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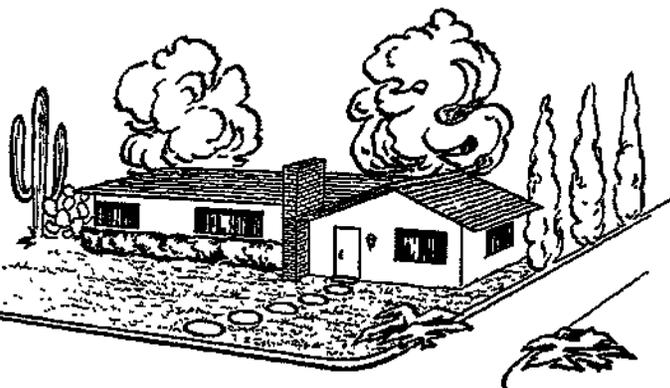
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# Plan and Plant for Beauty



## Unit 1 - Growing Annual Flowers

Cooperative Extension Service, The University of Arizona--4-H Manual No. 25

By Harvey F. Tate, Extension Horticulturist

### Why Plan and Plant for Beauty?

The next time you go for a ride—or on your way to school—look carefully at the different yards along the way. Some of them will be more pleasing to you than others. Just what is it that makes some of these yards so attractive to you?

Think of some of the yards which pleased you. On the list below, check those items which describe a yard which pleases you.

- Yard is neat, well kept, no junk or trash laying around.
- Lawn area is open and neat with trees for shade.
- Shrubs are around the foundation of the house.
- Shrubs screen off work areas; work and play areas separated.

- Walks and drives are trimmed and well kept.
- House is painted and in good repair.
- Flowers are used in borders and corners to give spots of color.

We use the term “landscaping” to describe the things we do around our homes to make them more attractive and pleasing to ourselves and others. A landscaping plan can make your home more attractive and pleasing—that is if you have the desire and don't mind the work.

If you have the desire for beauty, the 4-H “Plan and Plant for Beauty” project can help you reach these goals. It will give you a feeling of pride and satisfaction and help improve your home. That's why we “Plan and Plant for Beauty.”

### How to Plan and Plant for Beauty

#### First Let's Clean Up

1. Remove junk, trash, leaves and anything else from the yard that is unsightly, unpleasing.
2. Fence or make other arrangements to keep animals such as chickens, dogs, etc., out of the area that you desire to make beautiful. And plan for flowers or vines to make these fenced areas pleasing to you.
3. Grade and smooth the yard. Fill in low areas with good topsoil; rake smooth.
4. Walk away from your yard to about the place where other folks will be seeing it as they pass by the sidewalk, the street, or the driveway. Turn around; how does your yard look now? Where would be “just the spot” for some flower beds?

Three main types of plants are grown in flower gardens—*annuals*, *biennials*, and *perennials*.

An annual grows from seed, produces flowers and seed, then dies, all in one year.

Biennial flowers are those that grow one season, blossom and die the second season.

Perennial flowers live and blossom for many seasons. These are generally propagated by dividing the plants.

In this unit you will learn to identify and grow *annuals* and to show others how to grow them. You will also have flowers to use at home or to exhibit at fairs and flower shows.

#### Materials You Will Need

A sunny, well-drained location for your flower garden

Paper, pencil, and ruler for making a garden plan

A spade or spading fork, an iron rake, a trowel, a hoe, some heavy cord, a watering can, and a garden hose

Organic matter in the form of compost, peat moss, leaf mold, or well rotted manure and some commercial fertilizer such as 10-20-0 or 16-20-0

Good fresh seed and vigorous, started plants

## Now Let's Plan a Little

In our 4-H Plan & Plant flower-growing project you are expected to —

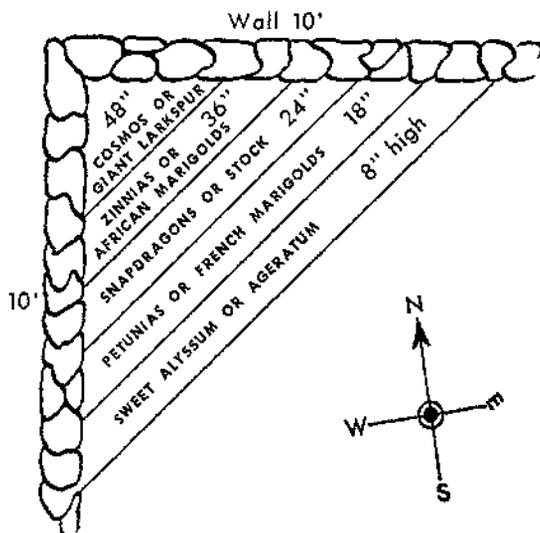
1. Grow five or more varieties of annual flowers, starting from seed or plants.
2. Use flower bed space of 50 square feet or more. This may be in one or several beds, whichever best fits the yard.
3. Learn to identify the leaves and flowers of five or more different annuals.
4. Keep plants well watered, fertilized, and free of weeds, insects, and diseases.
5. Learn four or more wild flowers in the community.
6. Collect and arrange 10 or more small bouquets for the house, church, club meeting, or sick room.
7. Give a demonstration or prepare an exhibit for a flower show or 4-H event.
8. Take pictures for your record book — before planting and after the beds are flowering. Take pictures from the same location to show comparison.
9. Keep a record of all work done and write a story.

## Plan a Place of Beauty

Planning your garden on paper may save time and effort at planting time.

Measure the area where your garden will be and map it on paper. Let one-half inch on paper equal one foot of garden. A piece of graph paper will work for this. Thus a flower bed 12 feet long will occupy six inches on your plan. Mark measurements in feet on your garden plan.

**No. Arizona** — 48" Cosmos, Dwarf Sunflowers, Tithonia or Dahlias  
 36" Zinnias or African Marigolds or Larkspur  
 18" Snapdragons, Stock, or Gladiolas  
 15" Petunias or French Marigolds  
 8" Ageratum or Sweet Alyssum



Suggested plans for flower gardens. Make plans to scale and mark dimensions on the plan.

**So. Arizona** — 48" Giant Larkspur  
 (Winter) 36" Snapdragons or Sweet Sultan  
 24" Stock or Gypsophila  
 18" Petunias or African Daisies  
 8" Ageratum or Sweet Alyssum

**So. Arizona** — 48" Cosmos or Tithonia or Dwarf Sunflower  
 (Summer) 36" Zinnias or African Marigold (early summer only or partial shade)  
 24" Periwinkle  
 18" French Marigold or Dwarf Zinnias  
 8" Sanvitalia or Verbena or Trailing Periwinkle

Include on the plan any building, wall, fence, or trees that are near the garden. Write north, south, east, and west on the corresponding sides of your garden plan. Exposure sometimes has a great influence on plant growth. Sunny location is best.

Talk with your leader and parents about the types of annual flowers you would like to grow, and varieties they too would like. Try some easy ones this year and more difficult varieties later.

Look up the height of the plants you have selected and plan to grow the tall ones in the back and the shorter ones in front.

## Let's Plant Some Beauty

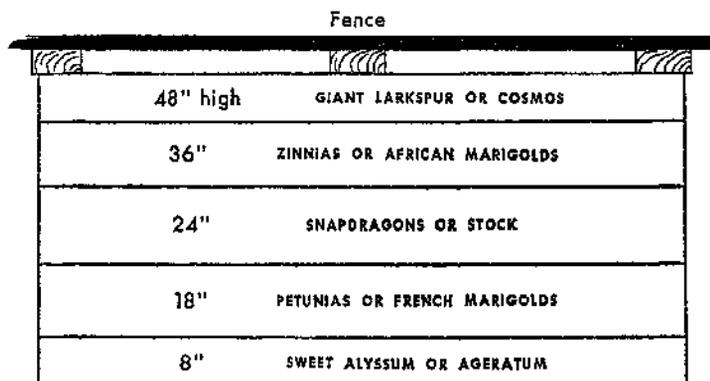
### Preparing the Soil

Most annuals will grow on a variety of soils, but they will grow better if the soil is supplied with organic matter and fertilizer.

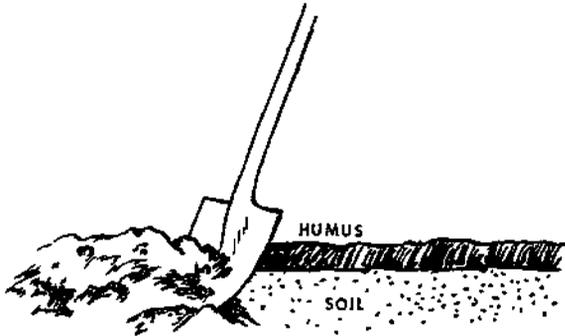
To tell when the soil is ready for planting, squeeze a handful of it. If the soil forms a mud ball, it is too wet; if it is cloddy, it may be too dry. The soil should crumble when squeezed.

If the soil is dry, water to a depth of 12 inches. Let the soil dry to the crumbling stage. Spread peat moss, leaf mold, well rotted manure, or other humus on the soil surface. Then spade to a depth of 8 to 12 inches.

Break up the lumps with a hoe and smooth the surface with an iron rake until level. Remove all stones and hard lumps of soil.



Garden is ready for spading when soil crumbles when squeezed in your hand.



Spread peat moss, leaf mold, well rotted manure, or other humus on the soil surface before spading.

Spread 1 to 1½ pounds of commercial fertilizer (a pint jar holds about 1 pound), such as 16-20-0, for each 100 square feet of garden, and work it into the soil with the rake. If the soil is still moist, the garden is now ready to plant. You may have to water lightly again before planting if the soil dried during the spading process.

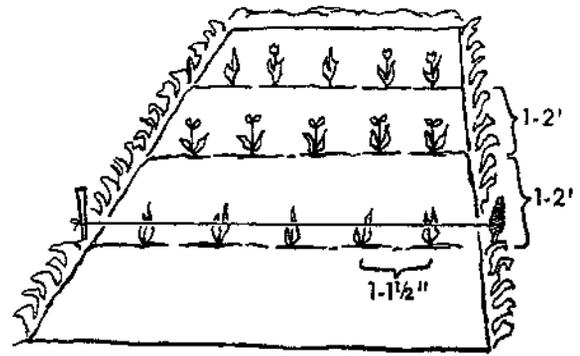
### Planting

For northern Arizona and summer gardens in southern Arizona, wait until the danger of frost is over before planting. For winter and spring gardens in southern Arizona plant frost hardy plants in the fall. Consult your leader for the proper planting date.

Your leader can also help you locate a greenhouse, garden store, or nursery where you may buy plants and seeds for your garden. You will grow some plants from seed, but those most difficult to produce should be purchased as transplants. Your leader will help you choose those most easily grown. In the next unit, you will learn to grow the more difficult varieties.

From your plan, determine how many plants will be needed. Space plants one to two feet apart, depending upon their size when fully grown. Group by varieties and color for best effect.

When you transplant, keep as much soil around the roots of young plants as possible. Transplants can be purchased in peat moss cups which are



Use a heavy cord for making straight rows. Space plants about 1 to 1½ feet apart in rows that are 1 to 2 feet apart.

planted without removing the plant. Dig holes for the plants with the trowel, setting them a little deeper than they were in the greenhouse pots or flats of soil, and water immediately. Transplants will bloom faster than seeded flowers.

A cloudy day or late afternoon is a good time for transplanting. Some shade, such as inverted flower pots or strawberry baskets, may be necessary for a few days. Half-gallon milk cartons with the ends removed are good plant protectors. Caps made of newspaper may also be used, but be sure to leave one side open. These keep the plants from wilting after transplanting.

Give the plant a little water each day with the hose or watering can until they are well established. Remove the plant protectors as soon as the plants start growing.

### Pinching

Most annuals grow tall and spindly if left to grow naturally. To make them bushy, pinch plants when they have three or four sets of leaves. Using the thumb and finger, remove the top inch of growth. Do not pinch celosia, poppies, stock, or balsam.



Use thumb and forefinger to pinch off top



Plant after pinching



Bushy plants result from pinching

## Let's Keep It Beautiful

### Summer Care

#### Weed Control

Weeds are a major problem in the summer flower garden. Unless they are removed early while still small, they will compete with the flowers for moisture and fertilizer. Cultivate the surface lightly about once a week, but only when necessary to

control weeds. Go no deeper than about ½ inch, otherwise you may injure plant roots near the surface.

A light mulch of about an inch of peat moss, cottonseed hulls, or grass clippings on the soil surface will help conserve moisture and help control weeds. Do not use grass clippings that contain mature seedheads.

## Water

Soak the garden about once each week to a depth of 12 inches. Use a shovel to make certain that the moisture has reached this depth. Frequent light watering will only encourage shallow rooting and alkali buildup in the root zone.

## Insect and Disease Control

A good, all-purpose program is as follows:

a. **For chewing insects** — Use 10% chlordane dust.

b. **For sucking insects** — Use Malathion or Diazinon either as a spray or dust.

c. **For leaf blights, spotting, or blossom blights** — Use Zineb 75% wettable powder — 2 teaspoons per gallon of water.

d. **For mildew on leaves and flower buds** — Use Actidione PM following directions on container.

e. **For root and crown rots** — Use Captan wettable powder following directions on the container for a soil drench.

# Let's Share Our Beauty

## Flower Identification

Flower growing and flower identification are closely related. You will want to recognize young plants by their leaves so you can tell them from weeds. You will also want to identify plants by their flowers for exhibition at fairs and flower shows, and when friends come to see your garden.

To complete this unit, you should be able to identify five different annual flowers. Pictures and descriptions of flower varieties in seed catalogs, garden magazines, and gardening books will help in identifying various types of annual flowers.

## Demonstrations and Exhibits

Other people are interested in knowing how to grow annual flowers and will ask you about your project. You can show them either by demonstrating certain practices, or by preparing an exhibit which will explain flower growing to them.

Demonstrations about five minutes long with catchy titles help to create and hold interest. Show the people in your audience, as well as tell them, how you do certain things in your flower garden. Here are a few ideas:

**What a Site** — (Use blackboard to show why you chose the site for your garden).

**Easy Does It** — (Show how to tap plants from flower pots before planting in the garden).

**Tight Squeeze** — (Show how to test soil by squeezing before starting to spade the garden).

**What's in the Bag** — (Use blackboard to show what the numbers 16-20-0 or 5-10-5 mean on a fertilizer bag).

**Pinched Again** — (Show how to pinch a plant and explain why this is done.)

## Exhibiting Flowers

There will be many opportunities during the summer to enter your flowers in fairs and flower shows. Many gardeners hesitate to enter flowers because they do not know what the judges expect of an exhibit.

Read the schedule carefully to make certain that you enter the exact number of specimens in the right class. Name your entries correctly if the schedule requires labeling.

Uniformity in size, color, age, and shape of the flowers counts heavily in judging flowers.

Make certain that there are no signs of insects, disease, or handling injury on the flowers or foliage.

The judges also expect an entry to look fresh, to be neither too old nor too immature, and to have strong stems of average length for that plant.

## Preparing Flowers for Exhibit

Flowers that have been properly prepared for exhibition will have a much better chance of winning than will flowers which are hastily picked just before the show.

1. Several days before the show, check the schedule or premium list to determine what classes you can enter.

2. Cut the flowers in the evening before the show. The food supply within the plant is greatest at this time of day. Use a sharp knife to cut the flowers, as scissors crush the stem.

3. Place the stems in water as you cut them, to prevent wilting. Cut a few extra flowers in case some are damaged in handling.

4. Keep containers of flowers in a cool place overnight. Wilted flowers may be revived by plunging them up to the flower buds in lukewarm water (110° F, just warm to touch) for two hours. The water in the containers should also be lukewarm, never cold. Plants absorb cold water very slowly.

## Looking Ahead

We hope you have enjoyed growing flowers. There are many more experiences in store for you.

Talk with your 4-H Club Leader or County Extension Agent about other units in this project. Then continue to "Plan and Plant for Beauty."

## Acknowledgment

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