Name: _____ Date: _____

Peat Bogs: Wet Ground That Saves Old Plants

Circle group

A peat bog is a soggy place. The ground feels like a wet sponge. Little grows there but moss, a few low shrubs and some special plants. It may seem dull. But a bog keeps a record of the past and does a lot of work.

The key plant in many bogs is sphagnum moss. It soaks up water like a sponge. It also gives off acids that make the water sour. In a forest, fallen leaves and stems are broken down by tiny living things in a few years. A bog is cold, full of water and sour. It has very little oxygen. So the decomposers work very slowly. Dead moss and plants pile up in layers. They become a dark, spongy material called peat. Peat grows only about a millimeter in a year. A deep bog can be thousands of years old.

Decay is so slow that bogs keep things well. Scientists study old pollen in peat. It tells them which plants grew nearby long ago. They have found wooden tools and other old objects kept safe in the wet ground.

People have dried and burned peat as fuel. Gardeners have mixed it into potting soil. Bogs also hold a lot of carbon. They soak up rain and let it go slowly. A bog that is dug up takes thousands of years to come back. So many places now protect their bogs.

Questions

1. What is the key plant in many bogs?

_____

_____

2. What does sphagnum moss do to the water?

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_____

3. What is peat?

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4. What have people done with peat?

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5. Why do decomposers work so slowly in a bog?

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6. Why do many places now protect their bogs?

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_____

Words to know

sphagnum: a kind of pale moss that holds a great deal of water
peat: dark material made of partly rotted plants in wet ground
decomposers: living things that break down dead plants and animals
pollen: the fine yellow dust that flowers make for reproduction

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Peat Bogs: Wet Ground That Saves Old Plants

Triangle group

A peat bog is a soggy stretch of land where the ground feels like a wet sponge and little grows except moss, a few low shrubs and some specialized plants. It may seem like a dull place, but a bog stores a record of the past and does a surprising amount of work.

The most important plant in many bogs is sphagnum moss. It soaks up water like a sponge and releases acids that make the water sour. In a normal forest, fallen leaves and stems are broken down by tiny living things within a few years. In the cold, waterlogged, acidic bog, there is very little oxygen, and those decomposers work extremely slowly. Dead moss and plants pile up, layer on layer, and become a dark, spongy material called peat. Peat builds up only about a millimeter or so in a year, so a deep bog can be thousands of years old.

Because decay is so slow, bogs preserve things well. Scientists can study ancient pollen in peat to learn which plants grew nearby long ago, and they have found wooden tools and other old objects kept safe in the wet ground.

People have dried and burned peat as fuel, and gardeners have mixed it into potting soil. Bogs also hold huge amounts of carbon, and they soak up rainwater and release it slowly. Digging them up takes thousands of years to undo, so many places now protect their bogs.

Questions

1. What is the most important plant in many bogs?

_____

_____

2. What does sphagnum moss do to the water?

_____

_____

3. What is peat?

_____

_____

4. What have people done with peat?

_____

_____

5. Why do decomposers work so slowly in a bog?

_____

_____

6. Why do many places now protect their bogs?

_____

_____

Words to know

sphagnum: a kind of pale moss that holds a great deal of water
peat: dark material made of partly rotted plants in wet ground
decomposers: living things that break down dead plants and animals
waterlogged: soaked with so much water that it cannot drain
pollen: the fine yellow dust that flowers make for reproduction

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Peat Bogs: Wet Ground That Saves Old Plants

Square group

A peat bog is a saturated expanse of land where the ground feels like a damp sponge and little grows except moss, a few low shrubs and some highly specialized plants. It may seem like a dreary place, but a bog preserves a record of the distant past and performs a surprising amount of valuable work.

The most important plant in many bogs is sphagnum moss. It absorbs water like a sponge and releases acids that turn the water sour. In an ordinary forest, fallen leaves and stems are broken down by tiny living things within a few years. In the cold, waterlogged, acidic conditions of a bog, there is very little oxygen, and those decomposers labor extremely slowly. Dead moss and plants accumulate, layer upon layer, and gradually become a dark, spongy material called peat. Peat builds up at a rate of only about a millimeter in a year, so a deep bog can be many thousands of years old.

Because decay proceeds so slowly, bogs preserve objects remarkably well. Scientists can examine ancient pollen in peat to determine which plants grew nearby long ago, and they have discovered wooden tools and other old objects kept intact in the wet ground.

People have dried and burned peat as fuel, and gardeners have blended it into potting soil. Bogs also store enormous quantities of carbon, and they absorb rainwater and release it gradually. Digging them up takes thousands of years to undo, so many places now protect their bogs.

Questions

1. What is the most important plant in many bogs?

_____

_____

2. What does sphagnum moss do to the water?

_____

_____

3. What is peat?

_____

_____

4. What have people done with peat?

_____

_____

5. Why do decomposers labor so slowly in a bog?

_____

_____

6. Why do many places now protect their bogs?

_____

_____

Words to know

sphagnum: a kind of pale moss that holds a great deal of water
peat: dark material made of partly rotted plants in wet ground
decomposers: living things that break down dead plants and animals
waterlogged: soaked with so much water that it cannot drain
pollen: the fine yellow dust that flowers make for reproduction

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Peat Bogs: Wet Ground That Saves Old Plants

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Peat Bogs: Wet Ground That Saves Old Plants

Easier · 234 words · Flesch-Kincaid grade 2.8

1. Sphagnum moss.
2. It makes the water sour with acids.
3. A dark, spongy material made of layers of dead moss and plants.
4. They have burned it as fuel and mixed it into potting soil.
5. A bog is cold, full of water and sour, with very little oxygen.
6. A bog takes thousands of years to come back, and it stores carbon and old records and slows rain.

Triangle: Peat Bogs: Wet Ground That Saves Old Plants

This passage · 241 words · Flesch-Kincaid grade 7.6

1. Sphagnum moss.
2. It makes the water sour by releasing acids.
3. A dark, spongy material made of layers of dead moss and plants.
4. They have burned it as fuel and mixed it into potting soil.
5. The bog is cold, waterlogged and acidic, with very little oxygen.
6. A bog takes thousands of years to build back, and it stores carbon and old records and slows rainwater.

Square: Peat Bogs: Wet Ground That Saves Old Plants

Harder · 249 words · Flesch-Kincaid grade 9.8

1. Sphagnum moss.
2. It turns the water sour by releasing acids.
3. A dark, spongy material formed from layers of dead moss and plants.
4. They have burned it as fuel and blended it into potting soil.
5. The bog is cold, waterlogged and acidic, with very little oxygen.
6. A bog takes thousands of years to rebuild, and it stores carbon and ancient records and releases rainwater gradually.