

Family Fun

Be a Plant Explorer

seed dispersal

Plants can grow in different kinds of places all over the world because they have evolved mechanisms to spread their seeds to new places - this is called **seed dispersal**.

You don't have to travel the world to see plants with some really cool seed dispersal mechanisms. You can be a plant explorer right here at the Morris Arboretum.

Follow this guide to see some real life examples...



seed dispersal by animal

Explore along the path around the creek near the Swan pond and Log Cabin for orange flowering **touch-me-not** (*Impatiens capensis*).



The **touch-me-not** has evolved to use physical contact by animals to help spread its seeds. If a human, deer, or other animal brushes against the seed pods, they pop open, sending seeds flying through the air. This is known as **ballistic dispersal**.



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wind dispersal

Plants have also evolved to take advantage of wind for seed dispersal. A strong gust of wind can blow seeds far from the parent plant.

Dandelions (*Taraxacum officinale*) have yellow flower heads that turn light gray and fluffy. These fluffy heads can contain more than 100 seeds and have evolved to be very lightweight so wind can easily transport them to new places. Explore the grassy areas around the Step Fountain for dandelions.

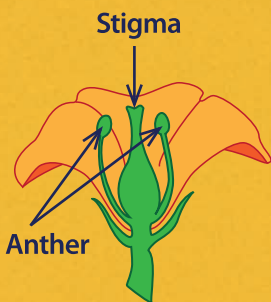


Maple trees have seeds connected to a flattened tissue resembling a wing called **samara**. When they detach from the tree, they spin like a helicopter to a new location to grow. Explore for maple trees all throughout the Morris Arboretum.



pollination

For flowering plants to reproduce, pollen has to get from one part of a flower called the **anther** to another called the **stigma**.



This process is called **pollination** and is usually performed by animals known as **pollinators**. Plants have evolved in ways to attract pollinators through color, shape and smell. When pollinators come to eat flower nectar, they pick up pollen and carry it to the next flower.

Look for these three common pollinators around the Rose Garden:

Honey Bee



Butterfly



Hummingbird



Come visit us again soon!
www.morrisarboretum.org

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Be a Tree Scientist

Summer is the perfect season to study trees at the Morris Arboretum. Be a tree scientist by creating your own field book to record your observations about trees.

1 Transform a sturdy notebook into a field book by decorating the cover with your own design or drawing. Each page of your notebook will include your observations of trees from around the Arboretum.



2 Write the common and scientific name and location at the Arboretum. (You can find the name on the tree's orange accession tag)

3 Record the date and time of day.

JULY 25, 2011
2:00 P.M.

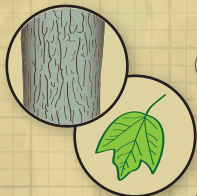


4 Begin observing your tree by sketching its shape from far away. How long a shadow does it cast?

5 Use a measuring tape to record the circumference of your tree.



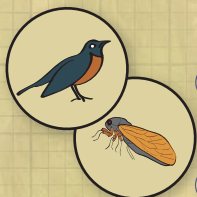
6 Draw the details of the tree including the shape of the leaves and texture of the bark.



7 Look for seeds or fruit on your tree, and record any interesting activity that occurs in and around it.



8 Are there any birds or insects on your tree? See if you can identify and draw them.



9 Continue your observations throughout the year in your field book and record the changes you see throughout the seasons.

Turn this card over to see an example of a page from a tree scientist's field book.

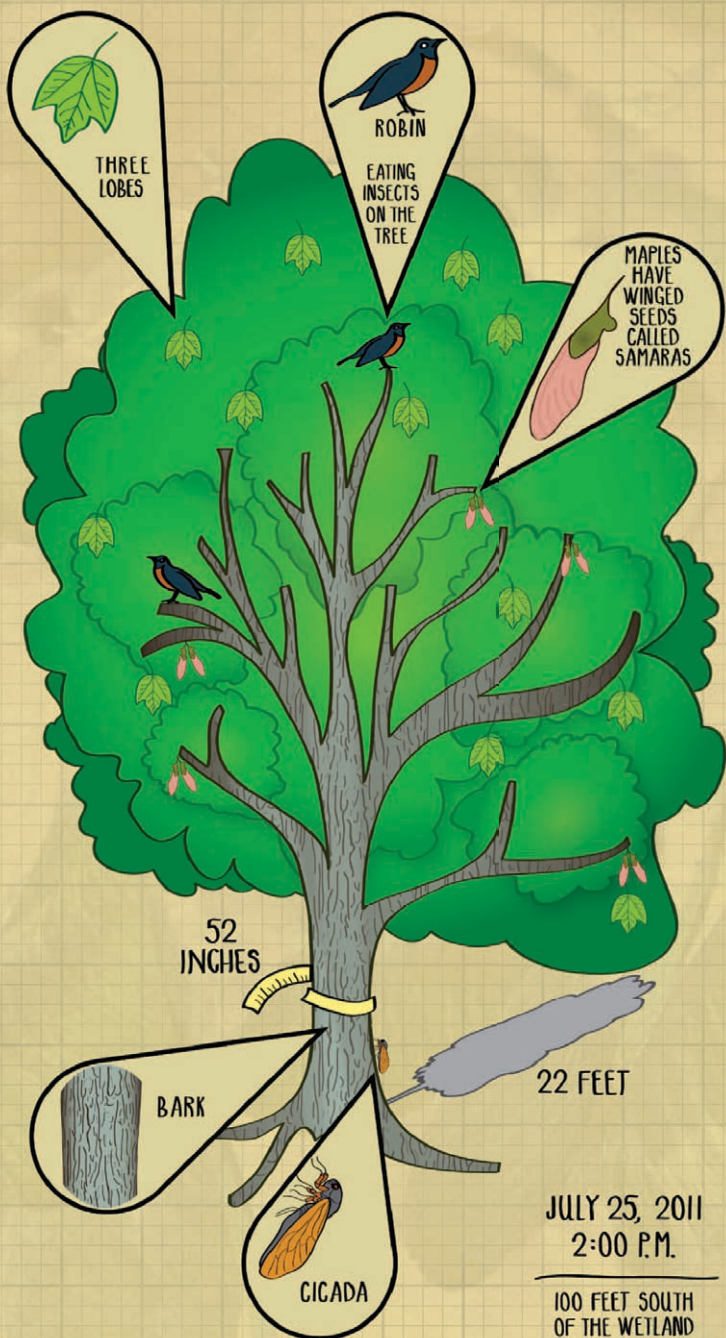


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RED MAPLE

(*Acer rubrum*)



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