



The Desert Speaks

#701 The Forgotten Pollinators

Teacher Information Sheet

Program Description

The Pollinators that help produce the food we eat are disappearing - especially bees, hummingbirds, bats, moths and butterflies. These pollinators are in decline due to habitat destruction, pesticides and shrinking migratory corridors. This program helps explain the interdependence among species. Students will also learn how to attract wild pollinators to their own backyards.

Teaching Tips

1. Discuss vocabulary words
2. Introduce the episode by giving a brief summary of the program and telling students what information you would like for them to gain from viewing the program.
3. Allow time at the conclusion of the program for discussion and the completion of the *Student Viewing Sheet*.
4. Investigate the related web sites listed below.

Vocabulary Words

- pollinate to transport pollen to the stigma of a flower
- pollen the fertilizing element of flowering plants, consisting of fine, powdery, yellowish grains or spores
- nectar a sweet liquid secreted by a plant which attracts the insects or birds that pollinate the flower

Related Web Sites

Bee Worksheets

A collection of 6 worksheets designed to review students' knowledge of bees. Worksheets may be printed out and reproduced for use with students. To access click on the links in this order: free worksheets - science/geography - animals - insects

www.freeworksheets.com

Pollination Parties

A Discovery Channel lesson plan designed to help students understand the concept of pollination

<http://school.discovery.com/lessonplans/programs/tlc-butterflies/index.html>

Nature: Alien Empire

This PBS site shows a interactive diagram of a worker bee.

<http://www.wnet.org/nature/alienempire/multimedia/bee.html>

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Student Viewing Sheet

Use information in the video to answer the following questions.

1. There are _____ thousand kinds of insects and _____ hundred species of birds and mammals that are involved in pollinating wild plants and cultivated crops.
2. There are two things that have happened to decrease the number of pollinators. They are a loss of _____ and the use of _____ to kill weeds.

Match each pollinator to its description.

_____	these bees nest on the ground and feed on the nectar and pollen of prickly pear and cholla
_____	these animals feed on the nectar found in red, white and yellow tubular flowers
_____	these insects are attracted to night blooming flowers; some have extremely long tongues that can get nectar deep inside the flower
_____	these animals specialize in night blooming flowers; they hover in front of the flower and use their tongue to reach the nectar
_____	these bees get a floral oil from underneath flowers, mix it with pollen, and take it back to their nest and use it for food for their larvae underground
_____	this bee is a type of native leaf cutter bee; they can be managed by being placed in cold storage and then brought out when the apple trees begin to bloom so that they can pollinate the apple crop

Word Bank

* blue orchard bee * moths * hummingbirds * digger bees * bats * cactus bee *

Name one thing that people can do to help protect pollinators.

Name one way people can attract pollinators to their yards.

Draw a picture of one of the pollinators discussed in the video. Describe how the pollinator might pollinate a plant.

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Answer Key

Fill in the Blank

1. 100, 12
2. habitat, chemicals

Matching

cactus bees

hummingbirds

moths

bats

digger bees

blue orchard bee

Questions

1. buy organic produce and support farmers who are careful with their farming practices; be cautious when using pesticides and other chemicals
2. set out feeders; set out rotten fruit for butterflies; create bumblebee houses for bumblebees to nest in; plant native plants and flowers

Illustrations

Student responses will vary; look for indications that students understand the pollination process