What native plants are good for pollinators?

Goal: Students use online and printed materials to help select the native plants for their schoolyard pollination gardens.

Objectives:

Knowledge. Students use on-line research tools & printed native plant resources to learn about native plants.

Skills. Students develop research skills such as using multiple sources of information and technology, as well as scan documents for key words and communicate findings to peers.

Values. Students gain an appreciation for the diversity of native plants that are available for gardens.

Grade(s): designed for 4th, but can scaffold for higher grades

Special Safety: Insure safe internet use

VA Standards of Learning addressed: English 4.1, 4.4, 4.6, 4.9

Instructional Time: Two or three 30 to 45 minute sessions, depending on the time needed to introduce research skills, especially using the internet, and time devoted to discussing the students' research results.

Materials:

- Computers (1 per team of 2 students)
- Datasheet(s) (1 double-sided sheet per team)
- Web Research directions (1 per team)
- Printed copies of *Native Plants for Wildlife Habitat and Conservation Landscaping: Chesapeake Bay Watershed*

  http://www.nps.gov/plants/pubs/chesapeake/pdf/chesapeakenatives.pdf

  Citation: Slattery, Britt E., Kathryn Reshetiloff, and Susan M. Zwicker. 2003. Native Plants for Wildlife Habitat and Conservation Landscaping: Chesapeake Bay Watershed. U.S. Fish & Wildlife Service, Chesapeake Bay Field Office, Annapolis, MD. 82 pp.
- Projector & Laptop or SmartBoard with internet access

NOTE: This activity was developed as part of a project to research and then plant a schoolyard garden with native plants that attract native pollinators. If you are not planting a school garden, you might want to create a scenario as to why students are researching plants (making a recommendation to the school administration, a community project needs research assistance, etc.).

Set Up:

- Conduct a trial search before your students arrive to make sure the web site search parameters have not changed. If they, have be ready to adjust your web search instructions.
- Print web instructions for your students (1 instruction sheet/student team)

Copyright 2015

What native plants are good for pollinators?

- Print datasheets double-sided (2 datasheets per sheet of paper); 1 double-sided sheet/pair of students
- Gather your non-fiction resource books describing native plants and their pollinators

Teaching Strategy:

Before beginning the online research activity, you may wish to discuss appropriate resources for finding information, and how to use the internet for research.

1. Inquire: Begin by asking your students:
   What are the things we need to think about to help us choose our plants?
   - Record student responses so that all can see them (newsprint, whiteboard, SmartBoard). Some potential responses are: sun, moisture, what animals can use the plant, height & width, can it live here, etc.
   - Advise students that they will use online resources and non-fiction book sources to determine what plants might work for their garden (regional native plant guides & pollination garden guides are good resources).
2. Model the on-line research with students.
   Using the projector and laptop or SmartBoard, demonstrate how to use the American Native Plants Beauties website (See the student instruction sheet included with this lesson).
3. Student online research: Organize students to work in pairs. Distribute data sheets to each pair and instruct them to choose two plants they think would be good for the pollinator garden and record information about each of the plants on the data sheet (see page 4 & 5). Assist students as necessary but be sure to let them navigate the webpages and choose their plants.
4. Research conclusion: Ask students to share a few interesting facts about the plants they with another pair (small group oral presentation). Inform students that the next steps will be to for you to review the information on their data sheets and then, as a class group they will choose what species of plants to use in their garden.
5. Plant Selection:
   Discuss the plants and the garden and allow students to vote as to what plants they can plant in the pollinator garden.
   Some strategies you could use to help students make their final plant selections are to list the potential plants by a variety of features, such as

Flower color	Plant Height	Pollinator attracted
Flowering time	Plant width	

   Then, help students select plants that will fit into the garden space they have, attract a variety of pollinators, and provide the color combinations that they desire.
6. Extensions
   Use the height and width, and flower color information to draw a map (landscape design) of what the garden will look like.

Copyright 2015

What native plants are good for pollinators?

Part 1. Web research

1. Go to the American Native Plants Beauties Web site: http://www.abnativeplants.com/
2. Click on Detailed Plant Search (top right on web page)
3. Conduct an Advanced Plant Search; there are "Green" and Red" portions to help with your search.
4. Follow the examples below to guide your search.
5. Select one or two plants that you might like to plant in your pollination garden and write the information about the plants (s) on your datasheet.

Your Search

The Underlined text asks for information to help with your search.
Plain text are the selections recommended.

Green Search Section

Native to: Virginia Plant Type: Perennial
Leave the height, width and hardiness zones blank.

Red Search Section

Exposure: Filtered shade (could also try a search for morning sun/afternoon shade)

Soil moisture preference: Average

Soil: Wide soil tolerance

Critter resistance: Rabbit

All other boxes/selections can be left blank. If you try more selection criteria, the search will yield too few plants.

Bottom of page

Check the button for "Show only plants having **ALL** checked characteristics above."

Part 2. Book Research

Find one of the plants you selected in the book, *Native Plants for Wildlife Habitat and Conservation Landscaping: Chesapeake Bay Watershed.*

The plants are on pages 18-40 (Herbaceous Plants, Purple section of the book). Plants are listed alphabetically by scientific name: genus, then species. You can learn more about each plant's height, flowering time, amount of light, and the types of wildlife that use this plant.

Developed by Education Programs at Blandy Experimental Farm Boyce Va
www.virginia.edu/blandy 540-837-1758
Copyright 2015

Page Intentionally Left Blank

Copyright 2015

What native plants are good for pollinators?

Student Name(s):	
Plant Scientific Name (genus and species, just like a last and first name):	
Plant Common Name:	
Height it can grow to:	**Width (spread) it can grow to:**

Pollinators that like this plant. Please check all the pollinators that use this plant.

- ☐ **Butterflies**
- ☐ **Bees**
- ☐ **Moths**
- ☐ **Hummingbirds**
- ☐ **Any Others? (please list):**

Scan over the page to find the Flower Color:

Scan over the page to find the plant's Bloom time:
(It might list the months or a season, look for both!)

Is there any other interesting information about this plant that you learned?

Why I think this would be a good plant for our school pollinator garden:

Developed by Education Programs at Blandy Experimental Farm Boyce Va
www.virginia.edu/blandy 540-837-1758
Copyright 2015

What native plants are good for pollinators?

Student Name(s):	
Plant Scientific Name (genus and species, just like a last and first name):	
Plant Common Name:	
Height it can grow to:	**Width (spread) it can grow to:**

Pollinators that like this plant. Please check all the pollinators that use this plant.

- ☐ **Butterflies**
- ☐ **Bees**
- ☐ **Moths**
- ☐ **Hummingbirds**
- ☐ **Any Others? (please list):**

Scan over the page to find the Flower Color:

Scan over the page to find the plant's Bloom time:
(It might list the months or a season, look for both!)

Is there any other interesting information about this plant that you learned?

Why I think this would be a good plant for our school pollinator garden:

Developed by Education Programs at Blandy Experimental Farm Boyce Va
www.virginia.edu/blandy 540-837-1758
Copyright 2015