

Kids 'n Nature

SCHOOL OUTREACH PROGRAM

Why is Biodiversity Important?

This activity introduces students to the idea that biodiversity is important for a healthy habitat.

Set-Up

- There are two sets of cards with 32 cards in each set. Remove cattail cards if there are extra cards.
 - High Biodiversity – dotted border
 - Low Biodiversity – solid border
- Print and cut out each set of cards, shuffle each set and keep each set separate.

Activity

- Each student receives one card from the LOW biodiversity set
- Students must find other students with the same plant or animal card, and write one another's name on their card.
 - i.e. Students who have a muskrat card try to find 3 other muskrats and write their names down
- Limit the time to a couple of minutes
- After students have written down 3 names or time is up, they return to their seats and stay standing.
- Now we are going to see what happens when there is a problem in the marsh.
 - *Read* - A disease comes into the marsh that kills Broad-leaved cattails.
 - *Teacher walks around the class and picks someone who has a Broad-leaved cattail card*
 - *Announce* – You are now infected with the disease and you spread it to the 3 other cattails nearby (names on the card)
 - *Have the student read out the names on their card, then sit down*
 - *Announce* – Now those three plants are infected with the disease as well
 - *Those students share the names on their card and they all sit down.*
 - *Keep going until all the name connections are sitting down.*
 - *Have students who are still standing read out what plant/animal they are*

- Discussion
 - Our marsh is looking pretty empty now, all/most of the cattails have died because of the disease.
 - We only have a few plants left in the marsh.
 - Muskrats – Do you think you will keep living here in this marsh?
 - No! Why not? *Nowhere to hide, no food, predators might eat us*

Round 2 – Repeat activity using the HIGH biodiversity cards

- Discussion
 - *You should find in this round that not as many students are sitting down at the end.*
 - We can see that our marsh habitat isn't as empty this time. We still have some plants left in the marsh and there are other animals living here too.
 - When we have lots of biodiversity this helps the habitat to stay healthy when there is a threat such as disease or fire.
 - Before we had low biodiversity, which meant that when the disease came it took out a lot of the plants from the habitat and the remaining animals could no longer find any food or shelter and had to move away.



Broadleaf Cattail	Broadleaf Cattail	Broadleaf Cattail	Broadleaf Cattail
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.
Broadleaf Cattail	Broadleaf Cattail	Broadleaf Cattail	Broadleaf Cattail
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.

Broadleaf Cattail 1. 2. 3.	Broadleaf Cattail 1. 2. 3.	Broadleaf Cattail 1. 2. 3.	Broadleaf Cattail 1. 2. 3.
Broadleaf Cattail 1. 2. 3.	Broadleaf Cattail 1. 2. 3.	Broadleaf Cattail 1. 2. 3.	Broadleaf Cattail 1. 2. 3.

Broadleaf Cattail 1. 2. 3.	Red Oiser Dogwood 1. 2. 3.	Red Oiser Dogwood 1. 2. 3.	Red Oiser Dogwood 1. 2. 3.
Broadleaf Cattail 1. 2. 3.	Red Oiser Dogwood 1. 2. 3.	Red Oiser Dogwood 1. 2. 3.	Red Oiser Dogwood 1. 2. 3.

Broadleaf Cattail 1. 2. 3.	Muskrat 1. 2. 3.	Muskrat 1. 2. 3.	Muskrat 1. 2. 3.
Broadleaf Cattail 1. 2. 3.	Muskrat 1. 2. 3.	Muskrat 1. 2. 3.	Muskrat 1. 2. 3.

Broadleaf Cattail	Broadleaf Cattail	Broadleaf Cattail	Broadleaf Cattail
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.
Broadleaf Cattail	Broadleaf Cattail	Broadleaf Cattail	Broadleaf Cattail
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.

White Water Lily

1.

2.

3.

White Water Lily

1.

2.

3.

White Water Lily

1.

2.

3.

White Water Lily

1.

2.

3.

Yellow Pond Lily

1.

2.

3.

Yellow Pond Lily

1.

2.

3.

Yellow Pond Lily

1.

2.

3.

Yellow Pond Lily

1.

2.

3.

**Red Oiser
Dogwood**

1.

2.

3.

**Red Oiser
Dogwood**

1.

2.

3.

**Red Oiser
Dogwood**

1.

2.

3.

**Red Oiser
Dogwood**

1.

2.

3.

**American
Bullfrog**

1.

2.

3.

**American
Bullfrog**

1.

2.

3.

**American
Bullfrog**

1.

2.

3.

**American
Bullfrog**

1.

2.

3.

<p>Muskrat</p> <p>1.</p> <p>2.</p> <p>3.</p>	<p>Muskrat</p> <p>1.</p> <p>2.</p> <p>3.</p>	<p>Muskrat</p> <p>1.</p> <p>2.</p> <p>3.</p>	<p>Muskrat</p> <p>1.</p> <p>2.</p> <p>3.</p>
<p>Red-winged Blackbird</p> <p>1.</p> <p>2.</p> <p>3.</p>	<p>Red-winged Blackbird</p> <p>1.</p> <p>2.</p> <p>3.</p>	<p>Red-winged Blackbird</p> <p>1.</p> <p>2.</p> <p>3.</p>	<p>Red-winged Blackbird</p> <p>1.</p> <p>2.</p> <p>3.</p>