



Water Plants

All Wet!



by Ellen Lawrence



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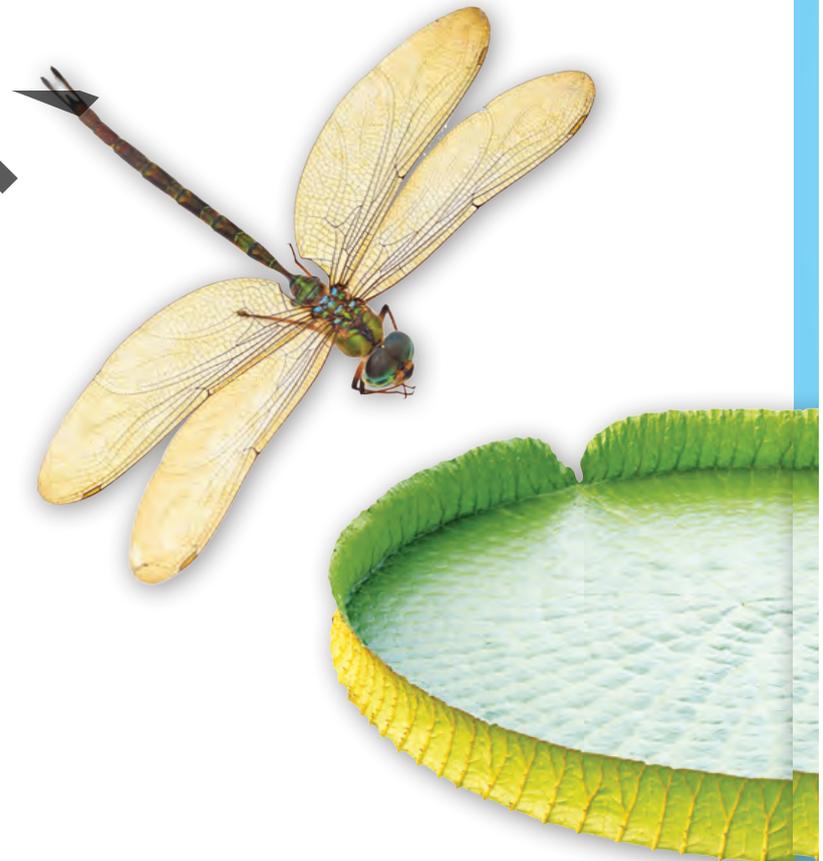
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Lily Pads

It's a warm summer day.

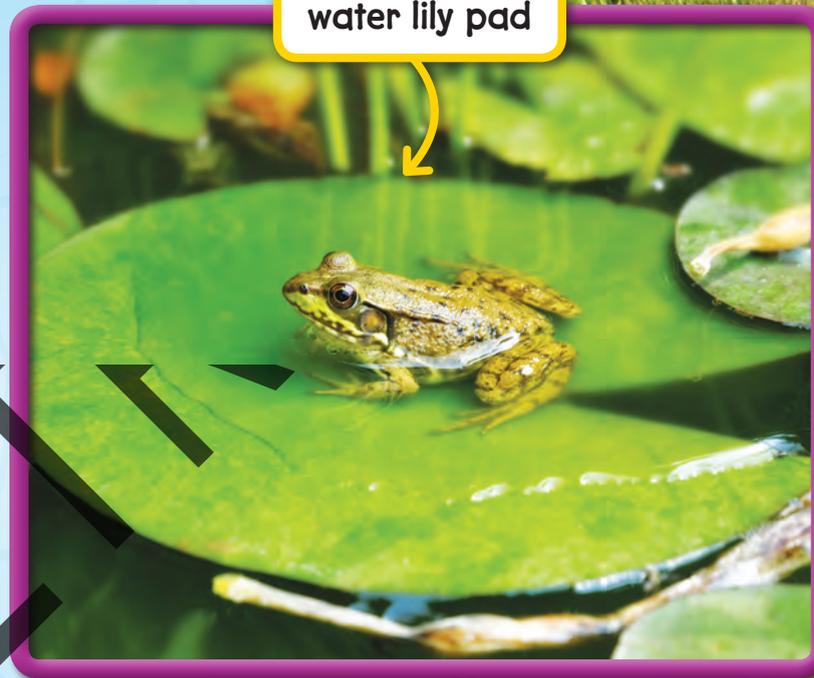
Round, green lily pads float on the surface of a pond.

A frog sits on one of the pads, waiting to catch an insect.

So what exactly are these green floating pads?

They are the leaves of water lilies.

Water lilies are plants that live and grow in water.





Plants that grow in ponds, lakes, rivers, and oceans are known as aquatic plants.

water lily pads

Plant Parts

There are many different kinds of aquatic plants.

Some water plants have leaves, stems, flowers, and **roots**—just like plants that grow on land.

The roots take in water and **nutrients** from the muddy soil at the bottom of ponds, lakes, and rivers.

Attached to the roots are long stems.

At the end of each stem is a leaf or flower that floats on top of the water.



Unlike the stiff stems of most land-growing plants, the stems of water lilies are soft and floppy. Why do you think this is?

(See answer on page 24.)





Skunk cabbage
is a water plant that
grows in wet soil at the
edges of ponds and lakes.
It gets its name
because it smells
like a skunk!

skunk cabbage

Floating Plants

Other water plants float on ponds with their roots dangling below the water's surface.

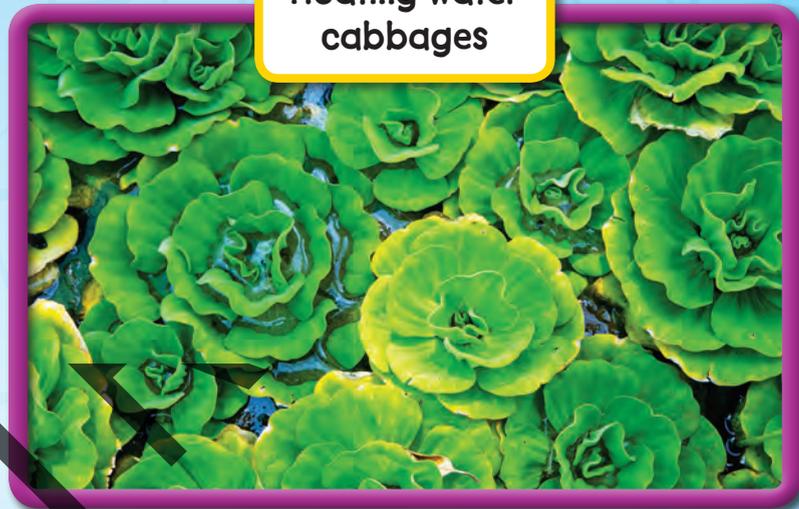
The roots take in water and nutrients directly from the pond.

Water cabbages grow in this way.

Some plants, such as hornworts, float beneath the water and have no roots.

These plants take in water and nutrients through their leaves.

floating water cabbages



water cabbage roots



Many water plants, including water lilies and hornworts, are supported, or held up, by the water. If they are lifted out of water, these plants will flop over.

hornwort



Tiny and Giant!

Water plants come in many shapes and sizes.

Duckweed is a tiny, round plant that floats on ponds.

Its flowers and roots are so small they can only be seen with a magnifying glass.

The giant water lily, however, is truly enormous.

Its huge, round, floating leaves can grow to more than 8 feet (2.4 m) across!

duckweed



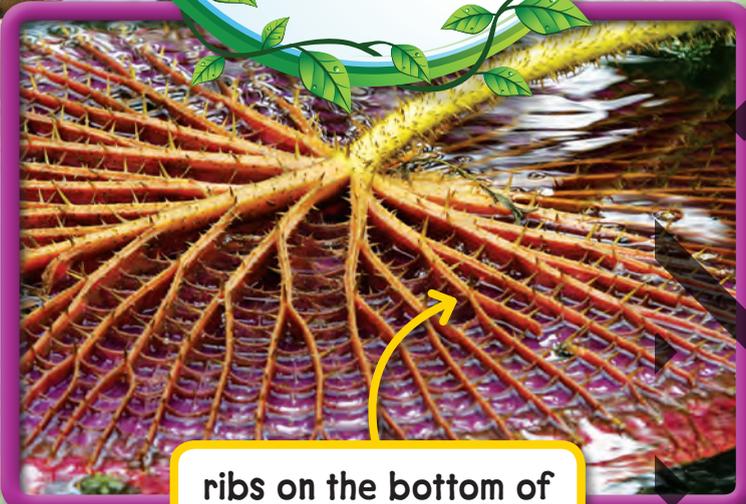
Each tiny ball is a duckweed plant.





The bottom of a giant water lily leaf has special parts called ribs that keep it from sinking. Air gets trapped between the ribs and helps the leaf float.

giant water lily leaves



ribs on the bottom of a giant water lily leaf

On the Seashore

Some water plants, such as mangrove trees, grow in salty ocean water along seashores.

A mangrove tree has many roots that spread downward from its trunk and branches.

The strong roots keep the tree upright and hold it firmly in the ground.

This stops the tree from falling over when waves crash against it.

Look at the mangrove trees in this picture. If you could rename the trees, what would you call them? Try to think of a name that describes how they look or where they live.





Crocodiles, fish, and crabs live among the underwater roots of mangrove trees. Birds, monkeys, and insects make their homes in the trees' leafy branches.

fish

An Underwater Meadow

Sea grass is a water plant that grows in oceans near the shore.

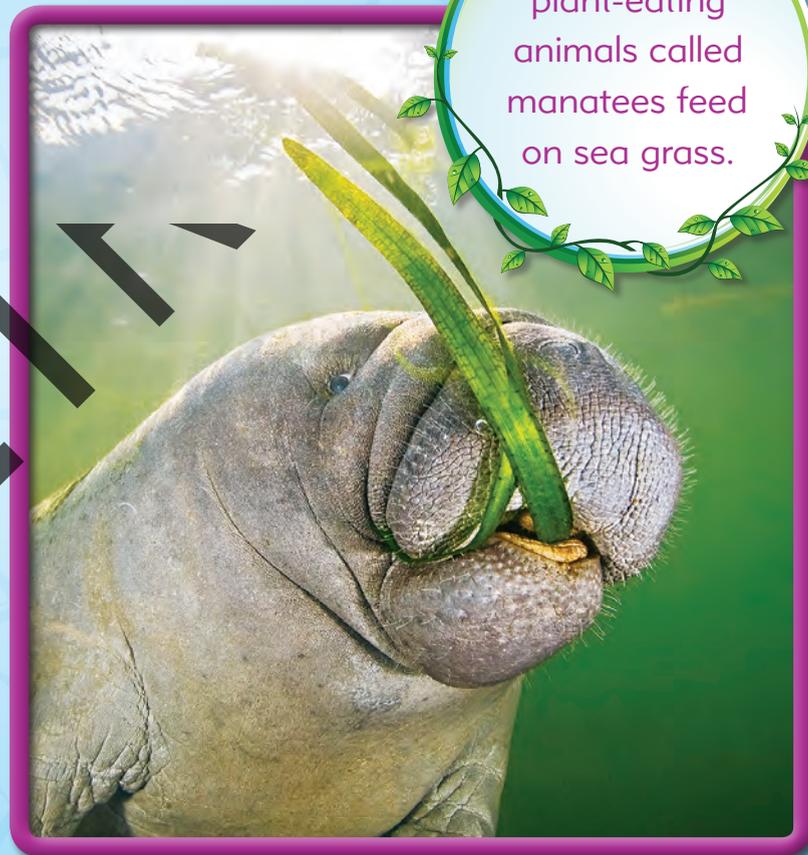
It has long, thin leaves that look like grasses that grow on land.

Sea grass grows in shallow water in huge underwater grasslands, or **meadows**.

Fish and other animals use these meadows to hide from their enemies.

Many sea animals also raise their babies in them.

Large plant-eating animals called manatees feed on sea grass.



sea grass meadow

stingray



What Is Seaweed?

Oceans are home to other living things that look like plants but are not, such as seaweed.

Seaweed is a type of living thing called **algae**.

Some seaweeds grow on the ocean floor or on underwater rocks.

Others float freely in the water.

One kind of seaweed has tiny balloon-like parts called bladders.

These air-filled bladders help the seaweed float in the water.

seaweed growing on rocks



bladders



floating seaweed



Kelp is a large, brown seaweed that grows on the seabed. Sea otters sometimes wrap kelp around their bodies to hold them in one place as they sleep in the ocean.

a sea otter wrapped in kelp



Trapped!

There are some underwater plants that are dangerous—but only to tiny animals!

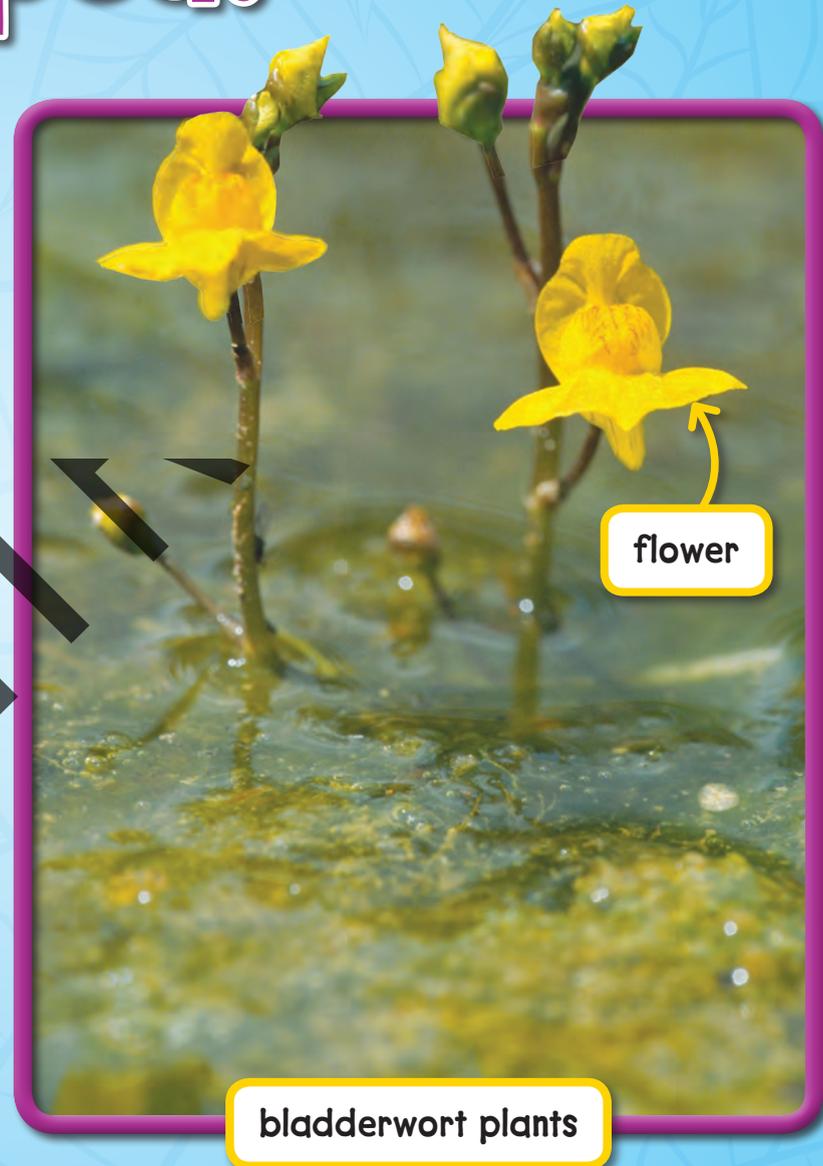
Bladderworts are **carnivorous** plants that grow in ponds and rivers.

These plants have tiny traps on their underwater stems.

When an animal touches a trap, it is sucked inside.

Then the plant releases liquids that turn the animal into a soupy mush.

The mush contains nutrients that the bladderwort needs to survive.

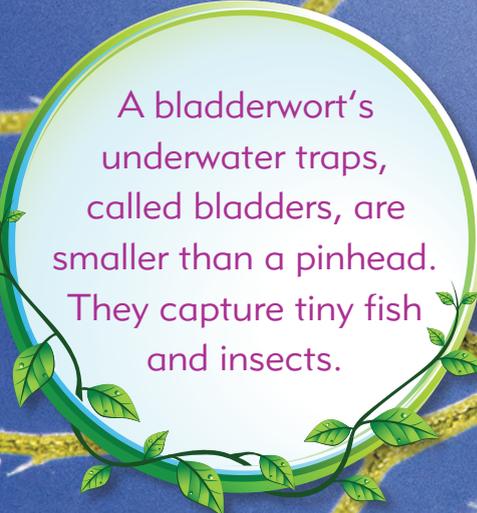




a bladder
between
a person's
fingers



bladder



A bladderwort's
underwater traps,
called bladders,
are smaller than a
pinhead.
They capture tiny
fish
and insects.



tiny creatures
trapped inside
a bladder

Water Plants to Eat

Some water plants, such as rice and water chestnuts, are grown by people for food.

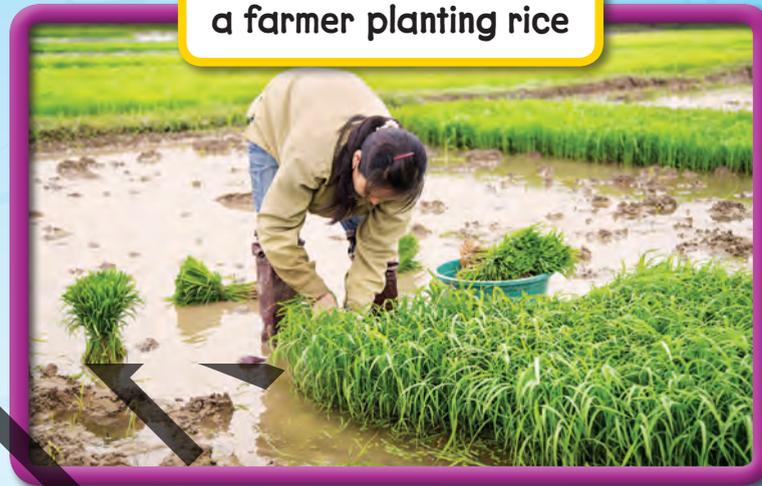
Rice plants produce grains that people eat.

The bulb-like **corms** of water chestnuts are also used for food.

Water plants are useful and important to animals and people.

They make ponds, lakes, rivers, and oceans look beautiful, too!

a farmer planting rice



water chestnut corms



Watercress is a leafy vegetable that has a peppery taste. Farmers grow this water plant in flooded fields.

farmers harvesting watercress



Science Lab

Make a model of lily pads

You will need:

- Gravel or small stones
- A large bowl
- Water
- Green string or yarn
- Scissors
- Duct tape
- Green plastic bottle caps

1. Place about 2 inches (5 cm) of gravel into a large bowl.
2. Slowly fill the bowl with water.
3. To make a lily pad and stem, cut a piece of string and tape it to the underside of a bottle cap. (The string must be slightly longer than the depth of the water in the bowl). Repeat this step with the other bottle caps.
4. Gently place one of the bottle caps on the surface of the water so that it floats. Then carefully tuck its string, or stem, under the stones—as if it were growing in a pond.



5. Repeat this step with the other bottle caps.
6. Show your model to your friends, family, or teacher.



- Explain how the plant grows in the soil at the bottom of a pond.
- Show how the stems are supported by water but are floppy when lifted out of water.
- Explain how the pads, or leaves, float on the water's surface.



Science Words



algae (AL-jee) plantlike living things, such as seaweed, that are often found in ponds, lakes, rivers, and oceans



carnivorous (kar-NIV-ur-uhss) meat-eating; carnivorous plants catch insects and other small animals to obtain nutrients



corms (KAWRMS) large, underground parts of plant stems



meadows (MED-ohz) fields or underwater areas covered with grasses and other plants



nutrients (NOO-tree-uhnts) vitamins, minerals, and other substances needed by living things to grow and be healthy



roots (ROOTS) underground plant parts that take in water and nutrients from the soil

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Read More

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Learn More Online

To learn more about about water plants, visit
www.bearportpublishing.com/Plant-ology

About the Author

Ellen Lawrence lives in the United Kingdom. Her favorite books to write are those about nature and animals. In fact, the first book Ellen bought for herself, when she was six years old, was the story of a gorilla named Patty Cake that was born in New York's Central Park Zoo.



Answer for Page 6

A water lily's stems are held up, or supported, by the water. Unlike land plants, the stems of aquatic plants don't need to be stiff to hold up leaves and flowers.



Water Plants

All Wet!

What water plant has leaves that are big enough for a person to sit on? What ocean plant is a manatee's favorite food? What meat-eating pond plant traps tiny fish and insects? Look inside to find out. Along the way, you'll discover how these amazing plants survive in their watery homes, and why people and animals depend on them!

Amazing Plant Bodies
Tiny to Gigantic

From Bird Poop to Wind
How Seeds Get Around

Poison Petals
Don't Eat!

Cooking with Sunshine
How Plants Make Food

Healing Plants
Medicine from Nature

Prickly Plants
Stuck!

Extreme Trees
And How They Got That Way

How Plants Clean the Air
One Leaf at a Time

Water Plants
All Wet!

Freaky Plant Facts
Extreme Greens

Meat-Eating Plants
Toothless Wonders

What Lily Gets from Bee
And Other Pollination Facts

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