

The Forest Where Ashley Lives

Written by Mark A. Vitosh and Ashley L. Vitosh
Illustrated by John L. Smith

The Forest Where Ashley Lives

This project was supported
in part, by a grant through the Iowa
Department of Natural Resources and from the
Urban Forestry Center for the Midwestern States of the
Northeastern Area State and Private Forestry, USDA Forest Service.

Illustrated by:

John L. Smith, Research Associate, Department of Forestry, Iowa State University, Ames, Iowa

Written by:

Mark A. Vitosh, Program Assistant, ISU Extension Forestry, and
Ashley L. Vitosh, 4th Grader, Crawford Elementary School, Ames, Iowa

Designed by:

Juls Design, Ankeny, Iowa

Edited by:

Elaine Edwards and Diane Nelson, Communication Specialists, ISU Extension

Published by:

Iowa State University Extension, Ames, Iowa

*Thanks to all of the students and educators
who assisted in evaluating the book.*

Copyright 2000, Iowa State University Extension, All Rights Reserved

This book may not be copied, reproduced, or distributed under any circumstances without prior permission from ISU Extension. Send permission requests to:
Extension Communication Systems, 3614 Administrative Services Building, #1702, Iowa State University, Ames, IA 50011-3614, Fax: (515) 294-7767

ISBN 0-9700528-0-4

Library of Congress Cataloging-in-Publication Data
Vitosh, Mark A. (Mark Allen), 1966-
The forest where Ashley lives / written by Mark A. Vitosh; illustrated by John L. Smith.
p. cm.

Summary: A girl describes the variety of trees found in her town and how forests provide many benefits for people and animals.
ISBN 0-9700528-0-4 (paperback)

1. Trees in cities--Juvenile literature. [1. Trees in cities. 2. Trees.] I. Smith, John L. (John Lyle), 1964- ill. II. Title.

SB436 .V58 2000
635.977--dc21

00-039697

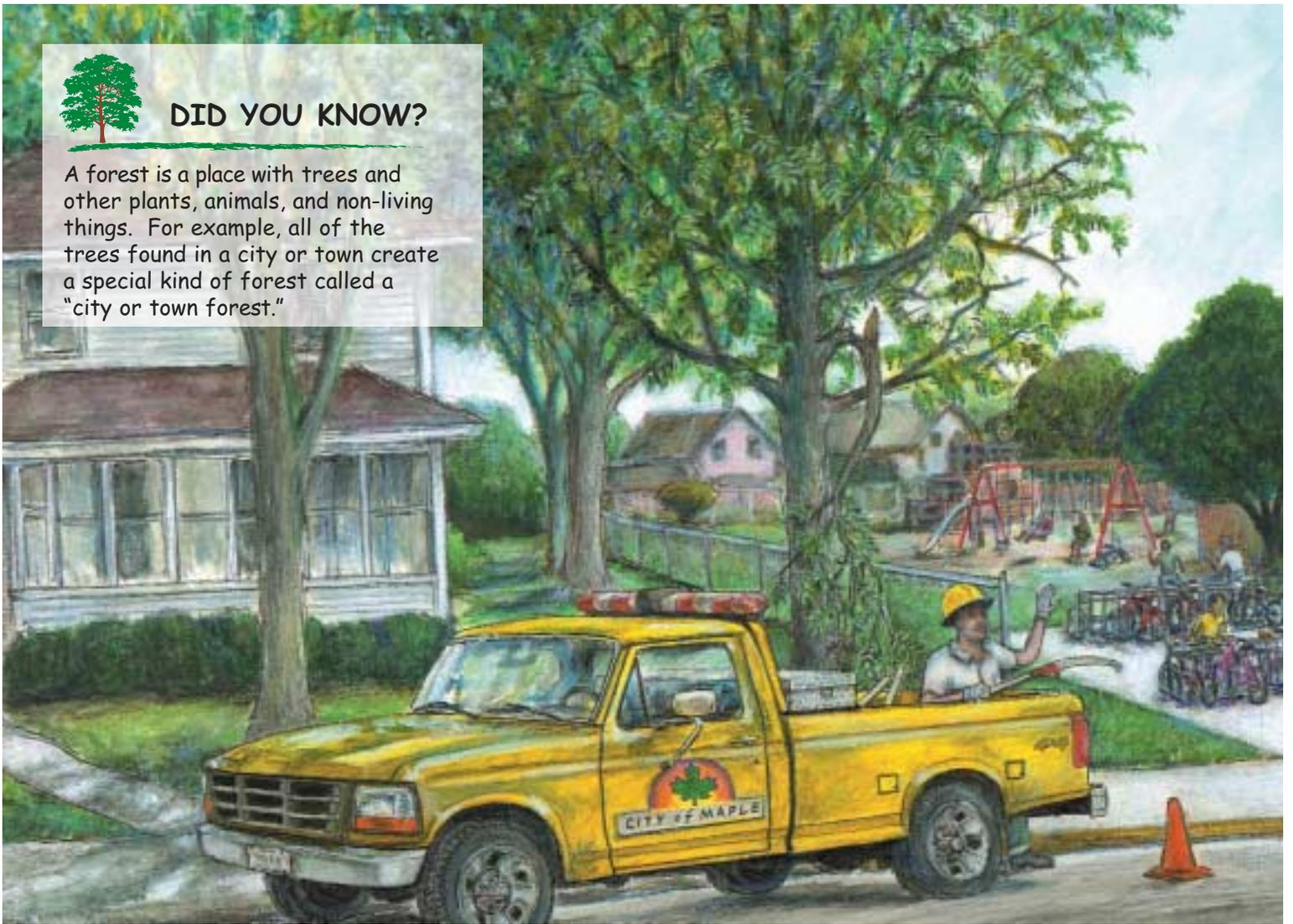


Hi! My name is Ashley. I'm seven years old. I like to play soccer in the spring, ride my bike in the summer, make leaf piles in the fall, and build snowpeople in the winter. I also like to take walks around town with my dad and my dog, Ubu.



DID YOU KNOW?

A forest is a place with trees and other plants, animals, and non-living things. For example, all of the trees found in a city or town create a special kind of forest called a "city or town forest."

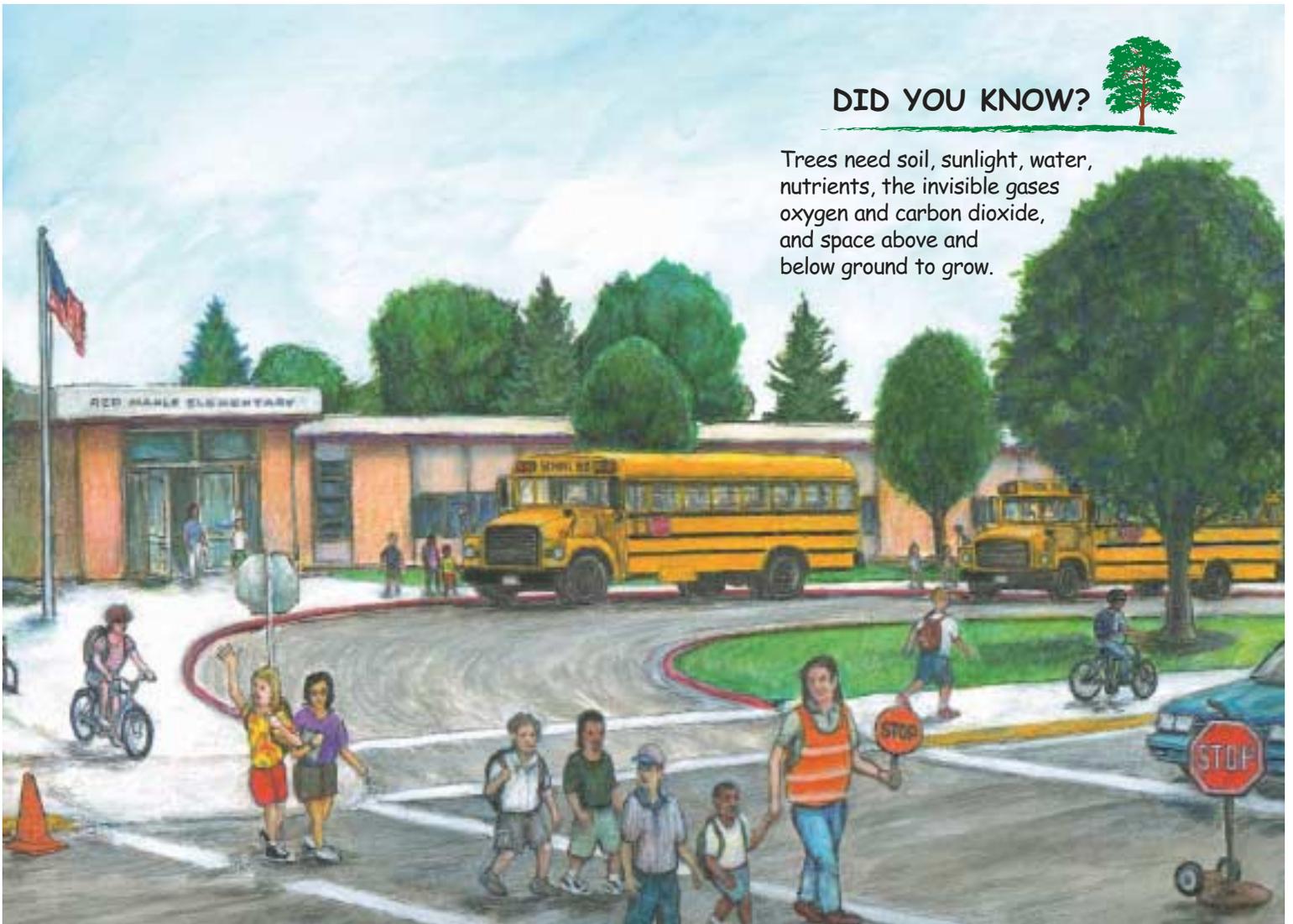


My dad is a tree person. He's called the "town forester" because he takes care of the trees in our town forest. Do you have a forest where you live?

DID YOU KNOW?



Trees need soil, sunlight, water, nutrients, the invisible gases oxygen and carbon dioxide, and space above and below ground to grow.

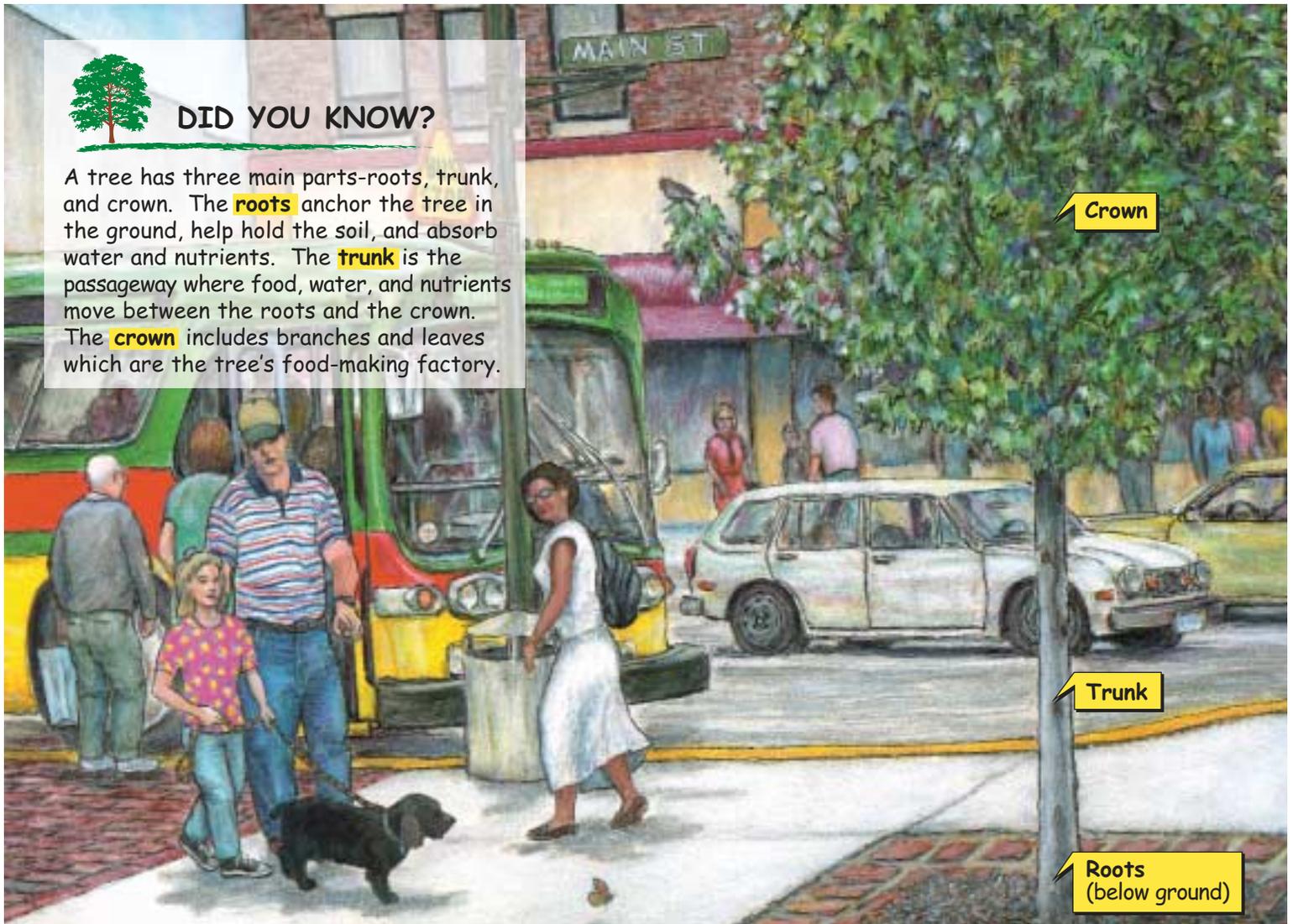


Trees are everywhere in our town forest. They're in the park, at my school, near the creek and river, along the streets, and in people's yards.



DID YOU KNOW?

A tree has three main parts—roots, trunk, and crown. The **roots** anchor the tree in the ground, help hold the soil, and absorb water and nutrients. The **trunk** is the passageway where food, water, and nutrients move between the roots and the crown. The **crown** includes branches and leaves which are the tree's food-making factory.



Crown

Trunk

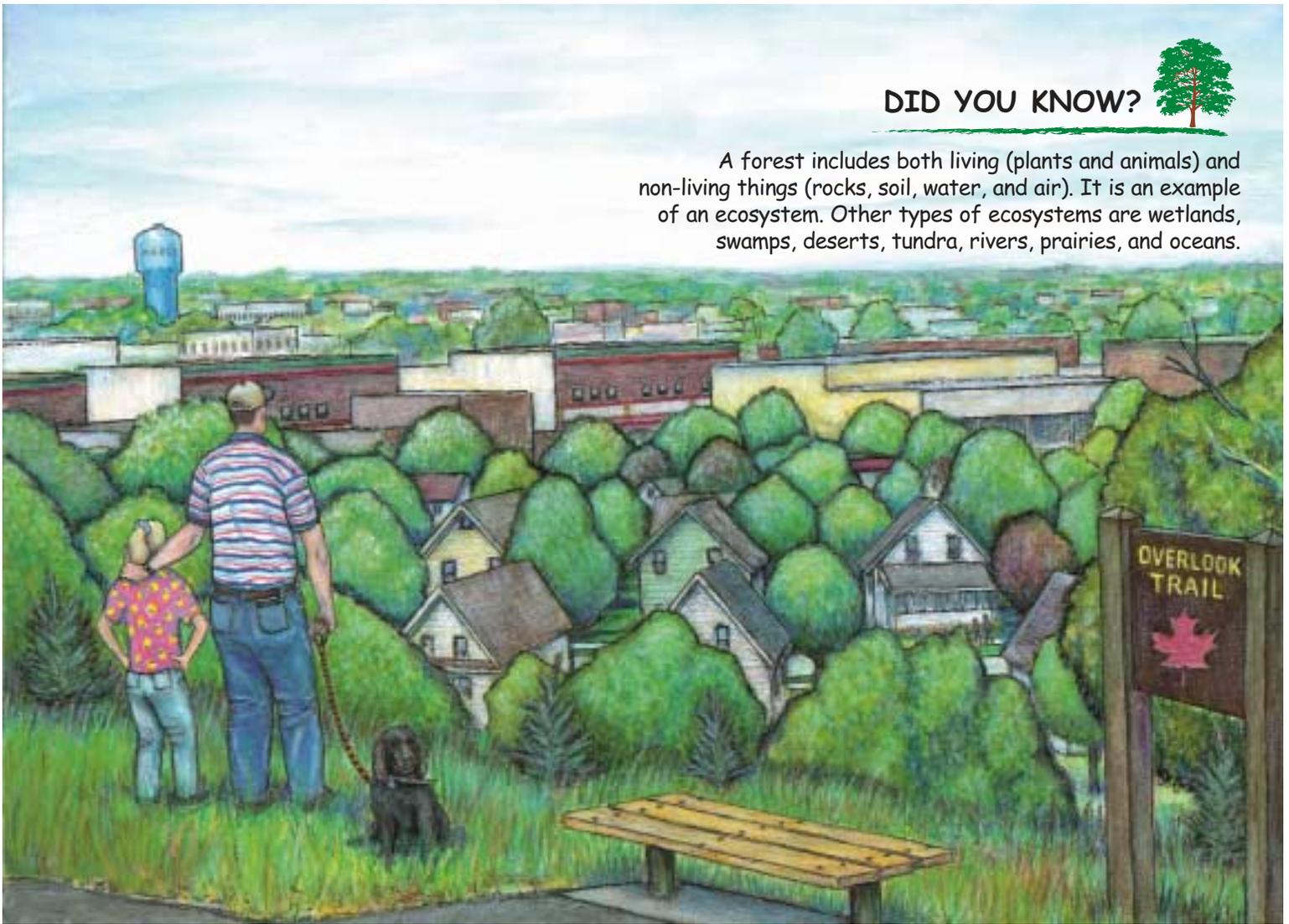
Roots
(below ground)

Our town forest includes more than just a lot of trees. It also has people, buildings, houses, streets, cars, buses, and trucks.

DID YOU KNOW?



A forest includes both living (plants and animals) and non-living things (rocks, soil, water, and air). It is an example of an ecosystem. Other types of ecosystems are wetlands, swamps, deserts, tundra, rivers, prairies, and oceans.



Our town forest also has shrubs, flowers, vines, water, soil, animals, and mushrooms. If you live in a town or city, you probably live in a forest, too.



DID YOU KNOW?

Trees can be identified by different things—such as their leaf shape, leaf edges, fall color, tree shape, bark, fruit, and seeds. Trees that drop their leaves in the fall are known as deciduous trees.



chinkapin oak



crabapple



pin oak



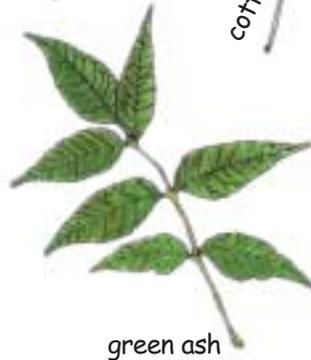
bur oak



white oak



red oak



green ash



cottonwood



river birch



honeylocust



black walnut



Norway maple



mulberry



sycamore



sugar maple



silver maple



American elm

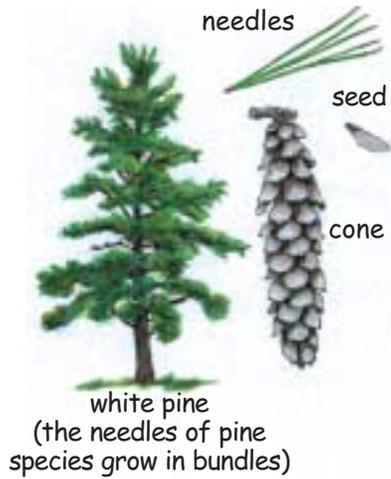


ginkgo

Many kinds of trees live in our town forest. Some have big broad leaves and names like maple, oak, ash, elm, and walnut. These trees lose their leaves in the fall.



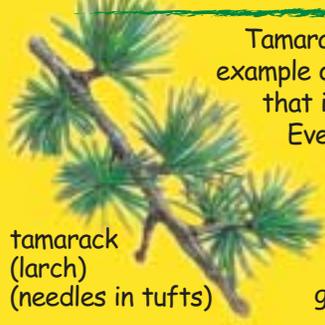
deciduous tree evergreen tree



white pine
(the needles of pine species grow in bundles)

DID YOU KNOW? 

Tamarack (larch) is one example of a conifer tree that is not evergreen. Every fall tamarack needles turn yellow and drop to the ground. New needles grow each spring.



tamarack (larch)
(needles in tufts)



spruce
(cones hang down on branches of spruce species)



4-sided needles

seed



fir
(cones sit upward on branches of fir species)



flat needles

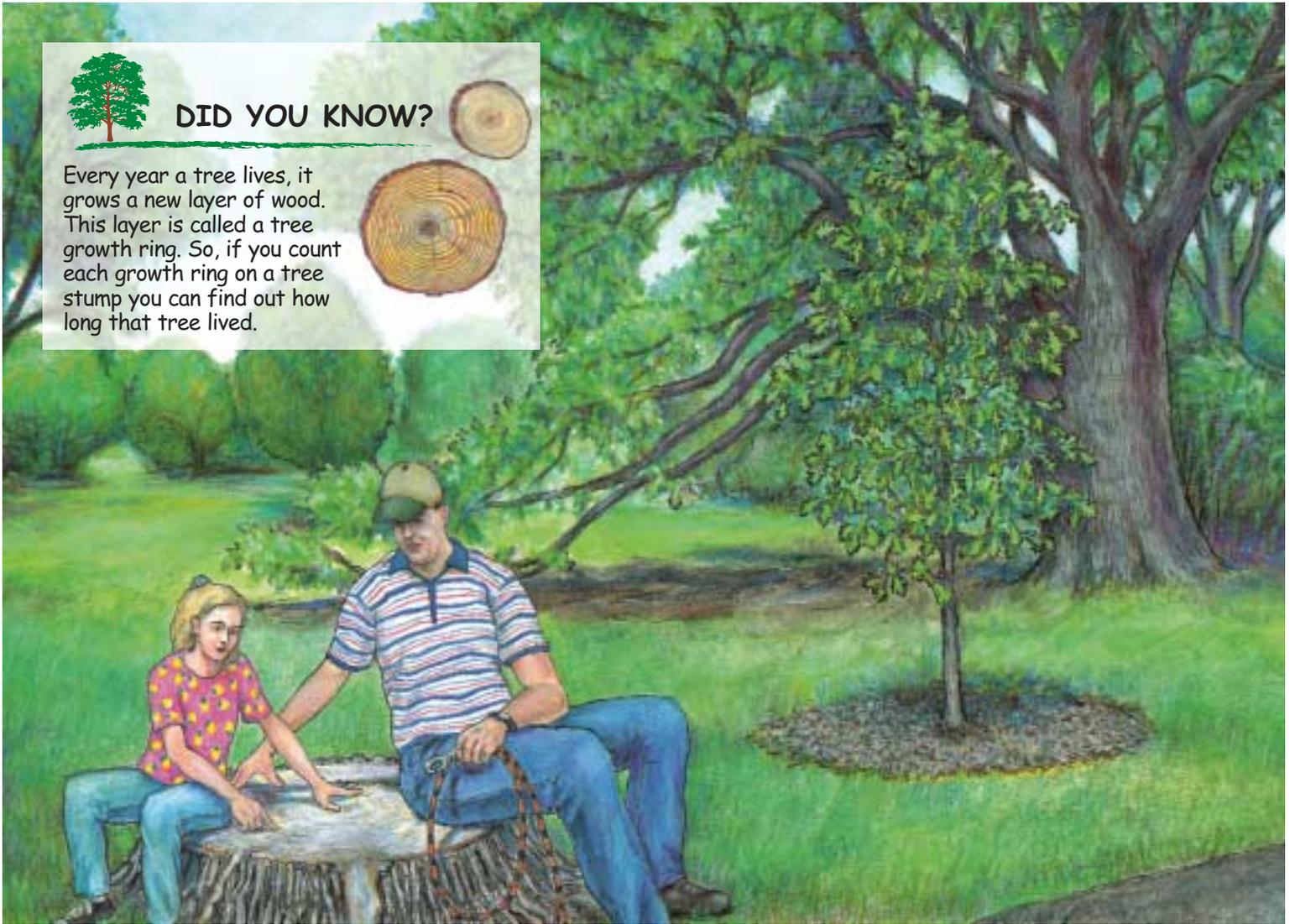
seed

Conifer trees have thin needle-like leaves with names like pine, spruce, and fir. Most conifers stay green all year long, even in the winter. These trees are called “evergreen.” All conifers make cones that hold seeds. What kinds of trees are in your forest?

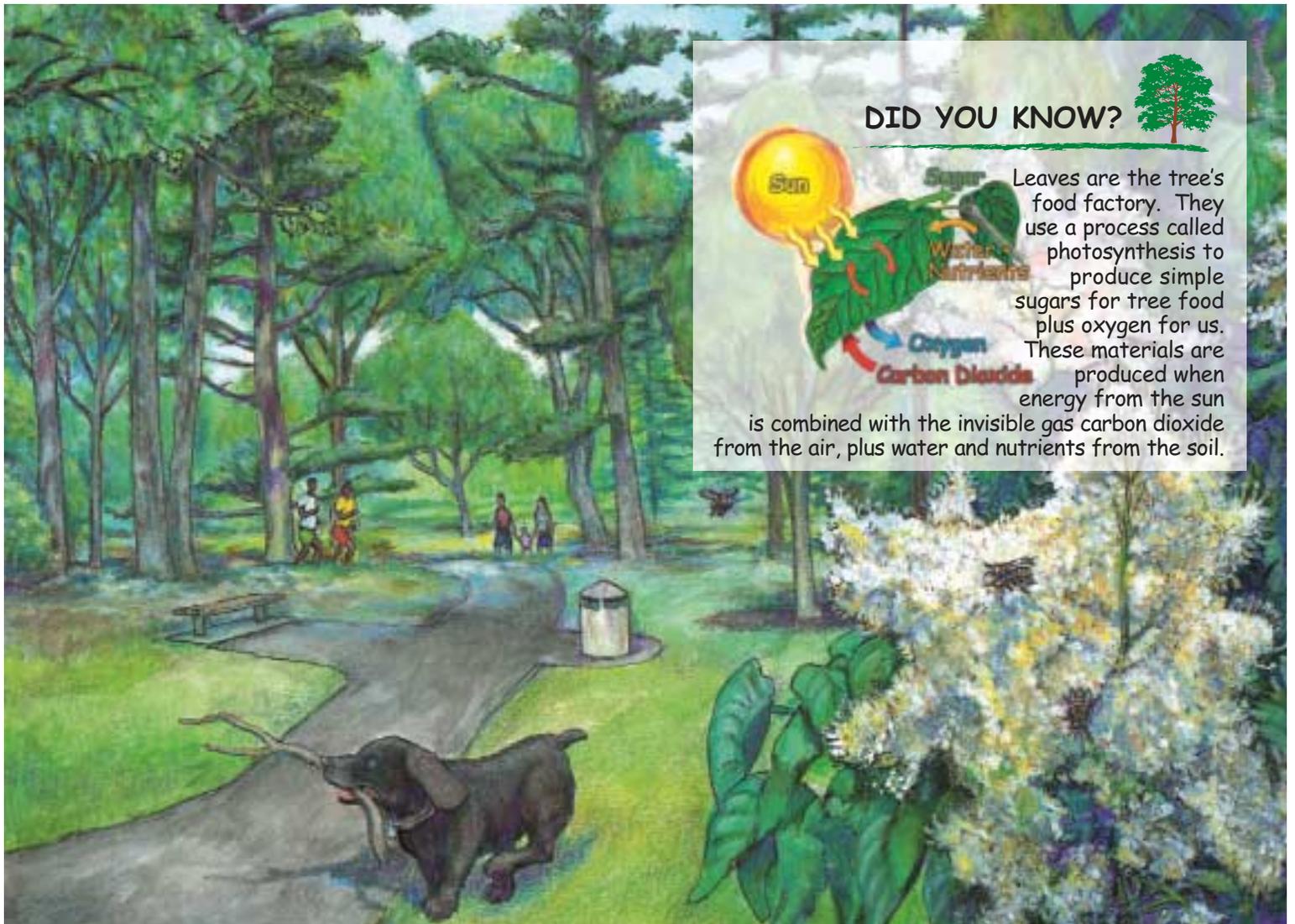


DID YOU KNOW?

Every year a tree lives, it grows a new layer of wood. This layer is called a tree growth ring. So, if you count each growth ring on a tree stump you can find out how long that tree lived.



Our town forest has many different sizes of trees. Some are tall, some are short, and some are in between. Just like people, the trees are all different ages. My dad told me that the biggest trees are not always the oldest. Some trees can grow more than 4 feet a year, while others may only grow 6 to 24 inches in a year.



DID YOU KNOW?



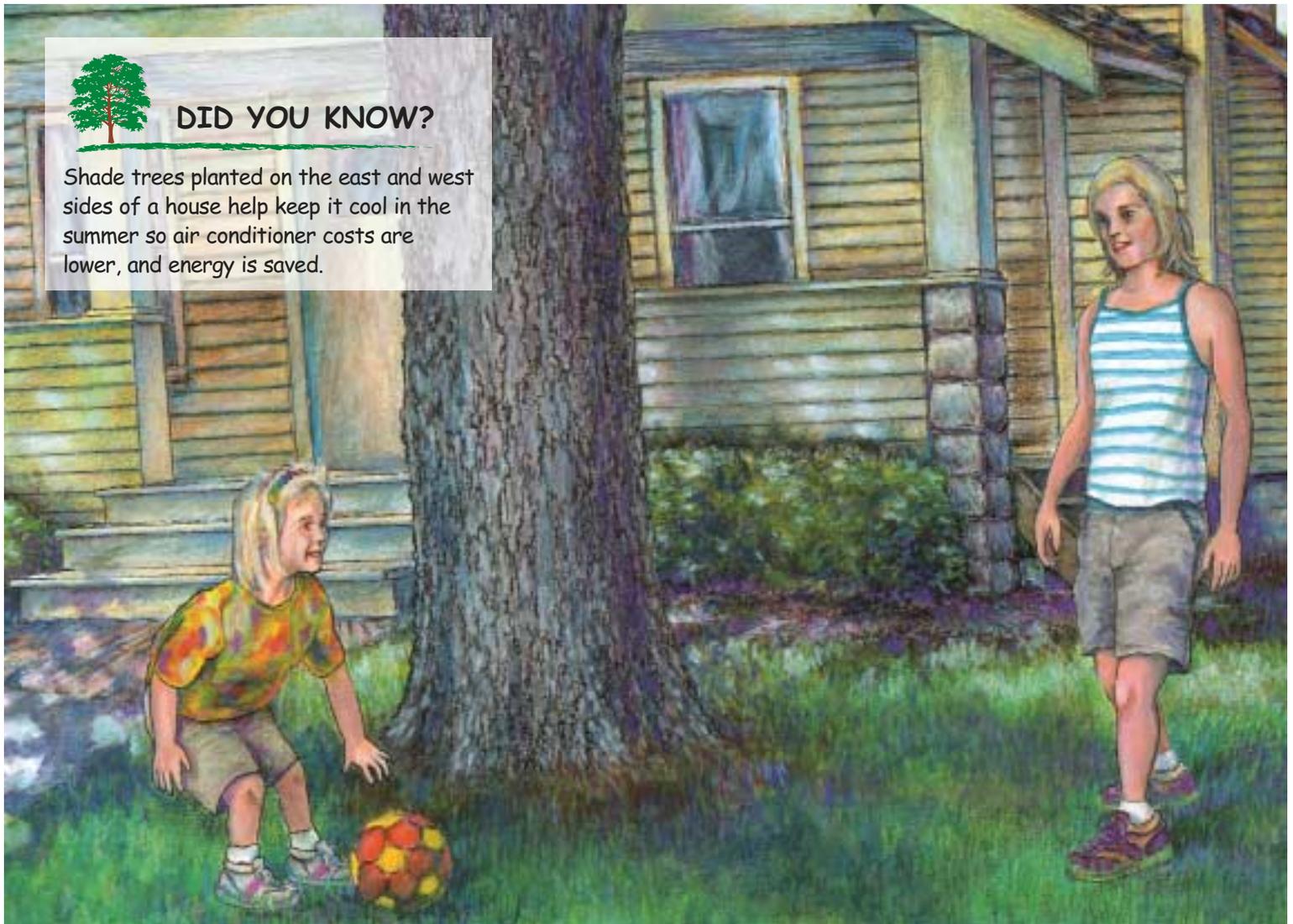
Leaves are the tree's food factory. They use a process called photosynthesis to produce simple sugars for tree food plus oxygen for us. These materials are produced when energy from the sun is combined with the invisible gas carbon dioxide from the air, plus water and nutrients from the soil.

Forests provide many benefits for people and animals. My dad told me that trees and other plants release the invisible gas called oxygen that is needed by all living things to survive. Wow! This means trees and other plants help us stay alive!

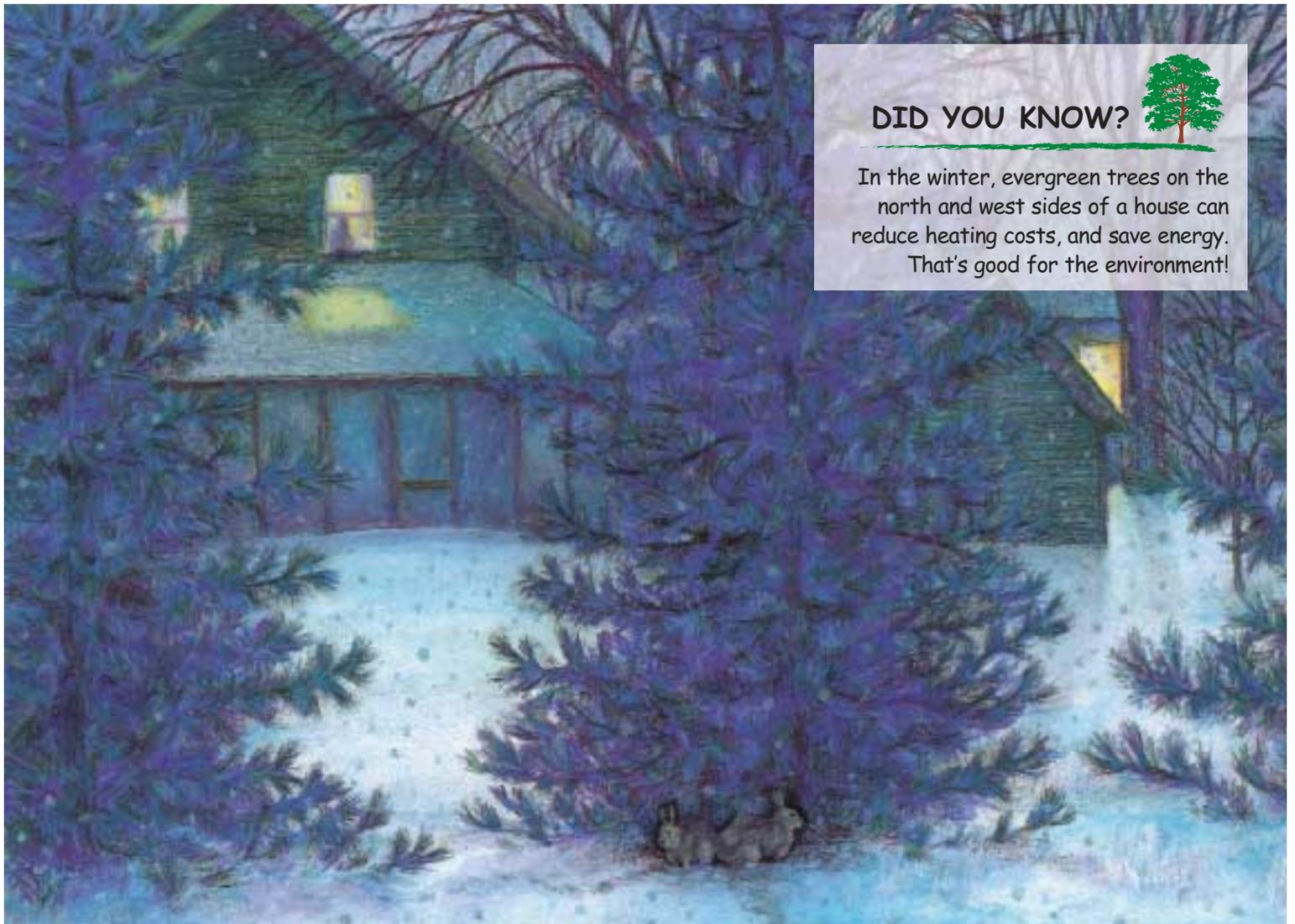


DID YOU KNOW?

Shade trees planted on the east and west sides of a house help keep it cool in the summer so air conditioner costs are lower, and energy is saved.



Trees are like big air conditioners that run all summer long. My sister, Abbey, and I like to play in the shade of our big trees. It would be really hot in the summer without any trees!



DID YOU KNOW?

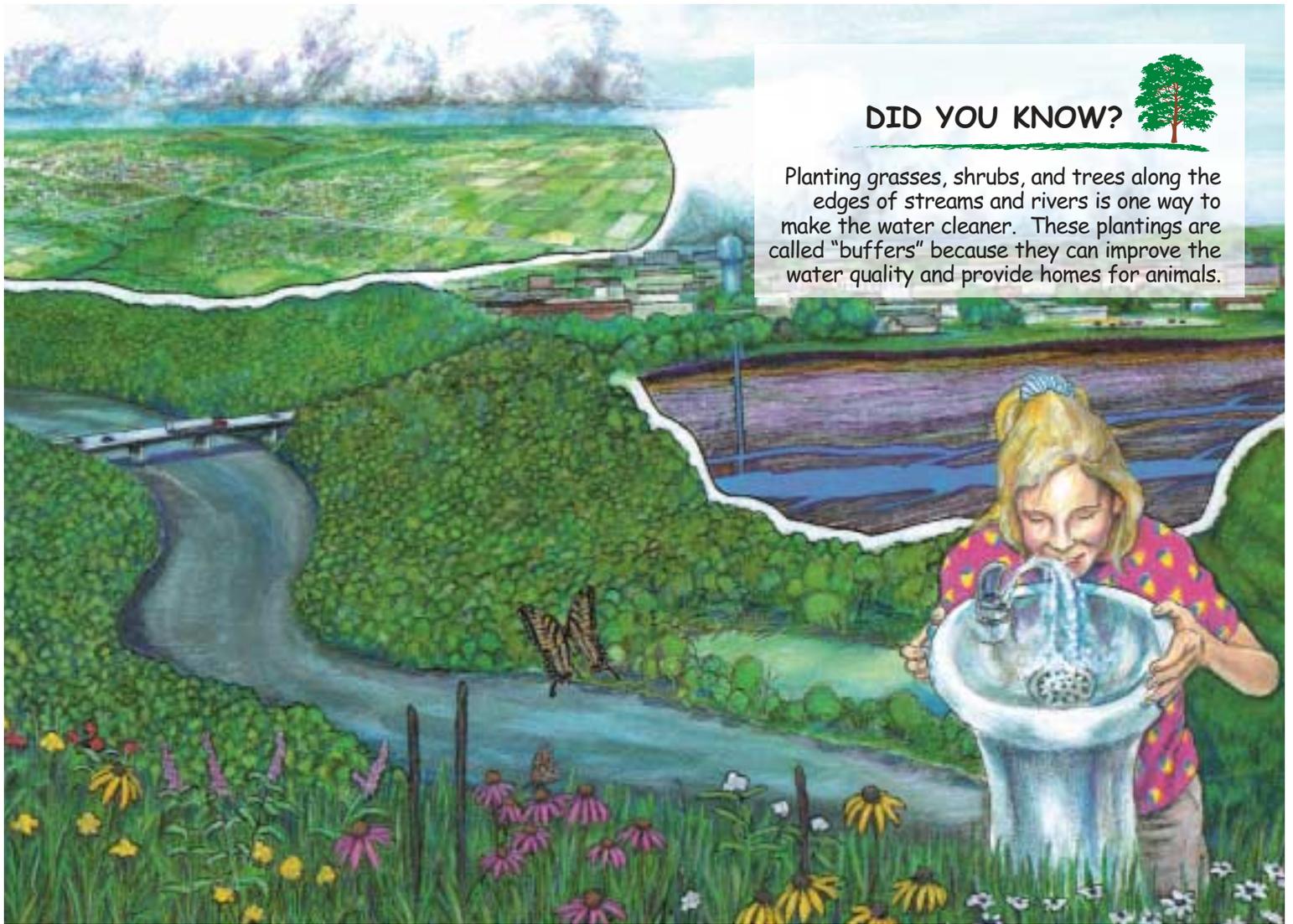


In the winter, evergreen trees on the north and west sides of a house can reduce heating costs, and save energy. That's good for the environment!

Some trees are helpful in the wintertime, too. The pine trees in our backyard stay green all year long. They act like a wall to keep winter winds from blowing against our house. They protect the rabbits in my backyard, too, by giving them a sheltered place to live.



Our forest provides a home for animals such as squirrels, birds, rabbits, owls, raccoons, butterflies, and beetles. Trees also provide food for some animals.



DID YOU KNOW?



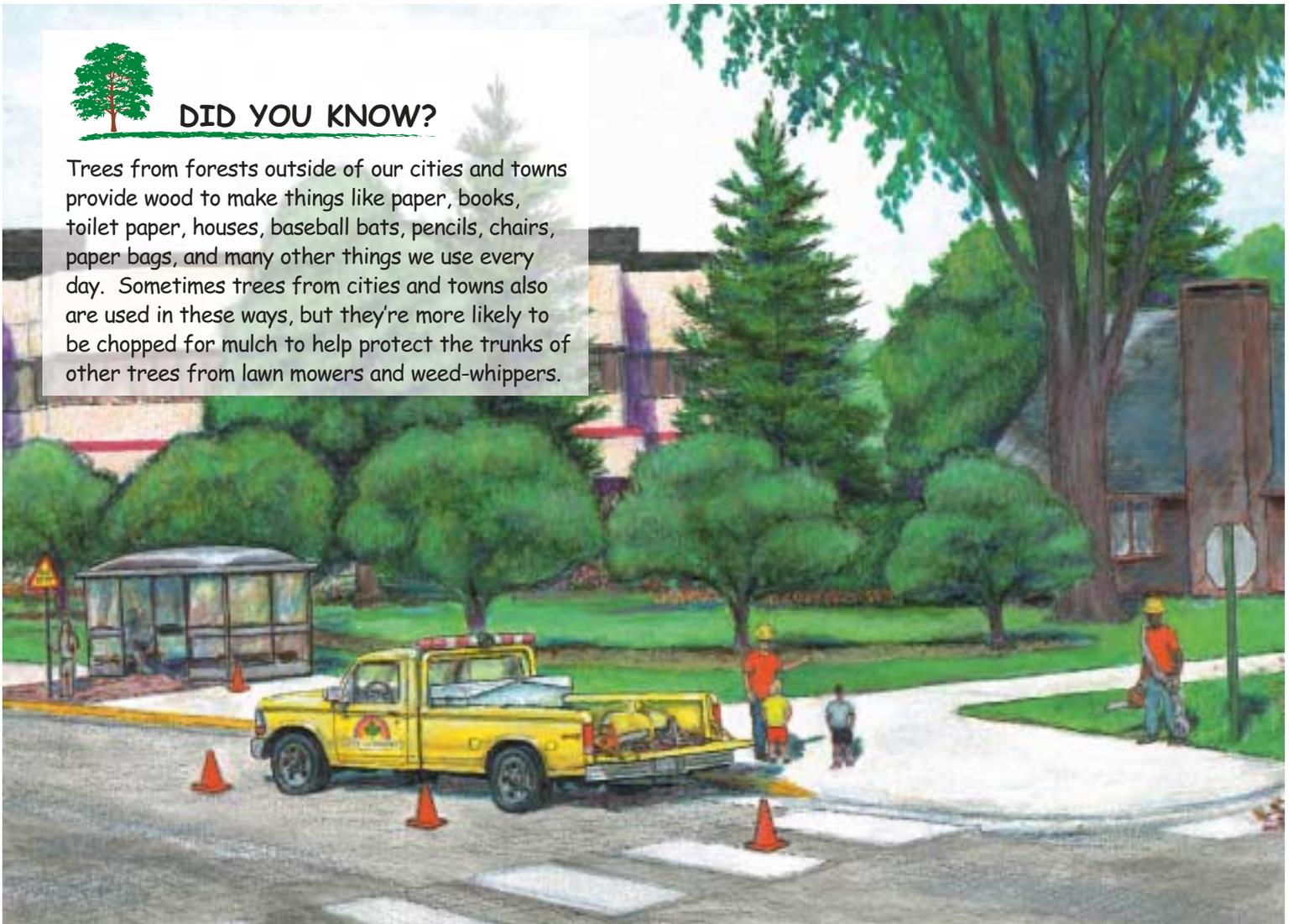
Planting grasses, shrubs, and trees along the edges of streams and rivers is one way to make the water cleaner. These plantings are called "buffers" because they can improve the water quality and provide homes for animals.

The trees, shrubs, and grasses in our forest help the water we drink at home and school stay clean. Tree and other plant roots filter out some unwanted materials in the water as it moves through the ground. Roots also help hold the soil so it doesn't wash away when it rains or when the snow melts. Without the help of tree and other plant roots, the water could get really yucky!



DID YOU KNOW?

Trees from forests outside of our cities and towns provide wood to make things like paper, books, toilet paper, houses, baseball bats, pencils, chairs, paper bags, and many other things we use every day. Sometimes trees from cities and towns also are used in these ways, but they're more likely to be chopped for mulch to help protect the trunks of other trees from lawn mowers and weed-whippers.



Trees provide many benefits. They help cool the air, clean the water, provide homes and food for animals, and provide oxygen for us to breathe. They also make our town look pretty! In order to do all these things trees and forests have to be healthy. Foresters like my dad help trees grow strong and healthy.



One day, I went to work with my dad. At first I was mad because his workers cut down some trees. But then my dad told me that sometimes sick or injured trees have to be removed so they won't fall on houses or people.

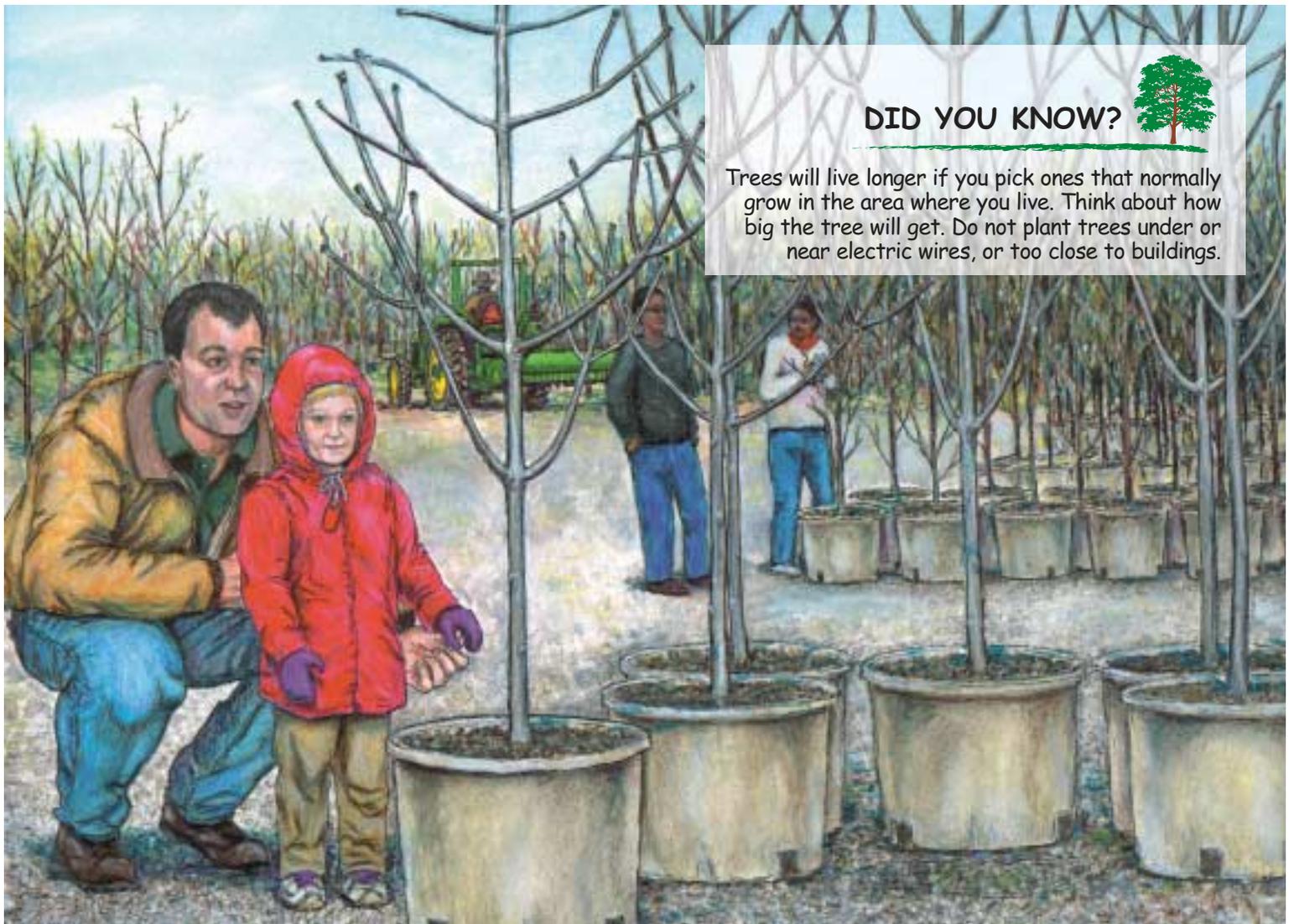


DID YOU KNOW?

National Arbor Day is celebrated the last Friday in April. J. Sterling Morton from Nebraska suggested the idea more than 100 years ago. At the first Arbor Day in 1872, more than one million trees were planted throughout the state of Nebraska.



The best way to help the forest every time a tree is cut down is to plant new trees to replace it. Every spring we have a special tree planting day called Arbor Day. My dad lets me help.



DID YOU KNOW?



Trees will live longer if you pick ones that normally grow in the area where you live. Think about how big the tree will get. Do not plant trees under or near electric wires, or too close to buildings.

When I was four years old, my dad and I planted a tree for Arbor Day. We went to a tree farm, which is called a nursery, to choose the tree. We picked a white ash. It was neat, because this tree had the same name as me. My dad calls it Ashley's tree.

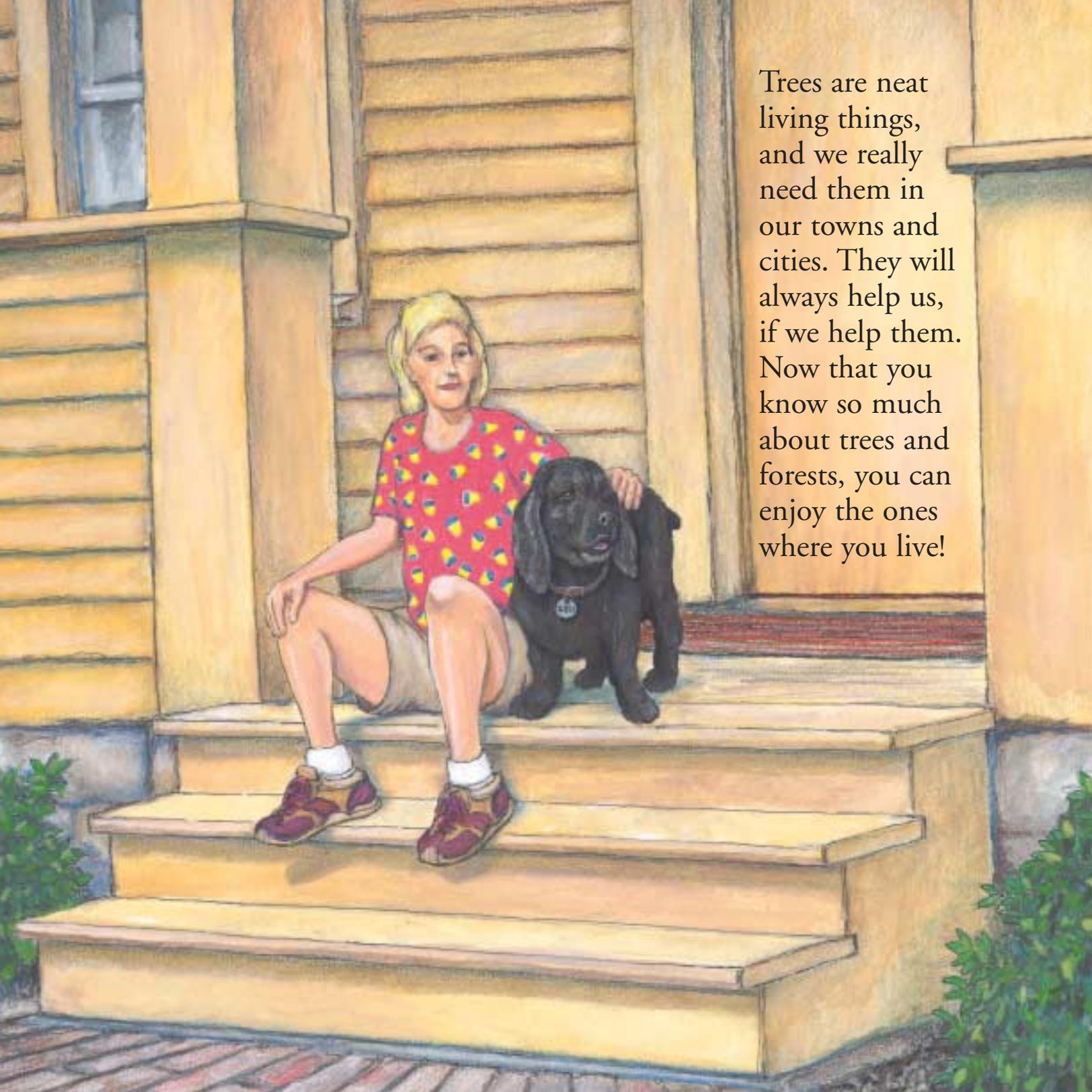


The first thing we did when we planted my tree was to dig a big wide hole. Then we put the tree in the middle of the hole, and then we put the same soil back into the hole to cover up the roots. Next we covered the ground around the tree with wood chips. Finally we gave the tree plenty of water.



To protect my tree, Dad told me not to break the branches, hit it with a lawnmower or weed-whipper, carve my name on it, or tie my dog Ubu to it. Instead, I water the tree when it is hot and dry, and my dad helps the tree become stronger by cutting and removing broken and weak branches. He does this to all of the trees in town at different times to help them stay healthy and strong.

Trees are neat living things, and we really need them in our towns and cities. They will always help us, if we help them. Now that you know so much about trees and forests, you can enjoy the ones where you live!





THINGS TO REMEMBER



Forest:

A place with trees and other plants, animals, and non-living things. For example, all of the trees found in a city or town create a special kind of forest called a "city or town forest."



Forester:

A person that understands trees, forests, and their environments so they can help take care of them.



Broadleaf tree:

Trees like maple, oak, ash, elm and walnut, that have broad or wide leaves. Many of the different kinds of broadleaved trees are also deciduous.



Deciduous tree:

One that sheds its leaves each fall. It has no leaves during the winter.

Ecosystem:

A complex place with living organisms and their environment that includes non-living things. Examples of ecosystems include: a forest, desert, marsh, wetland, river, stream, ocean, and prairie.



Photosynthesis:

The process in which the leaves of green plants use energy from the sun, carbon dioxide from the air, and water and nutrients from the soil to produce oxygen and simple sugars. The oxygen is released in the air for us to breathe, and the simple sugars are used by the tree for growth.



Conifer tree:

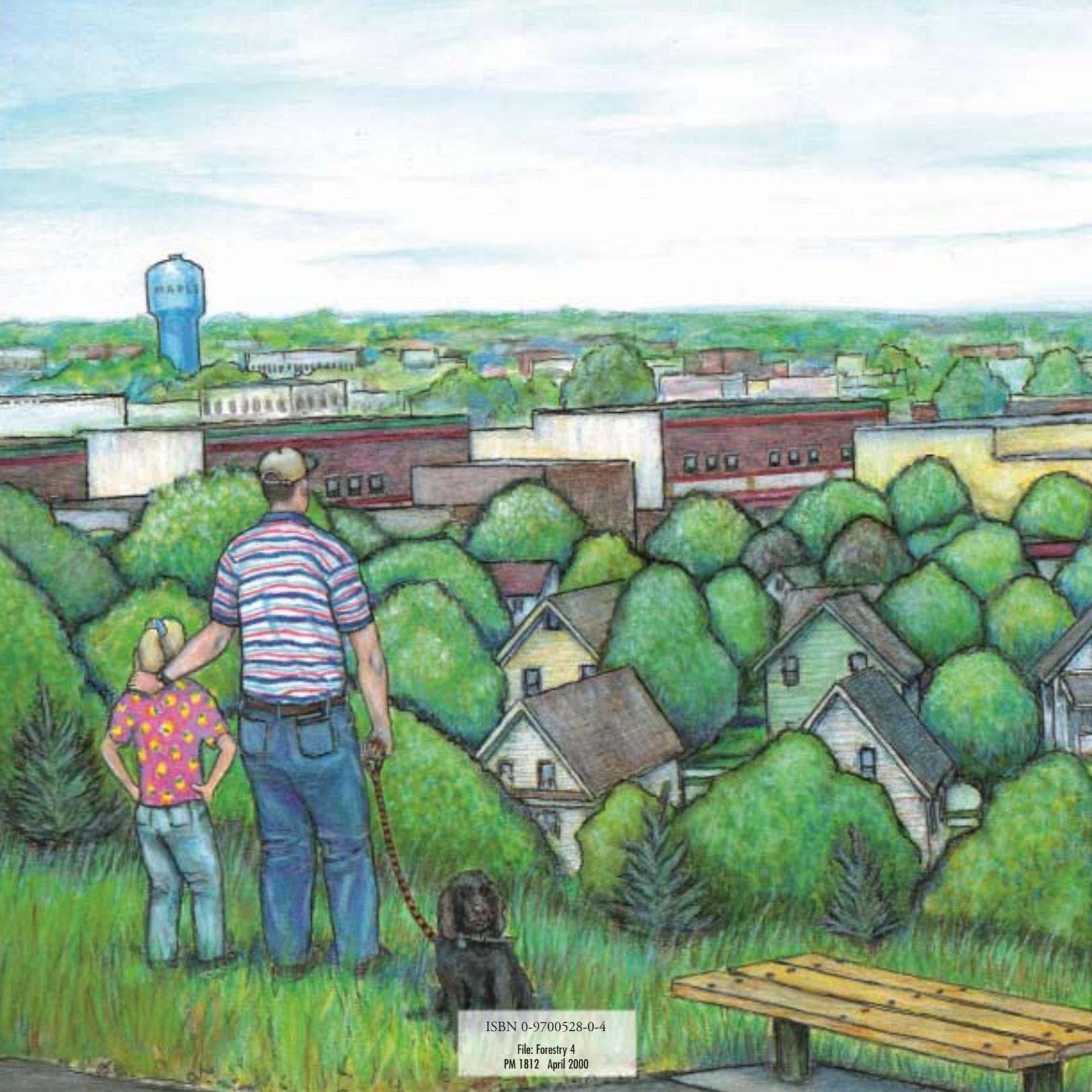
Trees like pine, spruce, and fir, that have needle-like leaves and cones that hold the seeds. Many of the different kinds of conifers are also evergreen.



Evergreen tree:

One that has green leaves all year long, even in the winter.





ISBN 0-9700528-0-4

File: Forestry 4
PM 1812 April 2000