



God Made **PLANTS**

Science/Worldview | Level 2

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Generations
PASSING ON THE FAITH



God Made **PLANTS**



Hi! We would like you to be your outdoor friends! We're very excited about plants. God made many kinds of plants and gave them special jobs. I'm Herby and I like to work!



And I'm Flora! I'm so happy to be a beautiful flower that shows God's beauty. Let's learn about plants together!

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Printed in the United States of America.

ISBN: 978-1-7350719-9-2

Cover Design: Justin Turley
Interior Design: Sarah Lee Bryant

Published by:
Generations
19039 Plaza Drive Ste 210
Parker, Colorado 80134
Generations.org

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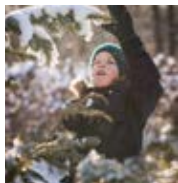
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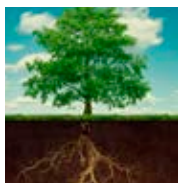
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Introduction

This introductory science course for young, school-age children is designed to bring to light the love, wisdom, and power of God that is evident in His creation. *God Made Plants* presents the amazing way that plants are perfectly designed to provide the earth with food, oxygen, moisture, healthy soil, and materials for supplies. There would be no life on Earth without plants!

Herby, the hardworking leaf, appears often in the course, both to keep the child's interest and to rejoice in the hard work plants do. Flora, the lovely flower, also has praise for God's plants—especially their beauty!

God Made Plants is designed to work with the way God made children to learn. Children learn best by using a variety of their senses and through hands-on activities. This curriculum helps children learn through:

- **Listening:** The textbook is designed to be read aloud to the child. The language is simple and easy to understand. Important words are in **bold** so the reader knows to emphasize them and maybe take a detour to a definition box or picture.
- **Seeing:** The beautiful pictures, fun illustrations, and simple diagrams in the textbook provide a visual aspect to learning.
- **Moving:** Children will have an opportunity to grow their own garden and watch God's amazing plan for plants firsthand! In addition, the *God Made Plants* companion activity book is full of hands-on learning, involving the senses and muscles with a variety of fun activities that are not too burdensome for the parent/teacher. The science topics are reinforced with a balance of observation,

experiments, imagination, logic, Scripture, art, cooking, poetry, math, exercise, music, geography, and a little bit of writing. Each activity reinforces the material introduced in the textbook, and every exercise is numbered for easy reference.

How To Use *God Made Plants*

God Made Plants is divided into nine units of four chapters each. Units 1-8 each have three chapters of instruction on an aspect of plants, followed by a fourth chapter on a biome of the world. For example, chapters 1-3 cover the wonderful things plants do and provide for us. Then, chapter 4 covers the grassland biome: its plants, animals, and location in the world. Units 1-8 each have a memory verse and a children's hymn that children will have an opportunity to work on in the activity book.

Hi Parents! Be sure to check out Unit 9, "You Can Plant a Garden," on page 299 to schedule your child's gardening activities for the year!



Unit 9 of *God Made Plants* will guide you and your child in making a small garden. It's recommended that the parent becomes familiar with Unit 9 before starting the course. A garden takes many months to grow from bare soil to harvest. Now and then, you may need to interrupt your progress through Units 1-8 of this book in order to work on Unit 9's garden. Or you may want to keep a steady schedule through the book and work on your garden after school and on weekends. See the introduction to Unit 9 for a schedule of when you may need to allow gardening time throughout the year.

The *God Made Plants* books are organized in a way to enable children to internalize what they have learned.

Learning comes easiest in small doses with time between each session. Children solidify what they have learned as they play. It becomes permanent as they sleep. To enable this, the following schedule is suggested for Units 1-8:

Cover one chapter per week for 32 weeks. Each week:

- **Day 1** — Read aloud the first section of the textbook chapter. Complete the corresponding activity in the Activity book (as announced at the end of that section of the text).
- **Day 2** — Break

- **Day 3** — Read aloud the second section of the textbook chapter. Complete the corresponding activity in the Activity Book.
- **Day 4** — Break
- **Day 5** — Complete the Green Thumb Activity from the activity book. This day has no read-aloud section in the textbook. Instead, there is time allowed for a special activity. These Green Thumb activities take a little more preparation and materials than the week's earlier activities.

May God be glorified, and may you be richly blessed as you study His creation in *God Made Plants!*

Tamela Sechrist
The Generations Curriculum Team
June 2022



UNIT 1

God Fills the Earth with Plants

God is very good! In fact, as our memory verse says, the earth is full of the goodness of the Lord. One way God is good is that He fills the earth with life-giving plants. Each of these plants have important jobs to do.



We also see God's goodness to us in the beauty He has made all over the earth. A lot of that beauty is seen in His plants. Green forests, colorful fields, and luscious fruit salads are good things we can praise Him for!

And the earth is full of God's goodness because He sent His Son to the world He loves.



Memory Verse

The earth is full of the goodness of the LORD. (Psalm 33:5)



Hymn to Sing

I Sing the Mighty Power of God

I sing the mighty pow'r of God, that made the mountains rise,
That spread the flowing seas abroad, and built the lofty skies.
I sing the wisdom that ordained the sun to rule the day;
The moon shines full at His command, and all the stars obey.

I sing the goodness of the Lord, who filled the earth with food,
Who formed the creatures through the Word, and then pronounced them good.
Lord, how Thy wonders are displayed, where'er I turn my eye,
If I survey the ground I tread, or gaze upon the sky.

There's not a plant or flow'r below, but makes Thy glories known,
And clouds arise, and tempests blow, by order from Thy throne;
While all that borrows life from Thee is ever in Thy care;
And everywhere that we can be, Thou, God, art present there.

You can listen to this hymn by searching for "I Sing the Mighty Power of God" on the internet.



CHAPTER 1

God Fills the Earth with Food

[God] causes the grass to grow for the cattle,
And vegetation for the service of man,
That he may bring forth food from the earth.
(Psalm 104:14)

How Can the Earth Be Full of Food?

All over the earth, God has created a way for food to be made. How does He do this? He uses three things: **sunlight**, **water**, and **air**. We can find these three things in almost every place on Earth.

Sunlight, water, and air are so



common that we hardly notice them. But they are also mysterious things. They seem invisible because we can see through them. They also can go almost anywhere, and we have a hard time capturing them. Yet God invented a way that these three mysterious things can be made into good, solid food that we can see, grab, and eat. He created plants to do this job!

The way plants do this is one of the most complicated **processes** on Earth. This process is called **photosynthesis**. We will learn more about it later!

Who gets this food made by plants? God gives this food to everybody and everything that's alive:

1. **People** eat plants. We also eat animals that have eaten plants, and we eat some animal **products**. A product is something that comes from something else or is made out of something else. Milk is a product that comes from cows. Eggs are products that come from chickens. Tortillas and popcorn are products that are made out of corn.



Definitions

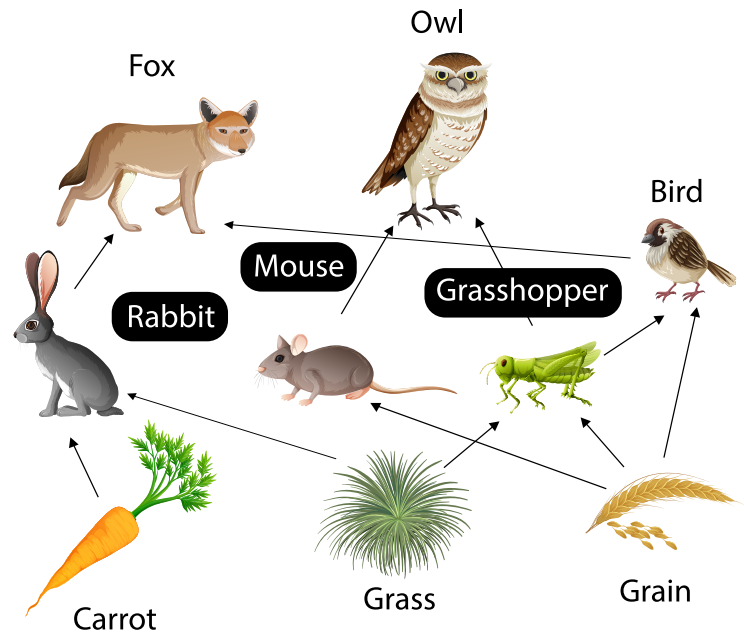
A **process** is the step-by-step way that something gets done. A recipe can tell you the process of making a cake. Instructions can tell you the process of putting something together.

Photosynthesis is the process plants use to make food out of sunlight, water, and air.



God fills the earth with food by providing sunlight, water, and air everywhere!

2. **Plants** use the food they make. This food helps them grow. Plants also store food in their seeds to give baby plants energy as they start to grow. Often plants will store food in their roots to use later.
3. **Animals** also eat plants, or they eat other animals that have eaten plants. No people or animals could live if God didn't make plants grow on Earth.



Food Chain



Time to do Activity 1 in the Activity Book!

What Is This Food?

There are fifty thousand different edible plants in the world! These plants include trees, bushes, vines, and short plants like wide-leafed garden plants and narrow-leafed grasses.

Most of the world's food for people and animals comes from grasses. Grasses make up about one fourth of the plant life on Earth. Different kinds of grasses grow all over the world.


Many kinds of grass make edible seeds, called **grain**, to feed people. Wheat, rice, and corn are grains we



Antarctic hair grass grows near the cold South Pole.

often eat. Grain is a good food because it gives quick energy.

Grain is also good because each plant



Sugarcane is a grass that grows in hot areas near the earth's equator.




Wheat can grow in places that don't get much rain.



Corn needs more water than wheat does in order to grow.



Rice needs to grow in warm, wet places with its feet standing in water!



can make a lot of food. One grain (or seed) of wheat can grow into a plant that makes about 300 more grains of wheat for us to eat. One grain of rice can be planted and makes about 1000 more grains. One corn seed (kernel) can make about 2000 more! More than half of the world's food for people comes from grain.

Different places on Earth have different amounts of heat, cold, and water, but God has created different grains that are perfect for these different



Definitions

Pastures are fields covered with grass and other plants that are good for animals to eat.

Nutritious food has everything needed for the life and health of the person or animal eating it.

places. Most areas on Earth are blessed with a perfect fruitful grain for the people living there.

People have made good use of grass as food for their animals. Besides letting



Corn is used to make tortillas in many parts of the world.

After tractors cut hay, it's dried and shaped into round or rectangular bales.



their animals eat the grass in **pastures**, people often mow extra grass to dry and store as **nutritious** hay.

In parts of the world where grains do not grow well, God has given people different quick-energy foods from the underground parts of some wide-leafed plants. Potatoes, yams, sweet potatoes, cassava, and taro are plentiful foods for many people in Africa, South America, and on tropical islands.

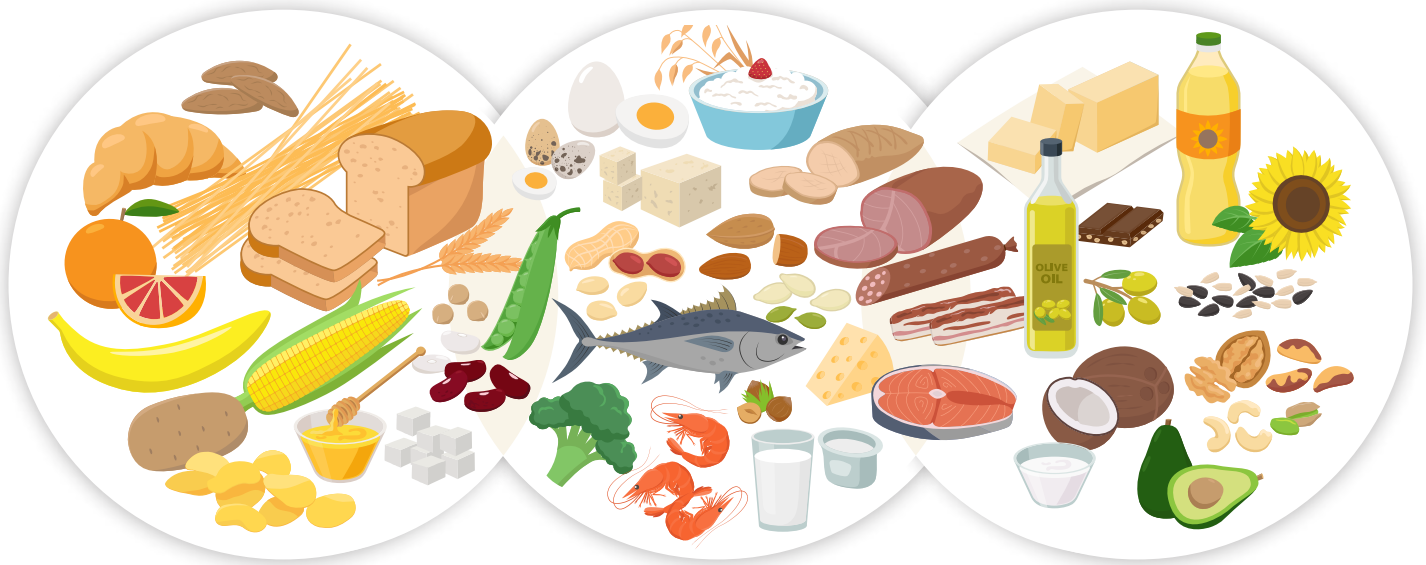
Quick energy comes from the **carbohydrates** in food. Carbohydrates are sugars and starches. But people need more than quick energy. We also need energy that lasts longer. God has made



Grass is a wonderful creation from God! He made it very fruitful. Grass gives food to people and animals all over the earth.

this possible by giving us **protein** and **fats** in our food.

Many plants we eat have protein and fats. But God has also given us protein and fat from animals. People and many animals can't digest grass. But God gave **grazing** animals (animals that eat grass in a field) a special way to digest grass and use it for food in their bodies. Then we can get protein and fat when we eat



Carbohydrates

Proteins

Fats

the meat, milk, and eggs from these animals. This is another way God fills the earth with food.

People and animals need

more than carbohydrates, protein, and fats from food. Nutritious foods also have important things like vitamins and minerals. God made our bodies to need all these things in order to live.

He also made plants that contain these things we need. It's wonderful that He put the right nutrition in plants all over the world for people and animals that live all over the world! He fills the earth with food!



Children help dig taro roots.



This cow's body is turning grass into an udderful of milk.



Prayer

Thank You, God, for growing plants everywhere on Earth!

Thank You for putting sunlight, water, and air everywhere. It reminds us that You are everywhere even though we don't see You. You have worked everything perfectly for Your creatures by giving us food this way. Amen.



Time to do Activity 2 in the Activity Book!

Sometimes we say that people who are good at growing plants have a **green thumb**. If you often work with plants, you will learn what makes them grow well. Maybe by the end of this course you will have a green thumb too!



Today is Green Thumb Day! Time to do Activity 3 in the Activity Book.



CHAPTER 2

God Fills the Earth with Supplies

Plants Are Perfect Gifts Because They Have Structure

We know that God gave us plants to eat as the perfect gift of food. But God also gave us plants to be used as supplies to make things with. We can use plants to make many things. What do plants have that make

them perfect as supplies? Every plant, anywhere in the world, has **cellulose**.

Cellulose is what gives plants their **structure**. Cellulose is arranged in different ways to make different parts on the same plant: stems, roots, leaves, and flowers. Cellulose can also be arranged differently to make all the different

Definitions

A plant's **structure** is the way it's put together to give it shape and strength.

Cellulose is tiny strings of sugar, attached and woven together. Cellulose gives plants structure.

Every good gift and every perfect gift is from above, and comes down from the Father of lights. (James 1:17)





Herby's List of Supplies Made of Cellulose



Paper



Rope



Cardboard



Lumber (wood)



Baskets



Cotton cloth

kinds of plants: skinny grasses, wide-leaved herbs, tiny mosses, huge trees, stiff shrubs, and twisty vines.

Let's look at why cellulose is useful to us:

1. Cellulose is as strong as steel when we bend or stretch it. But it's also lighter than steel. The cellulose in the wood of trees is joined together in a special way to make the trees strong, tall, and sturdy. That's why wood is a perfect gift from God for building houses and furniture all over the world.
2. Cellulose lasts a long time. It can't dissolve in water. It won't rot easily. Cellulose only breaks down if certain creatures, too tiny to see, eat it. People make washable clothes, towels, and bedding out of cotton and linen. Cotton and linen are cellulose. Baskets, rope, paper, cardboard, and

wooden things can last a long time because they are made of cellulose.


3. When people eat plants, the cellulose is not digested. This is good! Our bodies need to move solid waste out when we use the toilet. God gave us cellulose to help this happen. The bulkiness of the cellulose makes our intestines want to squeeze it along. It scrubs the intestines as it moves and carries other waste along with it. When talking about digestion, we call cellulose **fiber**.



Time to do Activity 4 in the Activity Book!

Other Useful Things We Make from Plants

We are thankful for cellulose because of all the things it's possible to make and build with it. People have discovered how to make useful supplies from other ingredients found in plants:

A close-up photograph of a person's arm with a small burn. A thick, clear slice of aloe vera leaf is being applied to the burn to provide relief.

Juice from the aloe plant helps heal burns.



1. Some **medicines** come from plants. Many plants are useful for first aid and other health problems.
2. Natural **dyes** that make cloth colorful are made from plants and minerals. To make dye, colorful plants or minerals are mixed with plant starch and seaweed which keep the color from washing out of the cloth.
3. The milky sap of **rubber** trees is collected to make forty thousand different products like rubber bands, medical supplies, toys, and tires. Tires are a mixture of manmade rubber and natural rubber. God's natural rubber helps keep the tires from cracking or tearing better than if they were made only of manmade rubber.
4. Some **paints** are made of plant oils and colors. Turpentine is made from pine trees and is used to thin oil paint, help paint dry faster, and clean paint brushes.
5. Fuel is something that is burned so its energy can be used. Coal, oil, and natural gas are **fossil fuels** that come from deep in the earth. We burn them to heat our homes and make our cars move. They are called fossil fuels because, like fossils, they are the remains of plants and animals that lived long ago. Before Noah's flood,

large forests grew on the earth. These forests were torn up during the flood and then buried by sand. In time, they became coal. Some of this coal got buried even deeper underground. Its temperature became so hot that oil and natural gas were formed. This has happened in many places around the world.¹

6. **Ethanol** is a fuel made from corn, barley, sugar beets, and sugar cane. Even though these are food plants that can give us quick energy, people have invented a way to change these plants' sugars into ethanol. The ethanol is then mixed with fossil fuel, delivered to gas stations, and we pump it into our cars.
7. These same quick-energy plants can also be used to make **plastic**. But most plastic is made from fossil fuels.
8. **Ink** is made from plant materials. The black ink for computer printers is made by burning fossil fuels and collecting the fine black powder left behind. The powder is then mixed into linseed or soybean oil from plants.



Mining Coal





Time to do Activity 5 in the Activity Book!



Prayer

We praise You, Lord, for providing plants for supplies all over the earth. You have made cellulose and other plant products so useful to us. Thank You for giving us brains to invent ways to use the supplies in plants. Amen.



God has made wonderful gifts for us by creating plants! There are so many things that can be made from plant products.



Today is Green Thumb Day! Time to do Activity 6 in the Activity Book.



Cotton field



CHAPTER 3

God Fills the Earth with Busy Workers

When God created plants, He created many different ways that plants can give food and supplies to the whole world. But besides *giving* us things, plants *do* things! They are busy doing all the jobs God created them to do.

Plants Work So We Can Breathe

Plants are busy all day long doing **photosynthesis**. Remember, photosynthesis is the way that plants use God's sunlight, water, and air and turn it into food for themselves and for people and animals. Let's learn another great thing that happens during photosynthesis!

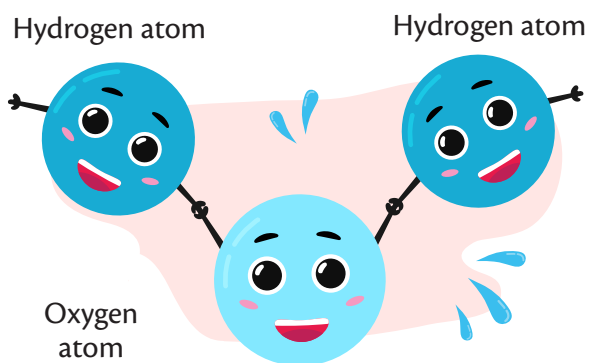
Chemistry is studying the stuff things are made of. Everything is made of chemicals. Chemicals are made of **molecules** that are too tiny to see. A molecule is the smallest piece of



something that still is that thing. If you hold a drop of saltwater on your finger, all you can see is water. But inside that drop of water are salt molecules and water molecules. If you could divide that drop of saltwater into smaller pieces, you could separate the water molecules from the salt molecules. Then you wouldn't have saltwater anymore. You'd have water, and you'd have salt. There is no such thing as a saltwater molecule. A salt molecule and a water molecule are very different things, but when they are mixed together, we get saltwater.

Molecules are made of smaller things called **atoms**. Let's pretend you divided your drop of saltwater into water molecules and salt molecules. Now pretend that you looked very closely at the water molecules. If you could see them, you'd see that a water molecule is made of three atoms joined together. Two of the atoms are **hydrogen** atoms and one is an **oxygen** atom. If these three atoms are separated, they're not water anymore.

A water molecule is called "H₂O"

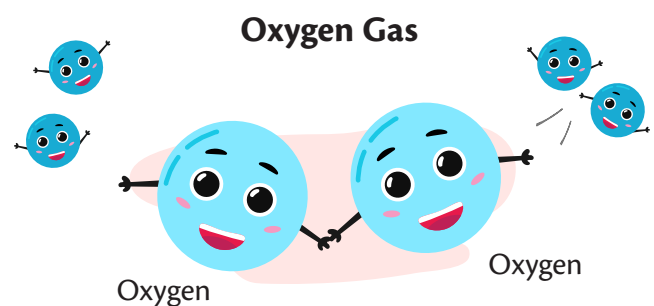


Sunlight is pure energy. It's not made of anything we can touch. It doesn't take up space. It's not made of chemicals. But sunlight is very important for plants. Plants need the light from the sun to make their food.

Plants use their roots to carry water up from the ground and into the rest of the plant. When a plant makes food, it uses the energy from sunlight to break apart the water molecules that have

come up from its roots. The plant then uses the two hydrogen atoms from each water molecule as ingredients to make food (sugar). Plants don't need the oxygen atom that's left over, so the oxygen atom joins with another oxygen atom from another broken water molecule. Together they leave the plant and go into the air.

Air looks like empty space. It looks like it's made of nothing, but it is actually made of molecules too. Air looks different than water because the molecules in air are spread out far from each other. When molecules are spread out far and floating around, it's called a **gas**. The pairs of oxygen atoms leaving the plant are **oxygen gas**.



This oxygen gas is what people and animals need to breathe! Plants make this oxygen for us. God has provided oxygen makers all over the earth for His creatures. He made plants able to busily change water molecules into the oxygen gas we must have to live!



Time to do Activity 7 in the Activity Book!

Plants Work to Improve Soil and Air

Good soil is important! Plants grow better and produce more food when they live in good soil. Plants busily help make soil better in two ways:

1. Plant roots put sugars and other good things into the soil to feed tiny creatures that are too small to see. These creatures then break up dead plants and minerals in the soil into things the plant uses. When different living things help each other in this way, it's called **symbiosis**.
2. Plant roots grow deep into the soil and hold the ground firmly in place. This helps prevent soil **erosion**. Erosion is when parts of something are gradually taken

away and moved somewhere else. Soil can be eroded by being blown away by the wind or washed away by water. Plants help prevent erosion from happening.

Moist air is important. Plants take moisture from the soil and put it into the air. This moisture is extra water that is not needed for photosynthesis. Moist air is less drying to our skin and more comfortable to breathe. It makes us cooler too! In the summer, a large maple tree can put 50 gallons (190 L) of water into the air every hour. Having grass, trees, and shrubs in your yard can make the air temperature around your home up to 14°F (8°C) cooler.² This water from plants can also join with other water in the air and become clouds. The clouds rain down water for the plants to use again.

Plants on hills prevent erosion.



Time to do Activity 8 in the Activity Book!



Prayer

Thank You for all the jobs that busy plants do, Lord! Using plants, You give us oxygen to breathe. You wisely gave plants a way to care for the soil they are growing in. And You make us comfortable with cool moisture from the plants we live with. Amen.







CHAPTER 4

Special Plants in Special Places: Grasslands


A **biome** (bye-ome) is a large area in the world that has certain kinds of plants, animals, and temperatures. Let's learn about the grassland biome!

About Grasslands

Grasslands are large, mostly flat areas of grass. These areas usually have long, warm summers and short, cold winters.

God sends rain and snow on grasslands, but He only sends enough moisture for grasses to grow. There isn't enough water to grow a forest, but a few trees sometimes grow in grasslands.

Fires start more often in grasslands than in any other biome. Every winter, the grass freezes, dies, and gets flattened to the ground. After a few years, a layer



Prairie fires
burn off
dead grass.



of dry plants has built up on the ground. When lightning strikes, it can start fires in this fuel. The fire quickly spreads and burns as the wind carries it along. Although fire can ruin things and be dangerous to life, it is helpful for grasslands.



Herby & Flora's List of Fire's Benefits

- Fire burns away dead plants, making it easier for new grass to reach the sunlight.
- Dead plants trap winter's chill in the ground and keep it there so new grass can't grow when spring starts. Fire gets rid of this layer of dead plants. Once these dead plants are burned off, new grass can start growing earlier in the spring.
- Fire takes the nutrition from dead grass and puts it into the soil for the new grass to use. If fire didn't do this, the nutrition would stay in the dead plants a very long time, and new plants wouldn't be able to use it.
- Grass roots can survive a fire better than most other plants, shrubs, or trees. Fire keeps grasslands from changing into other biomes because it kills the bigger plants.
- With dead plants burned away, grazing animals have an easier time finding good grass to eat. And the new grass that grows is healthier! The animals quickly grow fat because they don't have to use up their energy trying to find good green grass.



Sometimes people purposely start fires on their land to make grass better for grazing animals.

Fire does good things for the grasslands! Maybe that's how fire praises the Lord as it's told to do in this psalm.



Praise the LORD from the earth,
You great sea creatures and all the depths;
Fire and hail, snow and clouds;
Stormy wind, fulfilling His word.
(Psalm 148:7-8)



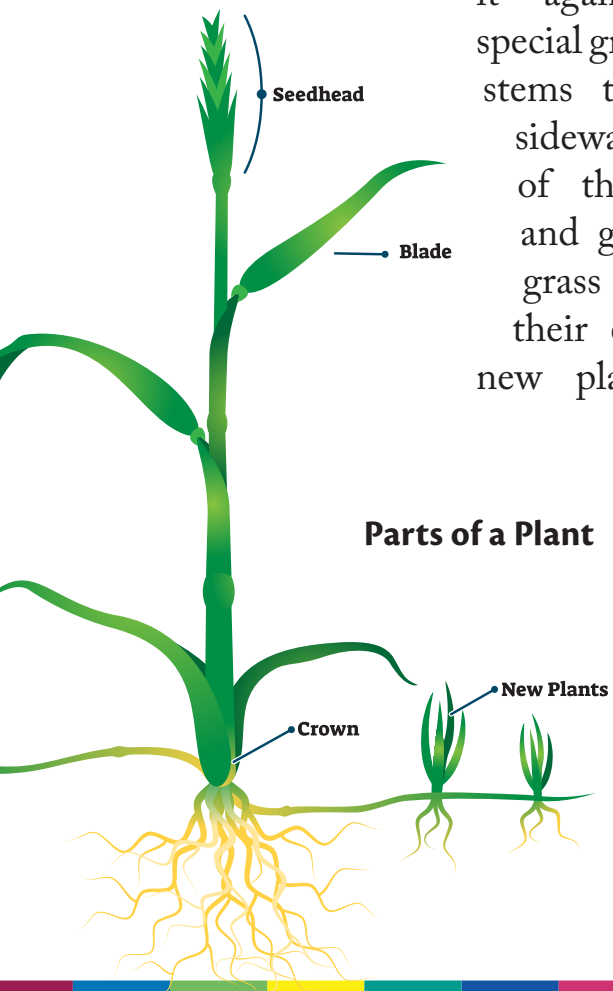
Time to do Activity 10 in the Activity Book!

Special Plants in Grasslands

We have already discovered the amazing way God provides food to people and animals all over the world with fruitful grass. Using grass, He provides grain for people and pastures for grazing animals. Let's look at grass a little more closely.

God has given many grasses ways to make more plants even if their seeds are somehow destroyed. Some special grasses have underground stems which keep growing sideways secretly. They will make roots every now and then, and a new grass plant will spring up from these roots. Then the secret stems

spread underground to do it again. Other special grasses have stems that creep sideways on top of the ground and grow more grass plants at their ends. The new plants send



Parts of a Plant

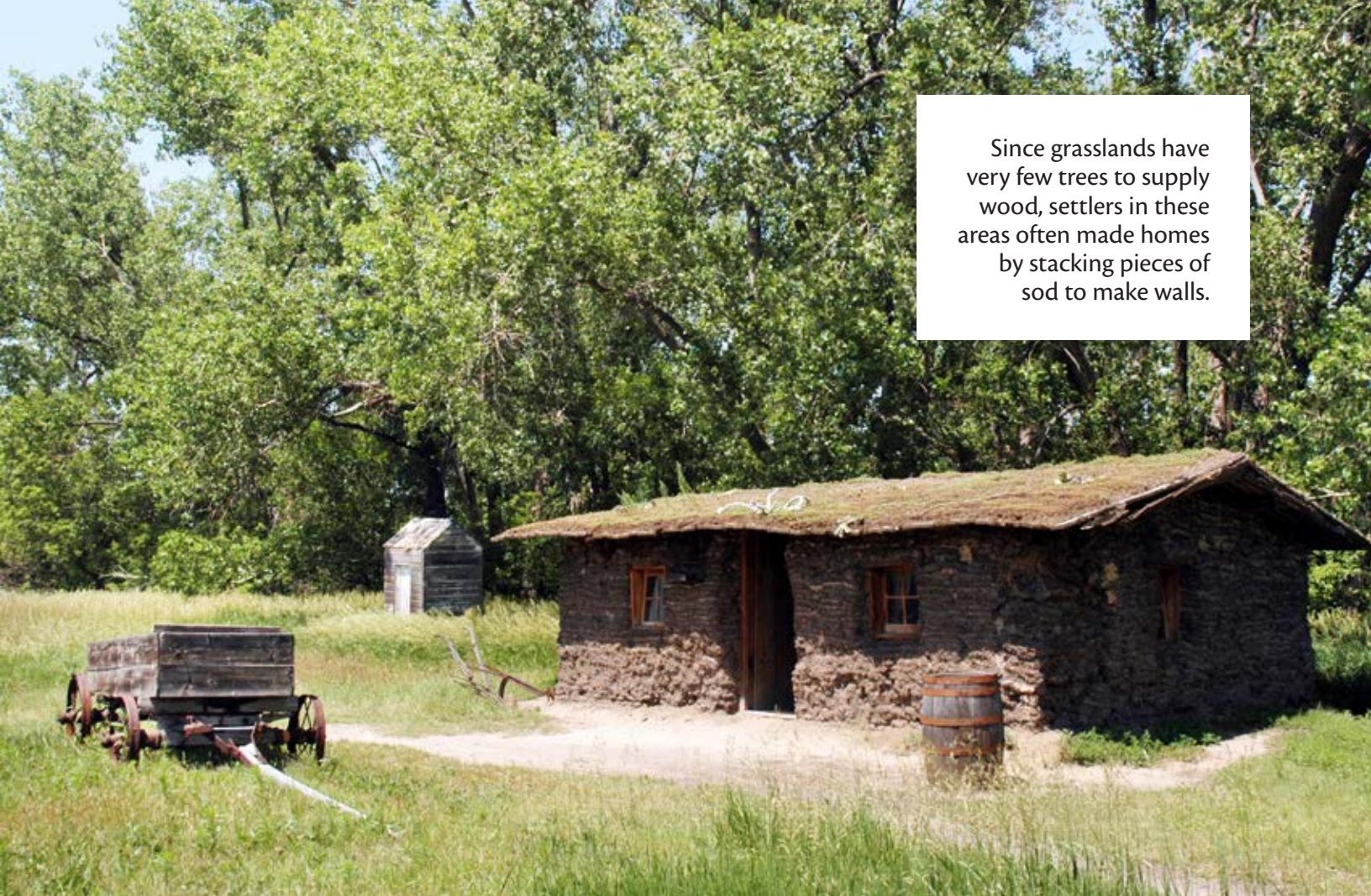
down roots and can make new sideways stems of their own on the surface of the ground.

Grasses are also wonderfully fruitful because grass **blades** (leaves) can grow back easily after an animal eats them. Most other plants grow taller only from their tips. If you cut the top off a tree, it won't get any taller. The reason for this is that plants have certain places where they grow. The growing places that make trees taller are only at the tips of the branches. Grasses are amazing because God also gave them growing places down near their **crowns** (where they come out of the ground). This means that, even though the tips of the blades might be eaten off, the blades will still get taller by growing from the bottom.



We should be happy when God shows us things we need to change. When people obey God, He says they can be as fruitful as grass!

“Happy is the man whom God corrects; Your descendants shall be many, And your offspring like the grass of the earth.” (Job 5:17,25)



Since grasslands have very few trees to supply wood, settlers in these areas often made homes by stacking pieces of sod to make walls.




This roll of grass and roots came from a sod farm. It will make a nice lawn if kept watered and mowed.



A flood in this creek washed away soil and allows us to see the tangled roots of grass.



Time to do Activity 11 in the Activity Book!



Grasslands have other short plants besides grasses. Purple coneflowers are one of the hundreds of kinds of plants in grasslands.

Saiga antelope of the steppes

Animal Life in Grasslands

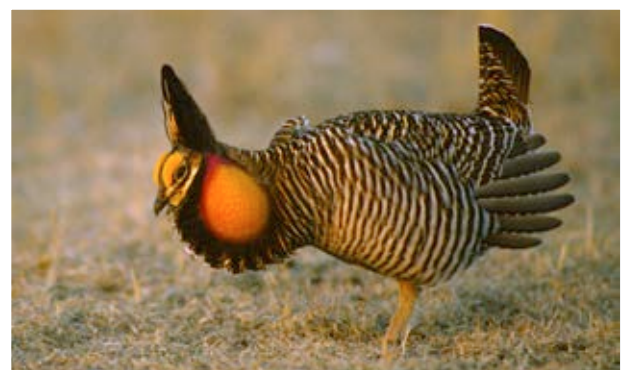
Some of the animals living in the grassland biome are: bison, wild horses, pronghorn, antelope, prairie dogs, coyotes, falcons, snakes, birds of prey, and different kinds of insects and gophers.

Heavy grazing animals are important for the grasslands. God made these animals wander while they eat. Here are some reasons why grazing animals are perfect for keeping the grass healthy:

- When grass is partly eaten or cut, it sends itself a signal to make more stems that travel sideways underground or

along its surface. This makes even more grass in the grassland than would grow from seeds!

- Tall grass makes too much shade. Grass that grows in its own shade isn't as strong or healthy as other grass. Grass roots don't grow well when the ground above them is shaded. Wandering animals help by eating the tall parts of grass. Then the sunlight can shine on the grass underneath.



Prairie chicken

- Sometimes grasslands don't get much rain. When this happens, grasses might lose too much water from their blades. When grazing animals keep the grass blades short, the plants lose less water.
- With their sharp hooves, grazing animals scratch away some of the dead plants on the ground while they walk and graze. Then they move along to a new spot. This makes little areas of bare ground where seeds can fall and touch the soil and sprout into new grass.
- When the ground is soft after a rain, heavy animals can make deep



Przewalski's horse of the steppes

footprints in it. This is good because each footprint can collect water like a little pond the next time it rains. The water in the footprint does not drain away or evaporate quickly. It slowly soaks into the soil and keeps plant roots and tiny soil creatures alive. Wandering animals make lots of footprints!

- Animal manure fertilizes the grassland plants.

Most of the grazing animals on Earth belong to people because people use their products. This means we can't let

Bison of the prairie



Definitions

The **prairies** are the grasslands of North America.

The **steppes** are the grasslands of Europe and Asia.

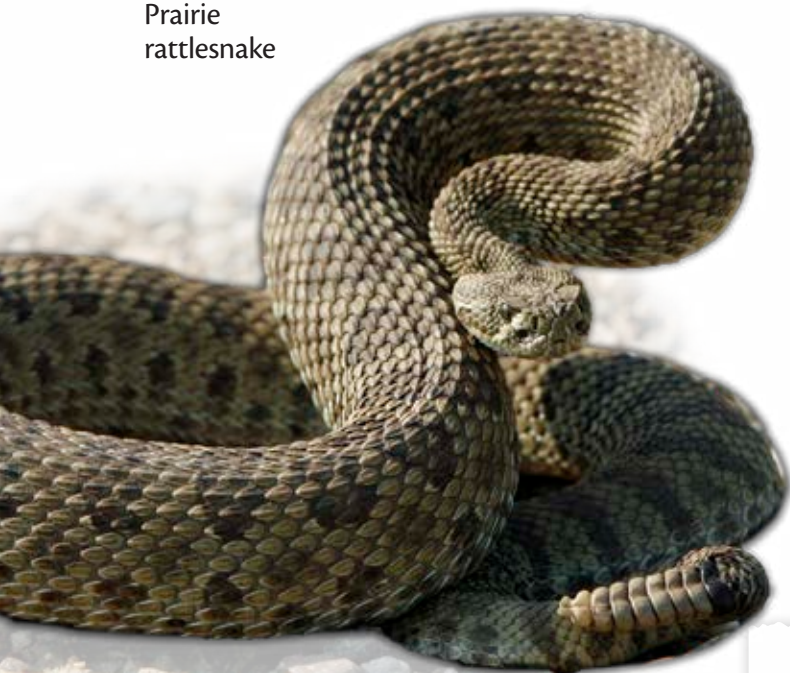


Prairie
falcon

them wander like wild animals. We have to either feed them or let them graze in fenced pastures.

When useful animals are grazed, the owner needs to know his pastures' grasses. He should know how much grazing will help each pasture. He

Prairie
rattlesnake



should know when to move the animals to another pasture to keep them from eating so much that the grass can't grow back. He needs to make sure the heavy animals aren't in one place so long that they make the soil hard. He is moving his animals to help his land the way wandering animals would. He is taking care of his land as God told Adam to do in this verse:

Then the LORD God took the man and put him in the garden of Eden to tend and keep it. (Genesis 2:15)

Food products from animals that eat grass are healthier for us than products from grain-fed animals. When an animal grazes, it eats many different kinds of grass and other plants in the grassland. Its body makes the kind of fat that's good for us to eat. When an animal is fed only a few of the kinds of food God made it to eat (like a lot of grain), its body makes a different kind of fat that isn't healthy for us.

Different grasslands around the world have different large animals living on them. The grasslands of North America are called **prairies**. At one time, no one owned the prairie land. Millions of wild bison lived on the prairies and kept the grasslands healthy.

Then people brought cattle to the

prairies. At that time, the cattle in an area belonged to different owners, but they all grazed together, keeping the grassland healthy. Each cow was branded with a mark that told who its owner was. When the cattle were large enough to be sold for meat, cowboys working for each owner would sort out his boss's cattle and take them to a railroad. On these long trips across the grasslands, there might be ten cowboys in charge of 3,000 cattle. These **cattle drives** could take up to two months. They had to go slowly and allow the cattle to graze twice a day so they would be fat enough for someone to want to buy them.

Now, because people own the land and put fences on it, there is no longer a large path of wild grassland to drive cattle on. Highways make it easy to send cattle on trucks to where they are sold. People who own grazing cattle today



Prairie dogs

keep them on land called **ranches**. These “ranchers” need to move their cattle around to different fenced pastures to best take care of their grassland ranches.

The large grasslands of Europe and Asia are called **steppes**. There were once many wild horses and antelope grazing there. As the area became more settled, cattle and sheep became the main grazing animals.



Time to do Activity 12 in the Activity Book!



Prayer

Grass is wonderful, Lord! It can be fruitful in so many ways: seeds, sideways stems, and blades that grow from the bottom. It provides grain for us and food for animals. And You even use dangerous fire to help keep grassland fruitful. Thank You for grasslands! Amen.

