WHY WE NEED TREES

You probably don't spend much time thinking about trees. But did you know that trees help people, animals and the environment as a whole? From the single trees along a city street to a pine plantation, and from the woods behind your house to a huge wilderness forest, trees affect your life every day. Without them, life on earth would be very different.

TREES ARE BEAUTIFUL

Trees make recreation areas more scenic. Hiking, biking, camping and birdwatching are popular activities in forests, partly because people enjoy being among trees. Virginia's State Forests are good places to experience the beauty and wonder of the woods. To find a State Forest near you, go to www.dof.virginia.gov and click on State Forests. You can also visit National Forests and State and National Parks to enjoy forest recreation activities. Just looking at trees can make people relax. Studies have shown that sick people who have a view of trees from their rooms get better faster.

TREES PROVIDE WILDLIFE HABITAT

Trees – both living and dead – provide food and shelter for many types of wildlife. You probably know that many of Virginia's songbirds nest in trees, and that squirrels spend a lot of time in them. But other users of standing or fallen trees may surprise you: mammals, like bats and raccoons; amphibians, like tree frogs and salamanders; and reptiles, like rat snakes and lizards. Many trees produce nuts, berries, seeds or tasty shoots and leaves that are eaten by animals. Trees also attract insects, another important wildlife food source. Evergreen trees, like pines and cedars, protect birds from cold winter winds. Large, hollow trees may even shelter black bears as they sleep away the winter months.

TREES CLEAN THE WATER

Lands next to streams are called riparian areas, and they have a big effect on water quality. A forested riparian area can filter out pollutants that travel over land in rainwater. They also keep soil from muddying the water, by holding the soil in place with their roots. Tree roots absorb excess water and help to prevent flooding. Trees shade streams, keeping the water cool enough to support many fish and other animals. Even the leaves and branches that trees drop into the stream are used as food and cover by many water creatures.

TREES GIVE US PRODUCTS

You know that wood and paper come from trees. But there are also tree products in many of the foods, fabrics and health products we use every day. Trees are a renewable resource. This means we can replace those we use, by planting more trees. Many products we could use in place of wood – such as steel and concrete – are produced from non-renewable resources, and making them uses a lot more energy. So, trees are "green" in more ways than one!

TREES PRODUCE OXYGEN

Like all green plants, trees produce their own food by a process called photosynthesis. A by-product of photosynthesis is oxygen, which animals need to breathe. Scientists at the U.S. Department of Agriculture estimate that one acre of trees produces enough oxygen for 18 people.

Solar Energy

Carbon Dioxide

Oxygen

Sugar

Water and Nutrients from the Roots
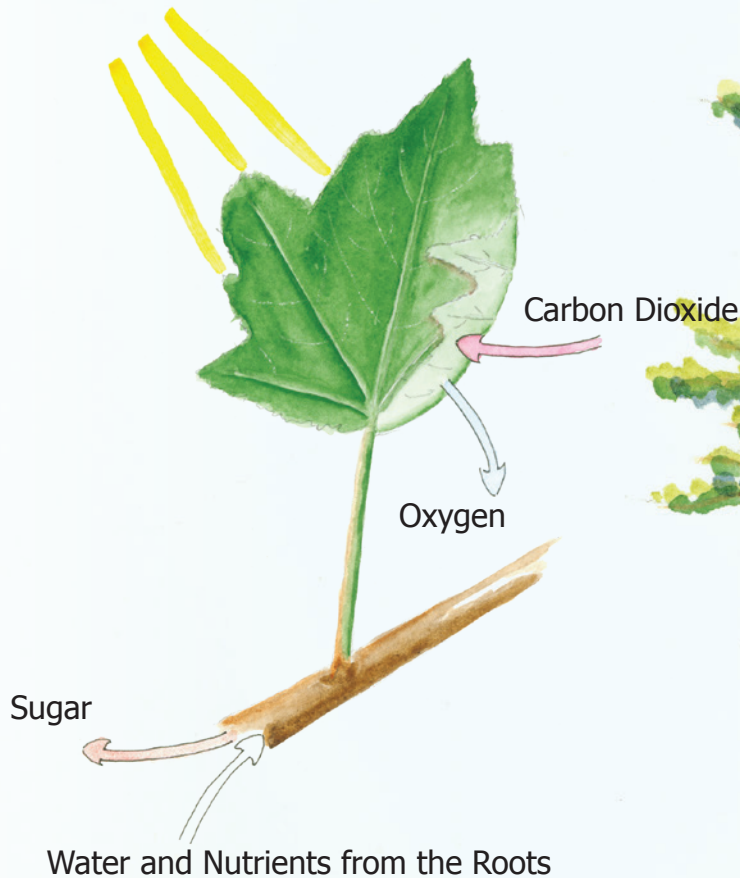
TREES CLEAR THE AIR

Trees can remove some pollutants from the air. Perhaps the most important is carbon dioxide. This is a "greenhouse gas" that traps heat in our atmosphere and may affect the earth's climate. Trees take in carbon dioxide as they grow, using the carbon to build new parts. The larger the tree, the more carbon it has stored in its cells. When a tree is made into long-lasting products, such as lumber for houses or furniture, that carbon continues to be kept in the wood and out of the air.

TREES SAVE ENERGY AND MONEY

Planting trees near your home can save energy, which means trees can save you money! Deciduous trees planted on the south side of a house provide shade in summer, so you may not need to run the air conditioner as much. In winter, the leaves fall, allowing the sun to warm the house, and re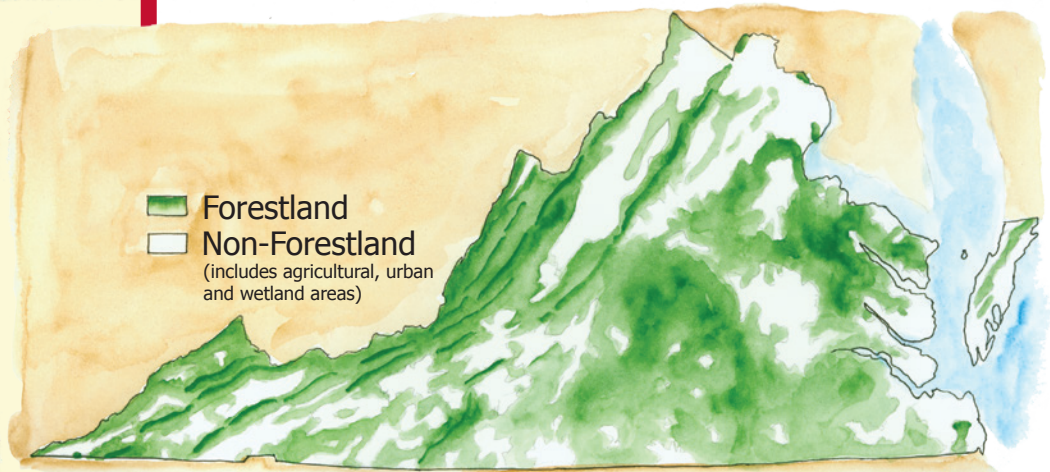ducing the need to run the heating system. Evergreen trees planted along the north and west sides of a property can block winter winds, keeping the house warmer as well.

Trees can also increase the value of your home. The U.S. Forest Service estimates that healthy, attractive trees can add an average of 10% to the value of property.

OH NO! WE'RE LOSING TREES

The good news? More than half of Virginia is forested.

The bad news? Our state is losing forestland rapidly. Forestland that is converted to other uses, such as shopping malls and subdivisions, is usually lost forever. Your family can help by practicing good forestry if you own land; by planting more trees, and by telling others about the importance of trees.

Forestland
Non-Forestland
(includes agricultural, urban and wetland areas)

Illustrations by
Mike Steele, Virginia Master Naturalist

Virginia Department of Forestry
900 Natural Resources Drive, Suite 800
Charlottesville, Virginia 22903
Phone: (434) 977-6555
www.dof.virginia.gov

VDOF F00006; 04/2022

This institution is an equal opportunity provider.

To see how much you learned, check out the crossword puzzle at www.dof.virginia.gov