

Flower Bed Design Summer 2010



Designing Flower Beds

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Thanksgiving Point Office

Designing Flower Beds

The class is done through a cooperative arrangement between Utah State University Extension Service and Thanksgiving Point Institute

A photograph of a garden with purple and pink flowers in the foreground and a Tudor-style house in the background. The house has a steep gabled roof and half-timbering. The garden is lush with greenery and various flowers, including purple globe alliums and pink and white flowers. The text is overlaid on the image in a yellow font with a black outline.

**Thank you for being a part of
our educational offerings**

Designing Flower Beds

Class guidelines

- Be on time
- Turn off cell phones
- Respect others who are taking the class

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Class guidelines

- Take and collect pictures
- Make lists of your favorite plants
- Ask questions to understand
- Have fun



**Designing a
flowerbed
does not have
to be a
daunting task**

Designing Flower Beds

**Designing
flowerbeds
can be a great
part of the
gardening
experience**



A photograph of a formal garden. In the center, a narrow path leads through a series of tall, rectangular hedges that form a sort of architectural structure. To the right, there is a large, rounded topiary tree. The foreground is filled with lush green plants, including tall grasses and white daisies. The sky is overcast and grey.

Flowerbeds are:

Way to express your creativity

**Indulge your horticulture
passions**

**Make your home and garden
look better**

Designing Flower Beds

**This class
helps you
create living
works of art
to share
with others**



Designing Flower Beds

**It gives ideas
for flower
beds using
your creativity
and planning**



Designing Flower Beds

**It will help you
learn to make
the flower bed
work for you,
not the other
way around**



Designing Flower Beds

**Start with
some class
definitions**

- **Flower**
- **Bed**
- **Design**



Designing Flower Beds

flow-er (flou“...r) *n.* 1.a. The reproductive structure of some seed-bearing plants, characteristically having either specialized male or female organs or both male and female organs

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flow-er (flou“...r) n.
1.a. such as
stamens and a
pistil, enclosed
in an outer
envelope of
petals and
sepals.



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flow-er (flou“...r) *n.* b. Such a structure having showy or colourful parts; a blossom. 2. A plant that is cultivated or appreciated for its blossoms.

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3. The condition or a time of having developed flowers:



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4. Something, such as an ornament or a figure of speech, that resembles a flower in shape, fineness, or attractiveness. 5. The period of highest development; the peak.

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bed (bɛd) *n.* this word has twelve different definitions 1.a. A small plot of cultivated or planted land: *a flower bed*

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gar·den (gär“dn) *n.* 1. A plot of land used for the cultivation of flowers, vegetables, herbs, or fruit.

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de·sign (d¹-z⁰n⁴) v. de·signed, de·sign·ing, de·signs. --tr. 1.a. To conceive or fashion in the mind; invent. b. To formulate a plan for; devise:

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2. To plan out in systematic, usually graphic form: 3. To create or contrive for a particular purpose or effect

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4. To have as a goal or purpose; intend. 5. To create or execute in an artistic or highly skilled manner.

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de·sign *n.* 1.a. A drawing or sketch. b. A graphic representation, especially a detailed plan for construction or manufacture.

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**de-sign *n.* 2.
The
purposeful or
inventive
arrangement
of parts or
details.**

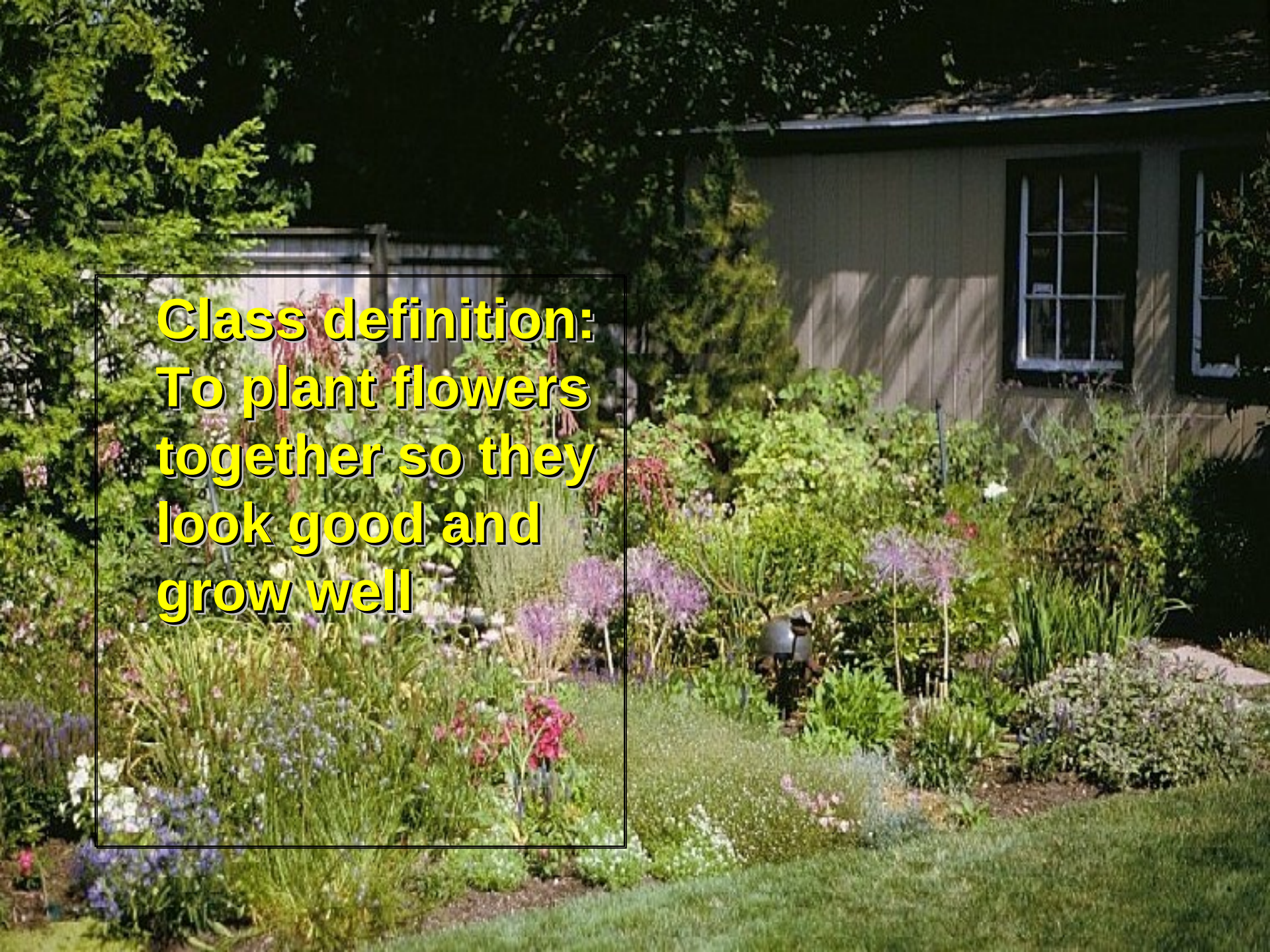


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de·sign *n.* 3. The art or practice of designing or making designs. 4. Something designed, especially a decorative or an artistic work. 5. An ornamental pattern.

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Class definition: To make or execute plans or to create designs for a plant that is cultivated or appreciated for its blossoms on a small plot of cultivated or planted land

A photograph of a lush garden in front of a house. The garden is filled with various plants, including tall purple flowers, green foliage, and a small black garden light. The house has a light-colored exterior and a window with a dark frame. The text is overlaid on the left side of the image.

**Class definition:
To plant flowers
together so they
look good and
grow well**

A photograph of a lush garden in front of a brick building. The garden features a variety of plants, including tall green irises, large green leaves, and ferns. A stone path leads through the garden. The brick building has a window with a metal frame, and white flowers are climbing over the wall. The text is overlaid on the left side of the image.

**Before you start
planning or
planting, ask
some questions
so you can start
with a purpose
in mind**

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The reason for having a flowerbed can be nothing more than for enjoyment and enhancing the landscape



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A focus or theme can make the design process much easier



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Water garden



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Fragrance garden



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Woodland garden



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Cottage garden



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Cutting garden



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Moonlight garden



Designing Flower Beds

Water Conserving garden



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Butterfly garden



A large field of tulips in various colors, including red, orange, and yellow, with a text overlay. The tulips are densely packed and in full bloom, creating a vibrant display. The text is overlaid on the middle section of the image.

Other possibilities are plant collections

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Hostas



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Iris



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Peonies



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Daylilies



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Roses



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Spring Bulbs



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Rock Gardens



Designing Flower Beds

A garden devoted to a particular season

- Spring



Designing Flower Beds

A garden devoted to a particular season

- Summer



Designing Flower Beds

**A garden
devoted to a
particular
season**

- Autumn



Designing Flower Beds

**A garden
devoted to a
particular
season**

- Winter



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The more focused the theme, the narrower the choice of plant material



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When thumbing through flower books and magazines, we get inspired by beautiful photos of grand flowerbeds overflowing with annuals and perennials

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The next thing you know, you are tilling up large sections of lawn for a huge flower border



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Fantasy meets reality when it comes time for planting, weeding, deadheading and other maintenance



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- **Who is going to take care of the flowerbed?**
- **How much time do you want to spend planting and maintaining the flowerbed?**

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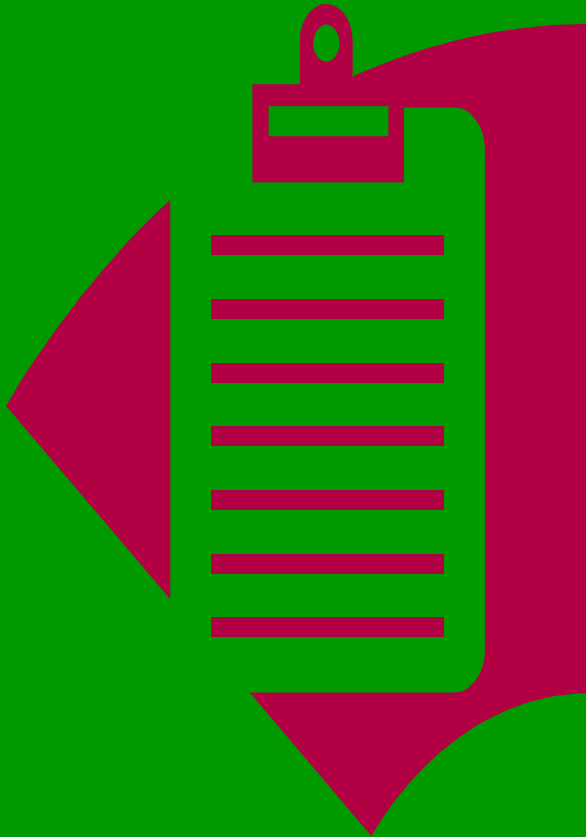
- **Make your plans**
- **Make a labor budget**
- **Make a plant budget**
- **Make plans for seasonal color**

Designing Flower Beds




- **Make your plans**
- **Planning the project identifies the square footage and the needs for the project**

Designing Flower Beds



- **Make a labor budget**
- **This forces you to quantify the time it is going to take to create and maintain the beds**

- 
- A painting of a woman in a garden. The woman is in the foreground, wearing a dark dress and a hat, looking down at something on the ground. The garden is filled with various plants, including a large bush of pink flowers. In the background, there is a two-story house with a gabled roof and two chimneys. The overall style is soft and painterly, with a warm, slightly muted color palette.
- **Make a plant budget**
 - **This forces you to buy plants you need, not just what looks good the day you shop**

- **Make plans for seasonal color**



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**Choose a size
that is realistic
but can be
enlarged as
needed**



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If you cannot devote much time to maintenance, focus on low-maintenance plants or a style (prairie, cottage, and meadow) that do not demand as much attention

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Waterwise Gardens



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How much do I want to spend?





Setting a budget helps dictate the size of the flowerbed and the amount of plant material you purchase

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Do not purchase all the plants in one season

With a plan, add plants each year and 'build' your flowerbed over time rather than making an instant flowerbed

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As flowerbeds evolve, the look and your ideas will change



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Leaving open spots means you can add plants to fit your taste and improve the overall look of the flowerbed



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A successful flowerbed usually has annual and perennial combinations



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**Perennials
form the
backbone of
the flowerbed
and give it
permanence**



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An advantage of perennials is that they have a one-time cost and live for several years



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Annuals are less expensive plants but only live for the season



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**Fill the border
with annuals
to give color
and mass until
the perennials
fill in for 1-3
years**



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What is the site like?



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Before you grab the shovel or buy any plants, take an inventory of the location where you want the flowerbed. Consider the following items:

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***Soil quality -
Annuals grow
but do not
thrive in
poorly
prepared soil***



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Soil quality -
**Perennials
seldom
survive more
than one year
without
properly
prepared soil**



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Plants prefer rich, black loam with abundant organic matter. Add organic matter to improve soil quality

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Spread 4 to 6 inches of the material on the flowerbed and till it in. In the spring, before planting, till the soil again

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**Do not waste
money on
expensive
plants until
you correct
serious soil
problems**



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DO NOT use peat moss in clay soils because they both hold water like sponges



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Organic matter must be fully decomposed or add extra nitrogen to speed decomposition





***Drainage* - Soil drainage is also crucial. Create well-drained soil for all flowers except a few (Marsh marigold, bee balm etc.) that thrive in wet, boggy conditions**



Poorly drained soils are a problem for many perennials. Many plants (*Scabiosa*, peony *Chrysanthemum*,) winterkill if the soil is too wet in the winter

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To test a site for drainage, dig a hole two feet deep and fill the hole with water. Allow the water to soak in. Fill the hole with water again

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If water remains in the hole after 2 hours, correct the drainage before planting most perennials



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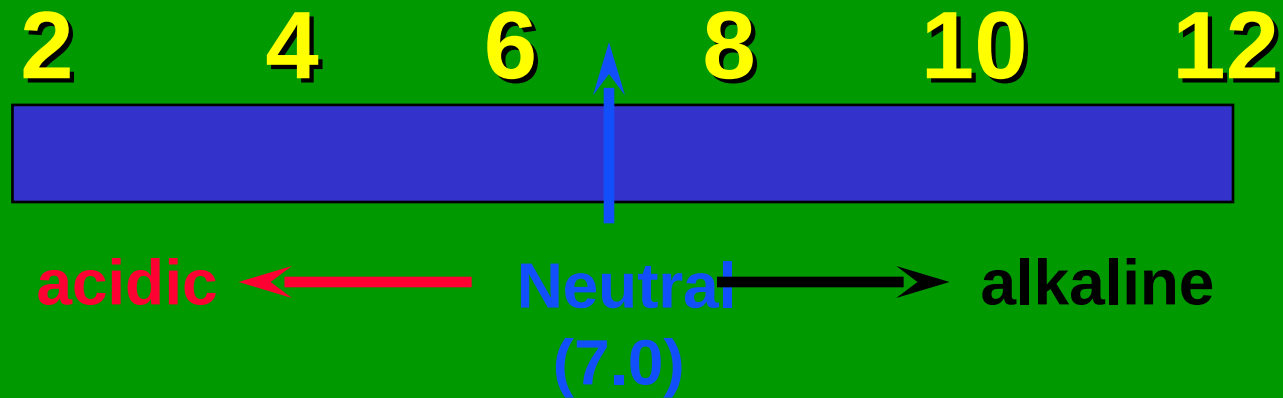
Soil pH –

The ideal soil pH for most flowers is near neutral

Soils in Utah are always alkaline

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- **Soil pH: the degree of acidity or alkalinity of soil**
- **The pH scale:**



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- **The degree of acidity or alkalinity (basic nature) of soil**
- **Guidelines:**
 - **Ideal: between 5.5 and 7.5**
 - **Acceptable: between 5.0 and 8.2**
 - **Unacceptable: below 5.0 or above 8.2**

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Acidic Loving Azaleas,
Rhododendron, Magnolias



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Alkaline Loving Alfalfa, Salt Cedar
And Halogeton



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- Treatment of high pH problem
- Select tolerant species and varieties
- Try amending soil with acidic organic matter or elemental sulfur
- Good luck

In spite of many recipes you can do little to change the pH



Jordan River Temple



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Jordan River Temple
Changed pH from 8.2 to 7.5 in 25
years in the flower beds



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Major pH problem: iron chlorosis



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**Control tough
perennial
weeds before
planting**



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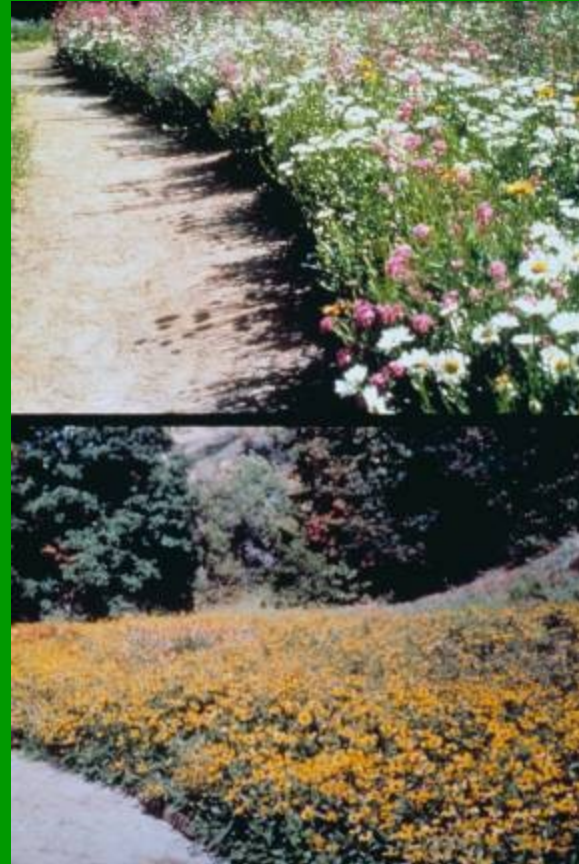
Check the label to see how long after application you must wait before planting



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*Existing
elements*

**-Take stock of
plants and
planting areas
you have**



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Existing elements – When you landscaped your home, you created a plan and selected plants that enhanced the architecture and property

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Flower beds should fit naturally into the landscape rather than appear as an afterthought



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Consider the style of your home. If you have a cottage, a very formal flowerbed will look out of place but a mix of old-fashioned perennials are right at home

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**A large home
benefits from
bold plantings
with dramatic
elements**



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Make a sample plan

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Most flower bed failures are attributed to lack of planning and careful planning almost guarantees success

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There are two approaches:



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First approach:

Select a landscape site where you need color. It can be a small bed near the mailbox, or a long perennial border near a fence or hedge

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Select plants that are adapted to the site

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What are the characteristics of the site?

How much sun or shade does it get?

How much water does it get?

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There are flowers for every site!

Many references are available to help you select plants

Contact your USU County Extension Office, local bookstore or library

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Second approach

Select plants first

**For example, it may have been
a childhood dream to have a
formal rose garden**

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Second approach

Perhaps you like particular flowers at a garden center or a neighbor's yard and decided you need them in your design

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Select a site that is appropriate for the chosen plants

There are many references available to help determine the needs of specific plants

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Do not be afraid to try something different!
Remember the maintenance requirements and how much time you are willing to invest

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Roses, for example, require frequent care, while verbena thrive on neglect

Select drought tolerant plants to cut down on your water bill

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Making a plan can sound like a daunting task but it does not have to be

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A plan can be something as a rough pencil sketch on a piece of scrap paper or as elaborate as a detailed, to-scale drawing

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The idea is to get your thoughts down on paper. It is much easier to shift plants around on paper rather than doing it after they are planted

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A plan gives a feel for whether the flowerbed is large enough for the plants you intend to grow, and if they are compatible for the site

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**This plan also serves as your
'blueprint'**

**When you go to plant, you will
have their location right at your
fingertips**

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**To make a sample plan,
measure the flowerbed area
Use a scale of 1/4 inch, 1/2
inch, or 1 inch equal to one
foot**

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If your flower bed is 20 feet by 10 feet (200 square feet), draw a bed 20 inches by 10 inches (200 square inches) on a piece of paper

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Graph paper makes this job a little easier since the grids are already marked

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The next step is to draw in the plants you intend to grow

You need to determine the width the plants at maturity

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Generally, the width is equal to the height but there are exceptions

Use a catalog or other reference to find this information

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You can either draw the plants directly on the plan, or use cutouts to move them around
Use the same scale you did for drawing the flowerbed outline

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Assuming you used 1-inch equals 1 foot for your flowerbed plan, a plant that spreads 4 feet is represented by circle 4 inches in diameter

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**This exercise eliminates a
problem for gardeners**

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The problem of not having a plan is you go to the garden center and return home with a carload of plants and start shoehorning them in randomly

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Since the plants are not mature, the tendency is to plant them closer than they should be

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Within a few years, the plants mature and begin to crowd each other, resulting in poor growth, competition for nutrients and moisture

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**This creates lopsided growth,
more disease problems, and
the need for immediate
division/replanting**

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**Place beds
where you can
view them
from inside
your home
and where you
spend time
outdoors**



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Locate them in high visibility areas, such as a front yard, near windows, the porch or patio



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Keep in mind factors such as soil type, drainage, pH, and light



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**Decide where
the flower bed
should be**

**You may find
several
locations that
need flowers**



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Create a courtyard bed, a patio bed, or a bed near the front door – rather than one large, overwhelming flower bed

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Incorporate flower borders in the front yard in place of foundation shrub plantings if the area has the best light and it visibility

A vibrant garden bed filled with various flowers. In the foreground, there are numerous yellow and orange marigolds. Behind them, there are purple and white pansies, and red and purple delphiniums. The background shows more green foliage and a dark, possibly paved area.

Make a 'wish list' of plants

A photograph of a garden. In the background, a light-colored gravel path curves through the scene. On either side of the path are two large terracotta pots overflowing with pink flowers. The middle ground is dominated by a dense row of tall, blue flowers. In the foreground, there is a large, colorful flower bed with yellow, magenta, and red flowers. The entire scene is framed by lush green foliage and trees.

A good place to start in making your plant list is to think about your favorite flowers

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**They may be family favorites,
flowers you remember from
childhood or those that give
you special memories**

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You might look through a catalog and pick out plants that you like based on the photos

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**Do not buy on photos alone.
Make a list and view the plants
at garden centers, in display
beds, or at local gardens**

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Before you actually purchase the plants, ask questions about its suitability for our climate

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Experienced salespeople can recommend adapted plants and steer you away from plants that will not perform well in your locale

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Does it grow in my area?

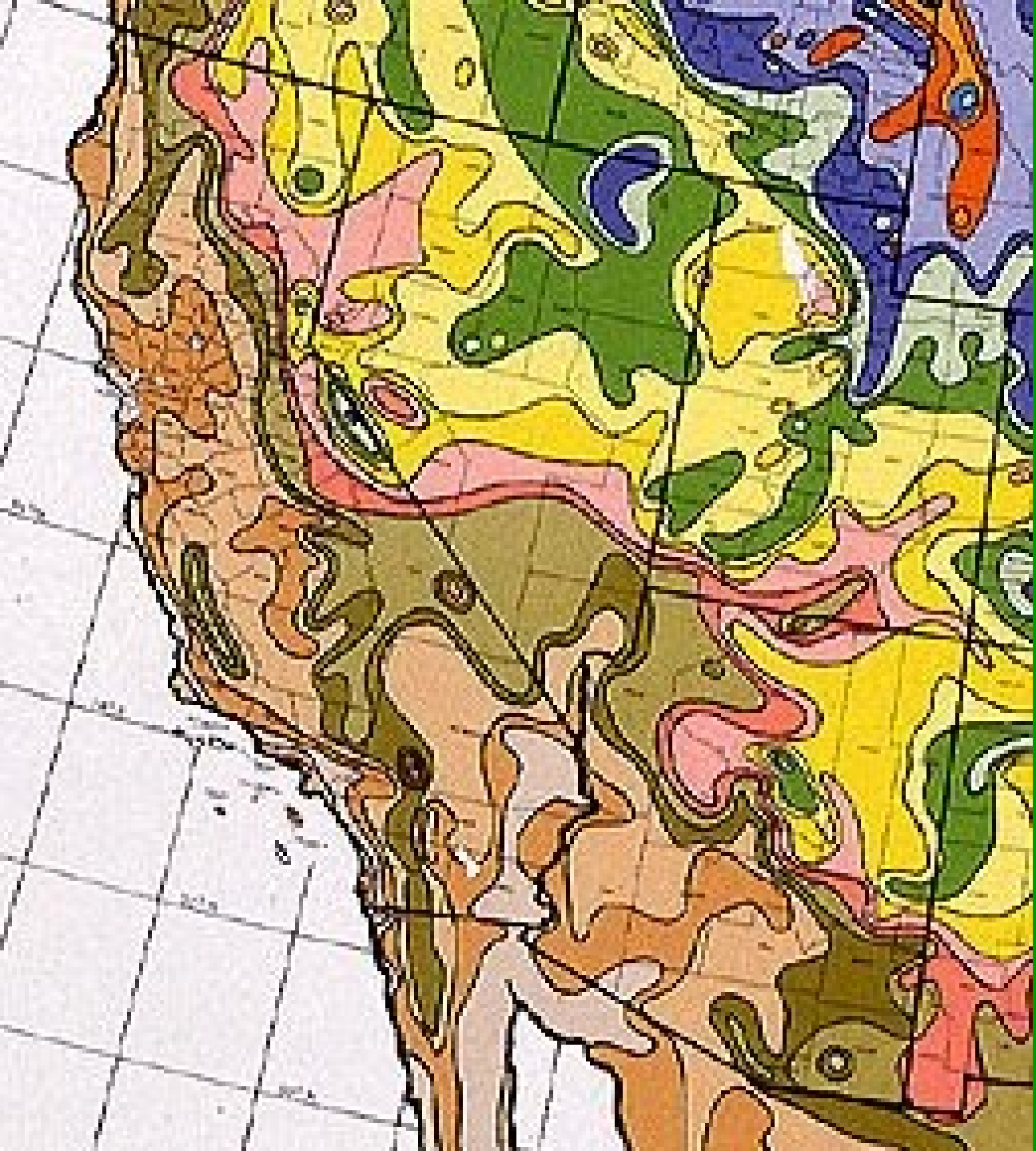
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**Find out what plant hardiness
zone you live in**

<http://www.usna.usda.gov/Hardzone/ushzmap.html>

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The USDA divides Utah into several hardiness zones running from Zone 3 in northern) to 8 in the southern part of the state



Average Annual Minimum Temperature

Temperature (F) Zone

Below -50	1
-45 to -50	2a
-40 to -45	2b
-35 to -40	3a
-30 to -35	3b
-25 to -30	4a
-20 to -25	4b
-15 to -20	5a
-10 to -15	5b
-5 to -10	6a
0 to -5	6b
5 to 10	7a
10 to 15	7b
15 to 20	8a
20 to 25	8b
25 to 30	9a
30 to 35	9b
35 to 40	10a
40 to 45	10b
45 +	11

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Most flower books and some catalogs have a picture of the zone map in them

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The average annual frost-free days and minimum winter temperatures determine zones

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**Most of Utah falls within zones
4B to 5B**

**Zones are important when
selecting plants from catalogs
or nurseries**

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Flowers can usually grow plants in their zone as well as two or three zones higher

For example, if you live in zone 4B, you can grow 5A,5B and higher with little problem

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**Attempts at lower zone plants
(below 4B) will require
significant winter protection**

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An exception to this 'rule' involves microclimates that exist and are particular to various sites

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Microclimates are areas that are unique for ability to support plants that are technically planted outside of their hardiness zone

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For example, if you live in hardiness zone 5, there may be areas unique to a particular property that could support zone 6 or 7 plant material

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These areas are usually located where there is some protection during the colder parts of the year

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Areas protected by buildings, fences, hedges, or other structures or land features can often be one or two planting zones different than other parts of the yard

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Because these areas are so unique and individualized, they are often found only after working and observing your flowerbed for several seasons

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Winter temperatures are not the only consideration in choosing perennials

Summer temperatures also influence plant growth and survival

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A Plant Heat-Zone Map, similar to the Plant Hardiness Zone Map, divides the U.S. into 12 heat zones based on the average number of days per year above 86 degrees F

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Utah is divided into four heat zones:

**The map is available online at
http://www.ahs.org/publications/heat_zone_map.htm**

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**Note that the hardiness zones
and the heat zones are not the
same numbers**

Flower Bed Design



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Consider several factors of design

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How long does it flower?

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**Annuals
provide color
constantly
from spring to
frost**



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**Most
perennials
bloom 1-3
weeks with
some repeat
bloomers**



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With careful selection, gardens flowers during spring, summer, and fall



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Add winter interest with ornamental grasses seed heads to have four seasons of interest



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Budget and maintenance issues affect which plants to use

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**Careful plant
selection
gives the best
investment
display**



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Is the foliage attractive?

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Most gardeners ignore the importance of choosing plants that have attractive foliage

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Too often, a designer selects plants based on the type of flower and usually its color

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With perennials, there are times when only the plant and its foliage are showy

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Make sure that the foliage is attractive enough to serve as filler or backdrop for other plants in bloom or locate them where they are not in the most prominent beds

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Be careful locating plants that are susceptible to foliar diseases or other problems that make plants unattractive

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Plants that fit in this category include monarda, phlox, and zinnia

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***Exposure* - Annuals and perennials are grouped according to four sunlight requirements**

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Full sun - receives sun for six or more hours each day

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***Partial sunlight - 3 to 5 hours
of sun each day***

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Partial shade - no more than a few hours of dappled sun

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***Full shade* - absence of direct sunlight**

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Few plants can grow in the full shade of a forest or grove of trees. Full shade plants must still receive some filtered light

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It may be possible to thin out trees and shrubs branches to allow more light for growth. Do this carefully to avoid destroying the plant shape

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Plants growing near trees and shrubs must compete for nutrients, light and moisture

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In addition to choosing plants based on hardiness and personal likes, there are other considerations

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Take specific plant characteristics such as height, width, flowering time, and texture need to be taken into account

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***Height* - Annuals and perennials differ in their height and width. Place shorter plants in the front, medium height plants in the middle, and taller plants in the back**

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This progression is broken up to create interest and appear more natural. Experiment with varying heights until you get a pleasing 'skyline'

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Spread – This varies by species. Newly planted bed look sparse when plants are set at recommended spacing, but this allows them to fill in without overcrowding

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Plants that are set too close compete for nutrients and moisture and infringe on each other causing lopsided growth

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Annuals planted at recommended distances will fill in during the growing season

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In a perennial bed, it may take 2 or 3 years for the plants to fill in. During these times, it is helpful to add colorful annuals to the bed

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***Form* - Form takes into account the shape of the entire plant as well as its individual parts**

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Herbaceous plants grow in five basic shapes

Rounded

Vertical

Open

Upright

Spreading or prostrate

Designing Flower Beds

Rounded



Designing Flower Beds

Vertical



Designing Flower Beds

Open



Designing Flower Beds

Upright



Designing Flower Beds

Spreading or prostrate



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The use of varying forms is a design consideration

Using only one form gives a monotonous display

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- Individual flowers have various forms
- Some of the more common ones are

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Bell-shaped (*Campanula*)



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**Daisy-like
(i.e. Shasta
daisy, aster,
zinnia)**



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Spherical (peony, marigold)



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Frilly or lacy (*Dianthus*)



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Star-shaped (*Amsonia*)



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Trumpet-like (*Hemerocallis*)



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- *Texture* - Texture refers to the plant's appearance, not the way it feels to the touch. It is fine, medium, or coarse with variation in-between (i.e. medium fine)

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- **Density of the foliage, form of the flower, flower size, and foliage size determine texture. Small, dissected, lacy leaves are considered fine textured (*Alyssum* or *Gypsophila*)**

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- **Plants with large leaves are generally considered coarse-textured**
- **Some examples of coarse plants are castor bean and Canna**

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Coarse-textured plants appear closer to the viewer



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Fine-textured plants appear to recede



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- If your flower bed is a considerable distance from where it will be viewed, use plants with large leaves so that they show up

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Designing Flower Beds

- **Texture is important in creating interest**
- **A flowerbed with a variety of textures creates interest**
- **A flowerbed composed of similar textures is visually boring**

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The End
Thanks for Coming

