LONGWOOD
GARDENS

Cartooning in the Gardens

At a Glance
Students will understand the effects of pollination and ways the community can help the pollinators.

Grades
3-12 (Modify as desired)

Materials
Colored pencils and clipboard

Objectives
Students will observe various pollinators in action.
Students will understand how we can help the pollinators in our own community by creating a cartoon.

National Standards for Science
Standard 6: Understands relationships among organisms and their physical environment.
Standard 7: Understands biological evolution and the diversity of life.
Standard 12: Understands the nature of scientific inquiry.

National Standards for Language Arts for Writing
Standard 1: Uses the general skills and strategies of the writing process.
Standard 2: Uses the stylistic and rhetorical aspects of writing.
Standard 3: Uses grammatical and mechanical conventions in written compositions.

Name_____

Directions

Part I: Read the information below.

A pollinator is any animal or insect that moves pollen from one flower to another. The most common pollinator is the honey bee. Pollinators are attracted to specific flowers based on their unique characteristics. Most pollinators rely on flowers for food, pollen or nectar. Flowers rely on pollinators to produce seeds and fruits. Below is a chart showing some of the characteristics flowers use to attract pollinators.

	Bee	**Beetle**	**Butterfly**	**Moth**	**Hummingbird**
Petal Color	blue, yellow, pink or red	dull colors gray or white	blue, yellow, red or pink	white or green	red or orange
Flower Shape	bell or funnel shaped	flat or bowl shaped	upright	deep, tube shaped	deep, tube shaped
Food	nectar	pollen	nectar	nectar	nectar
Sense of Smell	Good	Good	Okay	Okay	Poor

Part II

Now go into the Idea Garden to observe some of these pollinators in action. Observe one garden bed for 5-10 minutes.

Which pollinators did you observe?

What kinds of flowers were they visiting?

Which pollinators were not observed?

What pollinators would be affected if all the blue, yellow, and red flowers were gone?

Where would those pollinators go?

Animal pollinators are responsible for about 90% of all plant pollination. We use over 1,000 pollinated plants for food, drinks, clothing, spices and medicines. Honeybees are one type of pollinator that is in trouble. Over the last several winters, more that 25% of the honeybee population in the US has vanished. No one knows exactly why this is happening. Scientists refer to this mystery as "Colony Collapse Disorder" and are researching ways to reverse it.

We Need The Pollinators!

Here's how you can help...

Action Steps
1. Create pollinator habitats.
2. Reduce the use of pesticides.
3. Minimize your environmental impact (buy organic).
4. Get out and enjoy nature!

Directions
Create a cartoon strip focusing on one of the 4 Action Steps you can take to help protect pollinators. Use one of the pollinators you observed today in the Idea Garden as the main character in your cartoon. Don't forget to add the garden setting.

Think About
How can you help protect pollinators and share their importance? Find a way to help protect pollinators in your own community.

Comic Strip Title_____
Name_____