Woodsy wants children to understand what scientists are discovering. Let’s meet Dr. Lara Roman!
During middle school, Dr. Roman *discovered* (dis *kə vərd*) that she enjoyed science. Dr. Roman liked visiting science museums.

These children enjoy going to the science museum.
Dr. Roman is curious about the environment.

These children are curious about the environment, too.
Dr. Roman is a scientist who studies trees. She studies trees that grow in **urban** areas, like cities, towns, and suburbs.

Urban areas have many people, buildings, and roads.
Urban areas are different from **rural** areas.

Rural areas have few people, buildings, or roads.
Dr. Roman knew that trees can **survive** in urban areas.

Trees need soil, water, air, space to grow, and sunlight to survive.
People plant trees near roads, homes, schools, and parks in urban areas.

These two women are planting a tree along the sidewalk.
People benefit from trees in urban areas. People can enjoy the shade and beauty of trees.

This group enjoys the shade from trees while having a picnic.
Trees help keep the air and water clean. Trees give some animals a place to live.

Trees are good homes for many animals. Can you find all of the animals in this tree?
Dr. Roman asked, “Why do some urban trees survive and some urban trees die?”

One of these urban trees is showing signs that it may not survive. Which tree in this photo may not survive? Why do you think that?
Dr. Roman worked with other scientists to answer her question. She also worked with tree planting groups.

These scientists work together to check on urban trees. Why do you think scientists work with other groups of people?
Dr. Roman and her team of scientists observed the same urban trees for 5 years.

Dr. Roman visited many urban trees and took notes.
They used tools to collect information about each tree.

This tool measures the size of a tree’s trunk.
Dr. Roman learned about the people living near the trees.

The scientists asked people about trees.
Dr. Roman found many healthy trees during her study.

Healthy trees have bark and few broken branches. Healthy **deciduous** trees usually have leaves in spring, summer, and early fall. Leaves can be green, red, yellow, or orange. Some healthy deciduous trees lose their leaves in the winter and grow new leaves in spring.
In summer, an unhealthy deciduous tree may have no leaves or dry, brown leaves.

Unhealthy trees may also have many broken branches or missing bark.
Dr. Roman discovered that many urban trees survived during the 5 years. Some trees did not survive. Some trees were planted without following directions. Some trees were not watered. Some trees were taken out of the ground by people or hit by cars.

The scientist in this photo is measuring an urban tree that has died.
Dr. Roman found that trees in urban areas can survive if people care for the trees. People can help by following directions when planting trees. People can water urban trees. People can look after trees by not peeling bark or breaking tree branches.

These students are taking care of urban trees. What can you do to help the trees near you?
Critical Thinking Questions:

• Taking care of trees is one way to help the environment. What is another way you can help the environment?

• Name at least two things in the environment that help you. How do those two things help you?

• Dr. Roman worked with a team of scientists. Why is it good to work with others? What is a challenge of working with a group? How can you solve that challenge?

• Dr. Roman likes to ask questions. Why do you think it is important to ask questions?
Glossary:

benefit (be nə fit): A good or helpful result.

curious (kyûr ē əs): Eager to find out about something.

deciduous (di si jə wəs): A plant with leaves that fall off at certain times in its life.

discover (dis kə vər): To search and to find.

environment (in vī rə(n) mənt): The living and nonliving things that are a part of the natural world.

healthy (hel thē): Not sick; in good health.

observe (əb zərv): To watch something.

rural (rûr əl): About the country, people in the country, or life in the country.

survive (sər vīv): To remain alive.

urban (ər bən): About the city, people in the city, or life in the city.