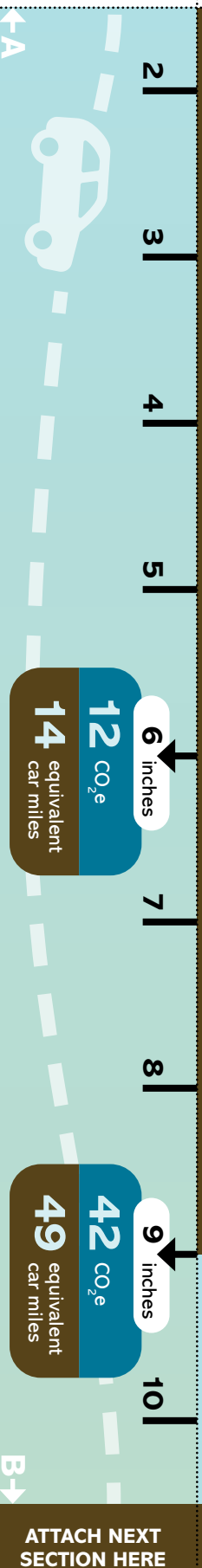
HOW TO USE THIS TAPE Explore a tree's carbon-dioxide equivalent (CO₂e) by measuring the tree at chest height with the Tree Carbon Tape. This tape provides a rough approximation of the amount of carbon a tree can store, and of the number of miles driving a car that emits that amount of carbon.

Developed by
Oregon Forest Resources Institute

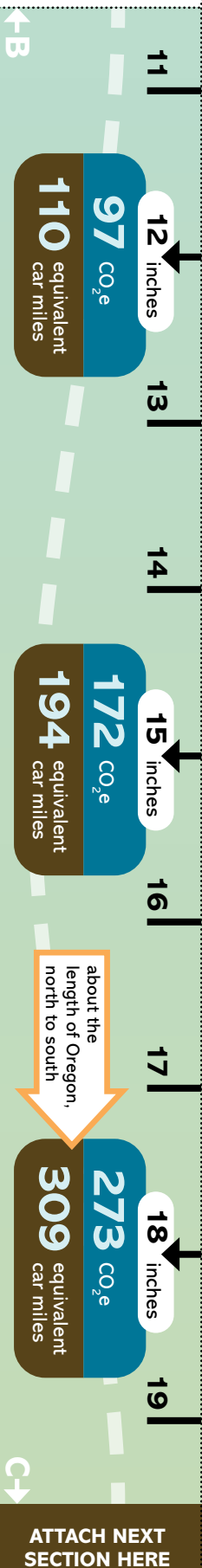
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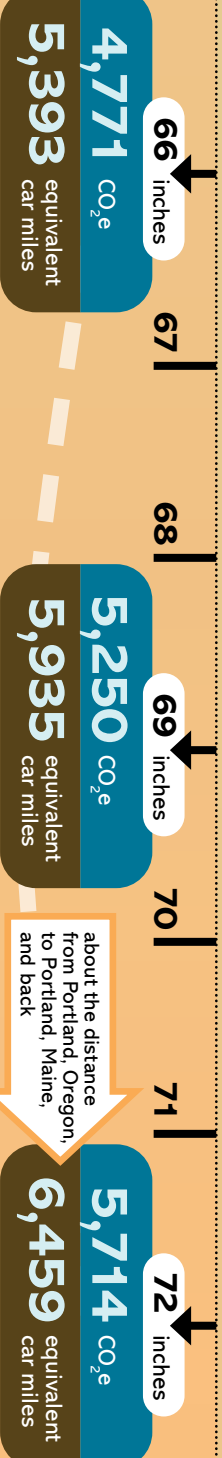
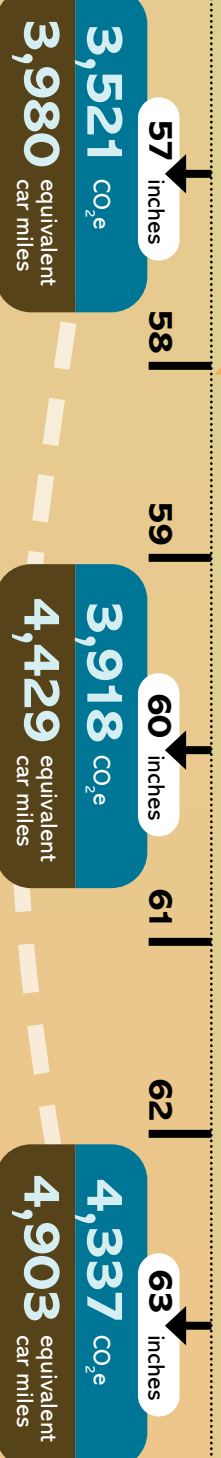
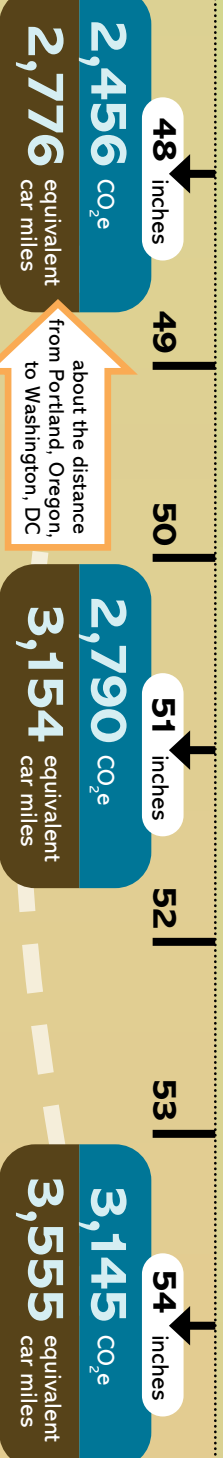
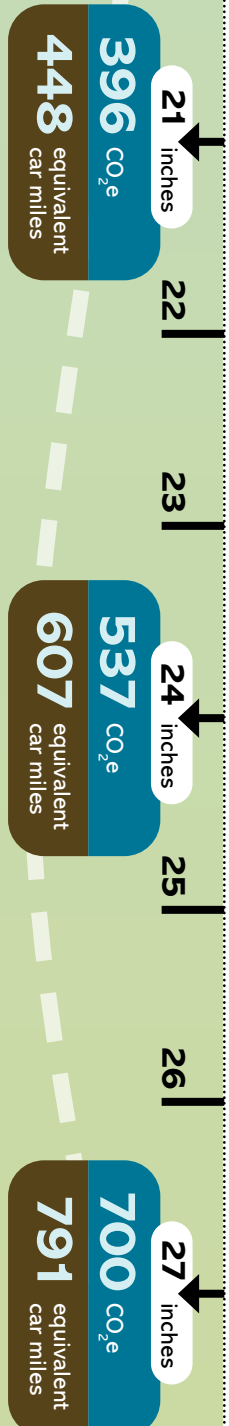


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about the length of Oregon, north to south



about the distance from Portland, Oregon, to Washington, DC

about the distance from Portland, Oregon, to Portland, Maine, and back

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