



Plant Selection

ACTIVITY

Background:

There are many factors to consider when choosing plants suitable for a particular wildlife habitat site. For one, the group must look closely at where the plot will go. Geographic region, the amount of sun exposure an area receives, the existing plant community, the type of soil, and the size of the plot will all play a big role in narrowing down the selection of plants. Group members should also consider the aesthetics of the site, which include color scheme, height, and overall layout. It is very important that the group have a goal in mind as to the type of plant community they want (e.g., woodland, grassland, wetland, desert, etc.), and what kinds of wildlife they want to attract.

It is also important to focus on diversity; selecting a variety of plants will help create a multi-dimensional landscape. Have participants choose a mix of ground covers, flowers of different heights, shrubs, and trees to create both vertical and horizontal growth. If possible, include plants that will: 1) provide nectar, seeds, fruit; 2) increase insect numbers to provide the greatest variety of food sources for wildlife; and 3) provide year-round food sources. Remember, the greater the variety of species planted, the greater the variety of wildlife species attracted.

The best plants for a wildlife habitat project are those that are native to the area. **Native plants** are species that were present in the local landscape at the time of European settlement. Over thousands of years these plants have adapted to the climate, soil, and water conditions of the area. Because they are well adapted to their region, native plants tend to need less water and fertilizers, and therefore less maintenance, than do other plants. Local wildlife have similarly adapted to their surroundings, so native plants best meet their food and cover needs, and provide good places for them to raise their young. Finally, while some native plants (like blackberry vines) are aggressive, native plants in general will not out-compete other plants in a natural area or more broadly in an ecosystem but instead generally enhance biological diversity.

On the other hand, **exotic plants** are plants that were imported from a different region (those in the U.S. often come from Asia or Europe). Frequently, these plants do not thrive in their new landscapes without increased use of resources, either natural (e.g., water) or synthetic (e.g., synthetic fertilizers and pesticides). In general, exotic plants are unable to sustain a wide variety of wildlife. They also can be **invasive**, which means that they reproduce rampantly and replace native (sometimes endangered) species.

Summary:

Participants select plants for their habitat project.

Grade Level:

4-12

Time:

1 hour (This activity can be a research project for older participants, lasting several weeks.)

Learning Objectives:

Participants will be able to:

- ◆ Define native and exotic plants.
- ◆ Identify at least three benefits to planting native species.
- ◆ Improve decision-making skills.
- ◆ Select plants for their wildlife habitat site.

Materials Needed:

- ◆ Field guides, gardening catalogs/magazines, and other reference materials
- ◆ Copies of the Plant Selection worksheet
- ◆ Pencils





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Native plants are available at many nurseries and garden centers. For more information on native plants and invasive exotic species contact your state natural heritage agency, or native plant or wildflower society. These can be found under “links” on the Lady Bird Johnson Wildflower Center’s website at www.wildflower.org. County and state agricultural extension offices are also good sources of information. For additional information and web links, visit the National Wildlife Federation’s web page at www.nwf.org/habitats.

When selecting plants, match the sun, soil, and moisture needs of plants with the appropriate areas available in your site. For example, plant a purple coneflower (*Echinacea purpurea*) in full sun or partial shade, and in well-drained soil. Note also that certain plants grow better in particular zones (regions) due to climate and other factors. Zone maps should be included in most plant guides and are available at local garden centers.

What to Do:

1. Ask, *What should we plant in our habitat site?* Explain why it is important to select a variety of plants for the wildlife habitat site. Discuss the terms “native” and “exotic.” If possible, give local examples of each. Discuss with participants the



benefits of using native plants, both for the environment and gardeners (the participants, in this case!).

2. Review the four elements of habitat (food, cover, water, and places to raise young) and discuss how different plants can meet different needs. For example, an oak tree can provide food, cover, and places to raise young for squirrels. Instruct participants to keep the four major needs of wildlife in mind as they select their plants.

3. Review the data from the Site Mapping activity to remind the group what type of sun, soil, and moisture conditions they are working with. Explain that sun, soil, and moisture needs of selected plants should match the sun and soil conditions of the site. Encourage participants to select a variety of plants (e.g., different heights, foods produced, etc.) to enrich site diversity. Review the type of plant community that

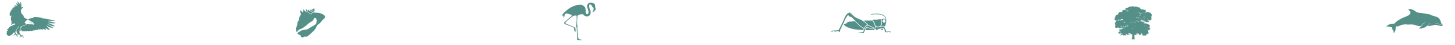
is being created (e.g., woodland, grassland, desert, wetland, etc.) for the habitat so that the appropriate plants are selected.

4. Have plant/flower field guides and other resources available. If possible, have a list of recommended species for your region and/or region specific field guides available to help participants narrow their search. Depending on time allotted for this activity, consider condensing a list of native plants, trees, and shrubs from the regional native plant list. Instruct participants to select a certain number of species from each list (e.g., eight plants, three shrubs, and two trees). Have participants select more plants than needed, as availability of native plants will vary.

5. Break participants into pairs or small groups to complete the Plant Selection worksheet. If possible, have volunteers assist groups in researching and selecting appropriate plants for the wildlife habitat site. Have pairs/groups present the plants they selected to the group.

6. Facilitate a group vote on the most appropriate plants for the site. From this, create a group version of the Plant Selection worksheet. Explain the need to choose alternates, in case some plants are not available at time of purchase.





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Questions:

- What kinds of plants do we want at our habitat site?
- Why should we choose native plants?
- Are they appropriate for the area in which our habitat will be located?

Adaptations:

Refer to general adaptations on pages 11-16.

Hearing Disabilities:

- Use pictures and/or hands-on examples of both native and exotic plants to help illustrate the discussion.
- Allow participants who have difficulty speaking to utilize the sign-language interpreter for their small group work and presentations. Encourage all participants to write down comments and questions in their small groups to ensure effective communication.

Learning/Cognitive Disabilities:

- Use pictures and/or hands-on examples of both native and exotic plants to help illustrate the discussion.
- Have field guides with large colored pictures available.
- Provide a list of plant options for participants to choose from. This will help narrow their search.
- Simplify the worksheet as needed.
- Have small tape recorders available for participants who have difficulty writing, or have a part-

ner assist with completing the worksheet. Participants can also draw symbols to represent items (e.g., a sun for plants that require full sun, etc.).

Motor Disabilities:

For participants with limited muscle strength, coordination, or dexterity of the hands:

- Build up the pens/pencils with foam, tape, bandage materials, or putty as needed.
- Have small tape recorders available for participants who have difficulty writing, or have a partner assist with completing the worksheet.

Visual Disabilities:

Overall:

- Use hands-on examples of both native and exotic plants to help illustrate the discussion.
- If possible, have resource materials available in alternative formats (large print, Braille, and/or audio cassette).
- If participants do not have writing equipment available to them, have small tape recorders available or have a partner assist with completing the worksheet.

For participants with low vision:

- Have a large print version of worksheet available.
- Provide thick, black markers for participants to use.

For participants who are blind:

- Have a Braille version of the worksheet available.

