

Seed Dispersal

Natural Resources 2

Exhibit Card

Name Lillian Behrens

County McHenry

Class Natural Resources Age: 11

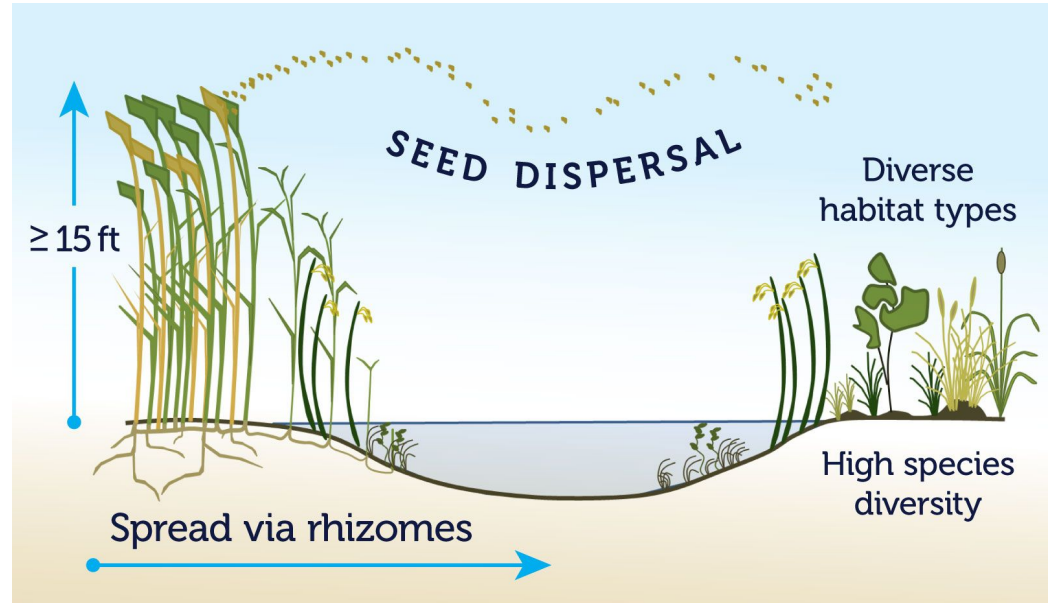
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COLLEGE OF AGRICULTURAL, CONSUMER
& ENVIRONMENTAL SCIENCES



Lillian Behrens
Legendary Pioneers
McHenry County
11 years old

Why do seeds need to disperse?

In order to grow, seeds require sun, water, and space. If a seed falls directly next to the parent plant, the young seed will have to compete with the parent plant for the necessary resources. So in order to reduce competition, they relocate in various ways to find enough resources to grow. This relocation process is called **DISPERSAL**.



What are some types of seed dispersal?

- Wind dispersal
- Water Dispersal
- Animal Dispersal
- Self dispersal



Animals



Wind



Explosion



Water

Wind Dispersal

Seeds that are very light and have sails (like hairy outgrowth) can be carried easily by the wind. These seeds can be dispersed over short or long distances. Since this is a very random process, plants produce large amounts of seeds to help other seeds have a greater chance of landing in favorable conditions.



Examples:

- Pines
- Maples
- Ash trees
- Balloon seeds on Willows
- Dandelions
- Milkweed

Water dispersal

Seeds can also be dispersed by water. They have air sacs or buoyant tissue, so when these kinds of seeds are being dispersed, they land on water and will be carried like a raft across bodies of water like rivers, lakes, swamps, and even through rain.

Examples:

- Cranberries
- Coconuts
- Mangrove fruits
- Lotus
- Cattail



Animal Dispersal

When seeds are dispersed by animals it means that those seeds have been eaten or carried on fur, then excreted. Some fruits or nuts are carried and stored by birds or small animals to be eaten later but germinate and become plants instead.

Examples:

- Berries
- Nuts
- Acorns
- Apples
- Grapes
- Tomatoes
- Cockleburr



Animal dispersal conn.

Externally dispersed:

Seeds that attach to fur, feathers, or clothing to be carried away from the parent plant. These seeds develop attachment aids such as hooks in order to be carried.

Ex: Burrs



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Internally dispersed:

Seeds that develop within tasty fruits can be carried by animals when they are eaten and excreted through feces.

Ex: berries

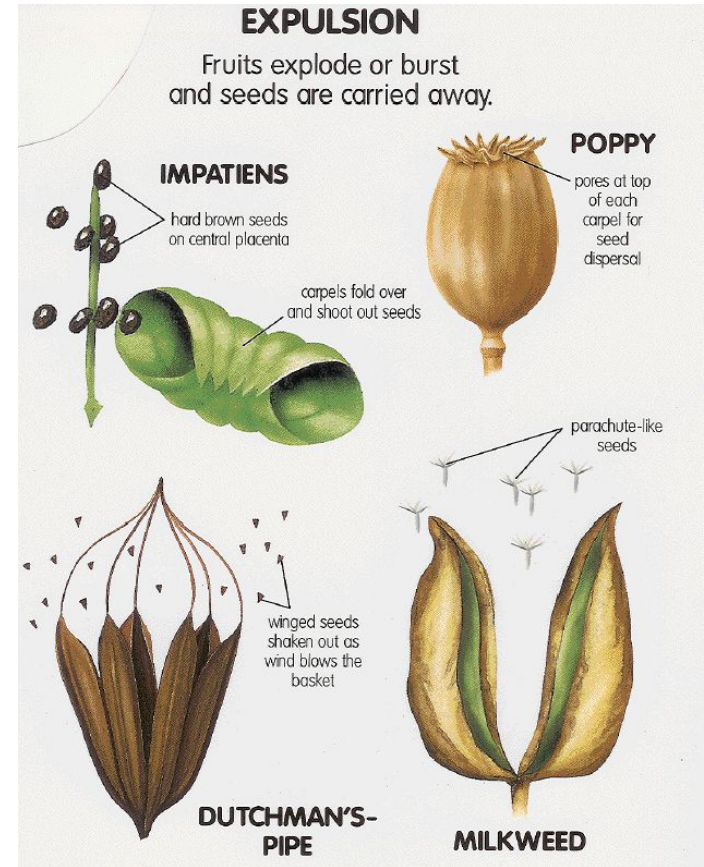


Self dispersal

Self dispersal is when the seeds or fruit burst or explode and are shot out and away from the parent plant. Seeds are produced in pods that create pressure within as they dry which cause them to explode.

Examples:

- Violets
- Lupine
- Beach pea
- Milkweed
- Poppy
- Impatiens



Thank you for judging!

Every year we clean up walnuts and apples from the yard and disperse them throughout the back pasture. Here is our load from October 2017. We have several small trees growing that will hopefully provide fruit for the wildlife to eat.

ANIMAL Dispersal!



4-H Project Report

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4-H Project Report (Maximum 1 page)

Name: Lillian Behrens

Age: 11

County: McHenry

Years in project: 3

Project Area: Natural Resources

1. What are three things you learned or insights you gained this year from doing this project.
 1. I learned that it is important for seeds to spread out to have a healthy habitat
 2. I learned more about how animals disperse seeds from eating them and the traveling with the seeds in their bodies before they "go" in another area.
 3. I learned that I am part of the cycle of dispersal!
2. What would you like to describe or share about your exhibit that we can't see easily in your uploaded photos or documentation?

Every fall, I like to spread Milkweed seeds in my back pasture. I drive around through the trails on my gator and let the wind take the seeds to disperse them. We now have Milkweed spreading in the 26 acre abandoned pasture. We also clean up the old apples and walnuts that fall to the ground. I throw them out of the back of the gator while my mom drives. It has been really cool to see how much has grown since I was little.
3. What steps did you take to complete this exhibit?

I did research on the Internet and looked for diagrams to help explain the project. I also took observations in my back pasture. Then I took all the things I learned and arrange them on sticky notes to decide what to put in my slideshow.
4. If you did this project again, what would you change or do differently?

I would include more information about different kinds of Seed Dispersal. I would also include pictures of me spreading the milkweed seed throughout the pasture.
5. How will you apply what you have learned to your life?

I will continue to learn more about how seeds are dispersed naturally to try to help the native plants continue to grow in my back pasture.