

Butterfly Garden WebQuest

This *WebQuest* was created by:

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Grade Level: FIVE

APEF Curriculum Outcomes to be added later!!

Subject(s) Integration: Major connection with APEF/Pan-Canadian Grade 5 Science outcomes (& *Innovations in Science* program unit - "Waste Not, Want Not")

Major connection with Grade 5 APEF Language Arts Curriculum outcomes for information literacy (& possible minor connection with *Connections* program unit - "Weather, Wings & Kite Strings")

Introduction

"We are destroying natural habitats all around us by building roads, houses, supermarkets, hospitals and golf courses. In fact, we sometimes forget that the land our school is built on was once a natural habitat and home to many living things -- plants, animals, and insects. It's time we did something to put back what was taken away.

Our principal has set aside one part of our schoolyard and has asked our class to create a beautiful butterfly garden."

The Learning Task

Before we can put on our gardening hats, there are several guiding questions we must answer:

- (1) How many different species of butterflies live on PEI ?
- (2) Which plants will attract butterflies?
- (3) What is the life cycle of a butterfly?
- (4) What equipment will we need and how much will it cost?
- (5) How will we share this project with the rest of the school?

The class will be divided into 5 expert groups. Some groups will have more members than others. Each expert group will be given one guiding question to research. Your group will complete the learning stations that go along with your

guiding question.

When you have finished, your expert group will share what it has learned with the whole class. Each group will be responsible for deciding how they should present their information to the whole class. Be sure to ask your teacher for help.

Once each expert group has had a chance to share what it has learned, we will create a plan for our butterfly garden. Only then will we put on our gardening hats.....

Field Observers

Group 1

Names: _____

TASK: Find out what butterfly species can be found on PEI .

Part 1: Creating the field guide

1. In pairs, choose one partner and log into the network with that partner's login name and password. Connect to the printer. Then start Netscape Navigator.

2. Visit the following site:

<http://www.cwf-fcf.org/surveys/butter.htm>

3. Click on BUTTERFLY AND MOTH PORTRAITS. For each butterfly listed, create one page in your Butterfly Field Guide. For each page, you should draw, color, and label the butterfly correctly. You should also include the butterfly's name.

Part 2: Watching for Butterflies

1. In pairs and with adult supervision, go outside and observe which butterflies you see on the schoolyard.

2. Use the butterfly net provided to carefully catch the butterflies that you see. See if they match any of the butterfly species in your field guide.

3. Keep a record of the butterflies you see using the survey provided at the back of your field guide.

IMPORTANT: Always be very careful not to injure the butterflies that you catch or to disturb their habitat. Field observers must respect the natural habitat that they work in.

Plants that Attract Butterflies

Group 2

Names: _____

TASK: I identify the traits of a good butterfly plant.

1. In pairs, choose one partner and log into the network with that partner's login name and password. Connect to the printer. Then start Netscape Navigator.

2. Visit the following site:

<http://www.si.edu/resource/tours/gardens/butterfly/traits.htm>

3. I identify 3 main traits of nectar plants that attract butterflies. Record these traits in your Butterfly Plant booklet.

4. Name 8 nectar plants that attract butterflies. Record these in your booklet.

5. Using a resource yet to be determined, identify which of these nectar plants will grow on PEI .

6. Using the Vesey Seeds catalogue, find the prices of those nectar plants which will grow on PEI . Record these prices in your booklet.

<http://www.veseys.com/index.html>

TASK: Create a bulletin board display on interesting butterfly facts.

1. As a group and using the chart paper provided, design a bulletin board display of butterflies. Be sure to include sketches of the nectar plants that you learned about.

2. Using the art activity provided, each person in your group will create a paper mache butterfly.
3. The next step is to draw and paint a butterfly garden on the bulletin board. Work together as a group to sketch out and paint the background.
4. Arrange and attach the paper mache butterflies to the bulletin board display.
5. Next, include some fun facts about butterflies in the display. In pairs, choose one partner and log into the network with that partner's login name and password. Start Netscape Navigator.
6. Visit the following site:
<http://www.si.edu/resource/tours/gardens/butterfly/facts.htm>
7. Choose one fun fact about butterflies and record it on the sheet provided.
8. Carefully print your fact on the flower cut-out provided and attach it to the bulletin board display.

Life Cycle of a Butterfly

Group 3

Names: _____

TASK: Create a booklet of the stages of the life cycle of the butterfly.

Part 1: Printing the Pages

1. In pairs, choose one partner and log into the network with that partner's login name and password. Connect to the printer. Then start Netscape Navigator.
2. Visit the following site:
<http://www.mesc.usgs.gov/butterfly/butterfly-coloring.html>
3. You will see four small pictures that show the stages of the butterfly life cycle. Click on the first picture to make it bigger. Print the large picture that appears.
4. Now click the BACK button and click on the second picture. Print the large picture that appears.
5. Now click the BACK button and click on the third picture. Print the large picture that appears.
6. Now click the BACK button and click on the last picture. Print the large picture that appears.
7. Send 1 partner to the printer to gather the pages you have printed.
8. Arrange the printed pages into the proper order, starting with the EGG stage. You may need to use the Butterfly Life Cycle webpage to make sure you have the picture in the right order. At the top of each page, neatly print the name of each stage in the life cycle of the butterfly.
9. Arrange the pictures into a booklet. Take one of the cover sheets provided to

use as a title page. When you are ready, your teacher will staple the booklet for you.

Part 2: Coloring the Pictures

1. Now visit this site:

<http://www.mesc.usgs.gov/butterfly/butterfly-life-cycle.html>

2. You will see colored pictures of the butterfly life cycle. Click on the picture that matches the EGG STAGE. Find the colors you need to use to color this picture. Check the colors you will need to use for the other three stages.

3. Neatly color each picture using the appropriate colors.

Part 3: Describing the Life Cycle

1. Using your ruler, draw five straight lines along the right side of each picture. Follow the example to make sure you are doing this properly.

2. Visit this site:

http://www.fmnh.org/butterfly/life_basic.htm

3. List at least 4 facts for each stage of the butterfly life cycle.

Butterfly Websites

1. The Smithsonian Institution Presents THE BUTTERFLY HABITAT GARDEN

URL: <http://www.si.edu/resource/tours/gardens/butterfly/start.htm>

2. Butterfly Garden: Build it and they will come

URL: <http://www.orkin.com/html/archive5.96.html>

3. The Butterfly Website

URL: <http://butterflywebsite.com/resource/index.cfm>

4. Wonderful World of Insects

URL: <http://www.insect-world.com/main/six.html>

5. Butterflies of Japan

URL: <http://www.asahi-net.or.jp/~ak5t-kmn/>

6. Mike MacDonald's Butterfly Garden

URL: http://www.snacc.mb.ca/projects/butterfly_garden/

7. Butterfly Zone

URL: <http://www.butterflies.com/>

8. Butterfly Gardening from Seed Source

URL: <http://www.seedsource.com/educate/teachers/butrflies.htm>

9. Children's Butterfly Website

URL: <http://www.mesc.usgs.gov/butterfly/Butterfly.html>

10. Coast-to-coast Butterfly Survey

URL: <http://www.cwf-fcf.org/surveys/butter.htm>