BEE PATCHES EVERYWHERE!

BUILDING A POLLINATOR HABITAT GARDEN

It's as Easy as One…Two…Three…Four

Step 1: Plan--Take as much time planning as planting! Bees need group plantings (3x3 of same blooms); plants need water and so do bees; it's easier to draw and change a sketch than it is to plant and dig them up to move later!

Step 2: Analyze—locate site features and planting obstacles (like distance to water line)

Step 3: Design—tweak your plan to suit the site and make a list of needs

Step 4: Implement—prepare the soil, place your plants, lay your irrigation

THE DETAILS

Much of the following information was extracted/condensed/modified from http://www.kidsgardening.org/node/12111

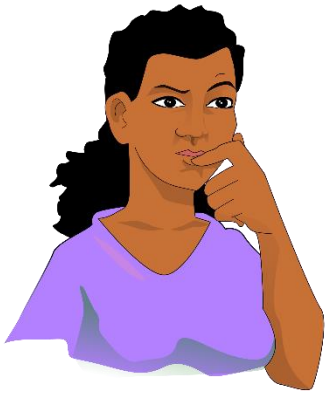
As you create a pollinator garden design, keep these principles in mind at each step:

- A garden should be functional and fun while accomplishing the goals of a habitat planting [forage, water, pesticide-free planting area].
- Plan before planting.
- Incorporate sustainable practices.
- Keep it simple!

You don't need sophisticated designs to build a successful pollinator garden, but creating a physical plan helps you organize your plans and facilitate your to-do list.

PLAN

A habitat garden design is a little different than that of a home landscape garden. The landscape complements and adds to the aesthetic quality of a house. But beauty is not necessarily a good measure of success for habitat gardens, although they should be esthetically pleasing. Even if habitat gardens are not manicured like other landscapes, it is still important to develop a garden design to guide you through installation of the habitat garden. A little forethought and organization will help create a space that is manageable — a key for overall sustainability of any garden.



Step 1. Know the elements of a sustainable habitat landscape

A sustainable habitat landscape uses environmental and financial resources efficiently so it's easier to maintain over time. Proper planning and use of a design is the first step toward creating a sustainable landscape. There are also many ecological principles to consider, including water conservation, weed prevention, and plant hardiness.

Step 2. Consider these tips to help you plan for sustainability:

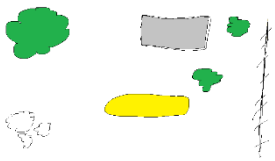
Use plants that bloom at different times of the year, have low water requirements, are well adapted to your environment, and have natural resistance to pests. Native plants are usually a good choice.

Include ground cover or mulch to manage erosion, evaporation, soil temperatures, and weeds.

Reserve time in your scheme to prepare the soil so that it is appropriate for the plants you wish to grow. Healthy soil results in healthy plants, which means less maintenance!

Use organic methods to prevent and reduce pest problems (bees are very susceptible to pesticide use.)

ANALYZE



1. Start by making an inventory of site features--sketch your garden space from a bird's eye view by outlining the property lines and all of the existing features (e.g., shrubs, trees, fences) on a piece of blank paper.

2. Use a large tape measure to take accurate measurements of the site perimeter and each existing feature noted on your sketch. Record the information in the appropriate places on the site sketch.

3. Note the location of and distance to a water source, or recognize that you will need to put in an irrigation dripper in a shallow bowl, but will still need a water line.

4. Plot the location of any existing garden plant materials and landscape beds. Identify and label the existing plants and make note of their approximate size (height and width).

5. Locate features you may not be able to see, including underground electricity, sewer, and water lines. You don't want to dig into or otherwise interfere with these lines.

6. Evaluate site conditions

Take time to observe your space. Answer the following questions to get started. You'll refer to your summary when identifying a plant list:

Does the soil appear to drain well, or is it hard and compacted?

Are there signs of drainage patterns or areas of poor drainage (e.g., standing water)?

Where is the sun? Use a compass to determine the cardinal directions -- east, west, north, and south -- and note it on your sketch. Southern and western exposures typically receive the most sunlight. What path will the sun take across the space?

Are there any trees or buildings that will shade the garden? If so, at what time and for how long?

Does the ground have any unusual dips? Determine the slope of the land. Do you need to take measures to prevent erosion?

What direction does the wind blow? Is there a steady wind across the site?

DESIGN

1. First create a base map

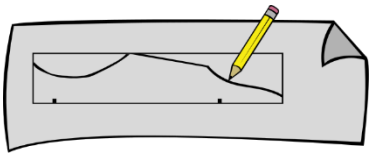
By the time your site analysis is complete, your initial sketch of the area will probably be cluttered! That's okay, because it's the 'draft' for creating a more orderly base map. Use your

measurements to create a correctly scaled drawing (graph paper works well), including the property lines and existing structures and vegetation you plan to keep.

At the same time, summarize your needs list, observations, and other notes on one piece of paper for easy reference. Keep your original sketch just in case!

2. Brainstorm your ideas with your family for input

Place a piece of tracing paper over your base map, or copy your map onto a transparent overhead sheet and lay another over it for sketching. On the second sheet, draw circles or squares representing each component of your garden (beds, plant groupings, pathways). Try different arrangements (such as placing the tallest plants at the back, and the shorter ones at the front; perhaps blossoms on a plant with interesting foliage might pop if moved elsewhere in your plan), shapes (circular beds versus rectangular beds), and sizes (i.e., a few large perennials versus multiple small perennials—and what about ground cover?) until you develop a general idea of where you want to place the different components.



3. Define your planting beds

Now you can take it to another level of detail. Start by defining beds, walkways, irrigation lines, and any other special areas. Beds can be in ground or raised depending on your needs and soil condition. Decide which type of bed you prefer before deciding the shape, since materials available for raised beds can potentially restrict the shape and size.

Be sure to draw the plan to scale so that you don't run into space problems later.

3. Choose types of plant materials

Now you can make some decisions about broad types of plant materials — shrubs, perennials, vines, and annuals. At this stage you don't have to know the specific names of the plants, just the characteristics of plants you are looking for in terms of size, shape, growth habit, and so on. Bees need about 3 foot x 3 foot areas of similar flowing color plants to "see" them from distance, so make sure your plan groups similar plants in a large enough clump. You'll choose specific plants in the next step!

4. Identify your plant list and a list of other needs

We have a pollinator plant list on our website from which to choose—be sure to also select back-up plants, as often nurseries may not have the full selection desired. Consult your Summary of Site Conditions for the space, light, and soil available on the site, and find plants with matching requirements.

Carefully consider how you the space may be used in the long term, and then translate that into landscaping needs. Here are some examples:

Will caring for the garden require small paths?

Will you plan to grow habitat that needs full sun? The site must have 6 to 8 hours of full sun for these plants to thrive.

Must the garden have water? If so, locate the nearest supply and how iut will be delivered to the site.

IMPLEMENT

1. Use string to lay out your plan on the ground

2. Prepare the soil, adding organic material, loosening compacted soils, etc. (you may need to re-lay your string when this step is done)

3. Place your plants according to your plan—make any adjustments based on deviations in the actual plants being used

4. Lay out the irrigation lines that will provide drip water to the plants

5. Set your plants in the ground

6. Anchor the irrigation lines in place

7. Add a dripper to a shallow bowl for bees to reach water

8. Mulch if possible to reduce weed potential