



FALL AND WINTER GARDENING BASICS FOR LOS ANGELES COUNTY

1. INTRODUCTION

One of the advantages of Southern California over the North and the East, is that our mild winters make it possible to plant and grow year-round. Fall is not only a time for garden maintenance and preparation of the soil for spring planting; it is the time to plant for winter and early spring harvests and blooms. Also it is the time to overwinter cool weather hardy crops, and plant cover crops for soil building. Growth during fall and winter slows down. Seeds sown now for spring crops and blooms will encourage the growth of strong roots and foliage. These plants will bear sooner in spring. Timing is an important factor in planting cool weather hardy crops in fall. Seeds will germinate throughout this season, but it is critical that these plants grow to maturity by Thanksgiving or early December, so they do not bolt and go to seed with the coming of the first warm weather in spring.

This workshop is designed to give you basic gardening principles in order for you to have a healthy garden.

2. SOIL

A. Types of Soil

- **Soil sample test:** Put approximately one cup of your soil into a straight-sided quart jar with lid and add approximately one tablespoon of alum or Calgon bath beads. Fill the jar with water almost to the top; shake vigorously for several minutes and then let it stand undisturbed. After the soil separates into layers, figure out the percentages of sand, silt and clay - the sand will be the bottom layer, the silt the next layer, followed by the clay, with the organic matter floating on top of the water. (Have them do the soil test now and read the results at the end of the workshop. You can determine their soil types for them by comparing the results with the attached soil-texture triangle.)
- Understanding your soil will help you know how to properly amend, fertilize, water and plant so that you will have healthy, disease and pest resistant plants.
- Soil is composed of 4 parts: the mineral part which is derived from the erosion of rocks to form sand, silt and clay; air; water; and the organic-matter portion which is derived from decaying plants and both living and dead microorganisms. The mineral part determines what is commonly known as soil type or texture.
- It is important to know that the balance of the 4 soil parts is very critical to plant growth. For example, over watering will increase the water part, thereby decreasing the air thus causing roots to drown. Likewise, as the air increases, the soil dries and the plant wilts.
- The ideal soil is loam which is a mixture containing equal amounts of clay, silt, sand and organic matter.
- Clay soils have great mineral holding capacity and poor drainage, while sandy soils have excellent drainage but poor mineral holding capacity.
- Soil structure can be improved by the addition of organic matter or compost. It is very important to note that no matter what type of soil you may have, clay or sand, or any other type, compost will improve it.
- Water will roll off of clay and just sit, so the addition of organic matter loosens up the soil and adds air pores so plants don't drown. Water drains through sandy soil so fast, so it needs the water holding capacity of the compost. Also the compost fertilizes the sandy soil. Never add sand to clay soils; it will only make it heavy and cement-like.

B. Preparation of Soil

- First, choose your site taking into consideration the shorter days and different angle of the sun this time of year.
- Build up your soil: turn over to loosen soil (but don't overwork), add compost to amend, water to settle, and then let sit a couple of weeks before planting. Letting the soil sit before planting allows the amendments to fully break down and enrich soil and also is less likely not to burn roots.
- Mulch around plants. Mulch is a layer of material such as compost, straw, bark, grass clippings, leaves, shredded paper or plastic spread over garden soil. Mulching reduces weed growth, keeps in moisture, prevents erosion, and controls soil temperature (helps soil stay cool in summer and warm in winter). Mulching with organic matter also enriches the soil as it breaks down.
- Mulch thinly in fall and winter, keeping mulch from touching the plants. You don't need the moisture retention properties as you did in the hot, dry summer and you want to avoid attracting pests and fungal diseases in wet mulch near the plants as well as provide good air circulation. Also, keep plant debris cleaned up, disposing of any possibly diseased material and composting the rest.
- Next, I want to define organic and inorganic fertilizers and soil amendments: a fertilizer improves plant growth directly by providing one or more necessary plant nutrients; a soil amendment is a material that improves the chemical and/or physical condition of the soil; organic amendments and fertilizers are directly derived from plant and animal sources; and inorganic amendments and fertilizers are not directly derived from plant and animal sources, however many materials come from naturally occurring deposits.
- As discussed earlier, when you worked compost into your soil, you were amending with an organic amendment and fertilizer.
- Soil needs to be fertilized from nutrients being used up by plants and washed away by rain and irrigation. Crops and annual flowers need fertilizer due to their short, fast growing season. It is best to use a standard complete and slow-release fertilizer. Plants need other nutrients along with the macro nutrients Nitrogen, Phosphorus and Potassium (N-P-K).
- Southern California soils tend to get Nitrogen deficiencies; however, extra Nitrogen is not desired in winter in order to slow the growth of lots of tender new foliage which could be susceptible to cool temperatures.
- You do not need to spend a lot on fertilizer. For example, do not buy fertilizers made especially for roses or citrus; rather look at the N-P-K. Compost is great and it is the cheapest; you can make it yourself, it is slow release, it contains micro nutrients and it is organic.
- Cover crops are great to plant when your garden is not in use. Before you plant, plow them in and let them break down. Planting legumes is very beneficial in that they add nitrogen to your soil as they grow. Besides this, cover crops stop erosion; keep down weeds, and acts as compost when you dig them into the soil in the Spring before planting.

C. Composting

- Compost is a natural fertilizer. It is made up of dead plant and animal material that has been piled up and allowed to decay to the point where it can be easily worked into your garden soil.
- One of the many benefits of adding compost to your soil is that the nutrients in it are slowly released into the soil and then are available for use by the plant. Compost is a slow-release fertilizer. Also, compost can be added to your soil to improve its structure for better drainage in clay soils and better water retention in sandy soil. It is also a great way to recycle yard and other wastes.
- Materials to compost are of two types: green and brown. Green, hot, soft, wet, smelly materials, such as grass clippings, spent plants and flowers, green pruning, fresh kitchen scraps and animal manures, supply Nitrogen to the pile. Brown, cold, tough, oily or waxy, dry, "mummy" materials, such as straw, wood shavings, dead fallen leaves and woody pruning, supply Carbon to the pile. The Nitrogen and Carbon must be in balance, along with proper air and moisture in the pile.

- For a hot pile that breaks down quickly, you should do the following: minimum size of pile should be 3'X3'X3', along with equal amounts of green and brown material add several shovels full of soil, brown and large materials should be no more than 1-1/2 inch in size, turn the pile regularly, keep moist and don't add anything to the pile once it is started. Compost is ready when it is dark brown in color and no longer recognizes what you put into the pile.
- Materials to be avoided in pile are poisonous plants, manure from carnivores, meat scraps, diseased plants and tough weeds such as Bermuda grass.
- **Hand out "Backyard Composting Questions and Answers"** for additional information on composting.
- **Mini-composter demonstration.**

D. Irrigation

- Use shovel test to know when to water: soil should be moist to the bottom of the shovel when inserted into the soil.
- Deep watering is important. Water is not getting where it should be if you sprinkle your garden every day. It is best to water to the point of run-off and water as frequently as needed to meet the shovel test. Also, with too much run-off you are wasting water.
- The ideal time to water is in the morning before the sun is high. This avoids evaporation and also gives the plants time to dry off which deters mildews.
- Frequency will change. You can water less in the cooler, wetter fall and winter seasons than in the hot dry summer.
- Over watering is the cause of most plants dying. As we discussed earlier, too much water will drown the roots.
- Avoid walking on your garden after watering so that you do not get compaction of the soil.
- Occasionally you should overhead water in order to clean both sides of leaves. Use foliar feeding sprays with seaweed.

E. Benefits of Good Soil

- Good soil gives you healthy plants.
- Healthy plants are disease and pest resistant.

3. PLANTING

A. What to Plant Now

- As I said in my introduction, due to our mild winters, we can plant year-round. Fall is a great time to start a garden.
- **Hand out fall and winter planting list for both edibles and ornamentals.** These are the ideal times to plant in Southern California.

B. Timing and Maturation

- **Hand out a packet of seeds to each person.** It is important to properly read the seed packet. Note: the date of the seeds, because you do not want to plant old seeds; disease resistance; germination and days to maturity; mature size of plant, for spacing; and cultural needs such as sun and water needs and time to plant.
- Take advantage of maturation time and use succession planting, so that all of one crop are not ready to harvest at once. Plant every 3 weeks.



SEPTEMBER

Sow in September:

beets
bok choy
broccoli
Brussels sprouts
cabbage
carrots
cauliflower
celery
chard
chervil
chives
collards
endive
garlic
kale
kohlrabi
leeks
lettuce (heading types)
green onions
short-day bulb onions (like Grano,
Granex and Walla Walla)
parsley (flat-leaf)
parsnips
peas
white potatoes
radishes
spinach
turnips

Transplant in September:

herbs
lettuce (heading types)
fruit and nut trees

Sow or transplant in September:

agenratums
alyssums
asters
astilbes
baby blue eyes
baby's breath (gypsophila)
bachelor's buttons (cornflower)
begonias
calendulas (winter or pot marigold)
campanulas (bellflower, cantebury bells)
candytufts (iberis)
carnations (dianthus, pinks, sweet Williams)
chrysanthemums
clarkias (godetia)
columbines (aquilegia)
coralbell (heuchera)

coreopsis (pot of gold, calliopsis)
glorioda daisy (rudbeckia, black-eyed Susan,
coneflower)
Shasta daisy
English daisy (bellis)
delphiniums
forget-me-nots (myosotis)
foxgloves
gaillardias (blanket flower)
gerberas (Transvaal daisy)
geums
hollyhocks
impatiens
larkspur
linarias
lobelias
lunarias (honesty, silver dollar plant)
nemesias
nigellas (love-in-a-mist, Persian jewel)
pansies
penstemons (bearded tongue)
phloxes
Iceland, Oriental and California poppies
primroses (primula)
salvias
snapdragons
statice (limonium, sea lavender)
stocks
sweet peas
verbena
viola
California wildflowers

Plant fall-color perennials in September including:

cyclamen
fortnight lily
Kaffir lily
primroses

Transplant in September:

perennials
ground covers
shrubs
vines
trees

Plant shrubs, in September, with colorful berries for fall and winter accents:

abelia
barberry
bottlebrush
forsythia

holly
hydranegia
oleander
pyracantha
quince
toyon

Plant in September:

iris rhizomes
daylily crowns
lily bulbs

Bulbs to plant in September for spring bloom, including:

alliums
amaryllis
anemones
brodiaeas
crocuses
daffodils
freesias
fritularias
galanthus
baby glads
glory-of-the-snows
grape, Dutch and wood hyacinths
Dutch irises
ixias
leucojums
lycoris
montbretias
narcissus
paperwhites
peonies
ranunculus
scilla
snowdrops
sparaxis
tigridia
tritonias
triteleia
dogtooth violets
watsonias
winter aconites

Bulbs to chill in September:

crocus
daffodil
hyacinth
narcissus
tulips

Start or reseed lawns in September



OCTOBER

Sow in October:

fava beans
bok choy
broccoli
Brussels sprouts
cabbage
carrots
cauliflower
celery
chard
chervil
chives
collards
endive
garlic
kale
kohlrabi
leeks
lettuce (especially romaine,
small-heading bibb and
buttercrunch types)
green and long-day
bulb onions
parsley (flat-leaf)
peas
radishes
shallots
spinach (especially
savoy types)

Transplant in October:

artichokes
asparagus
beets
broccoli
Brussels sprouts
cabbage
cauliflower
herbs (especially comfrey,
sage, thyme)
rhubarb

Sow or transplant

in October:

ageratums
alyssums
bachelor's buttons (cornflower)
calendulas
campanulas (canerbury bells)
candytufts (iberis)
chrysanthemums
clarkias (godetia)
columbines (aquilegia)

coralbell (heuchera)
coreopsis (pot of gold)
African daisies (arctotis, gazania)
delphiniums
dianthus (carnation, pinks,
sweet William)
Shasta daisy
English daisy (bellis)
forget-me-nots (myosotis)
four-o'clocks
foxgloves
gaillardias
hollyhocks
larkspur
linarias
love-in-a-mist (nigella,
Persian jewel)
lunaria (honesty, money plant,
silver dollar plant)
blue marguerites (Felicia)
nieremberbias (cup flower)
ornamental cabbage and kale
phloxes
poppies--California, Iceland,
Oriental, Shirley
primroses (primula)
rudbeckias (coneflower, gloriosa
daisy, echinacea, monarch
daisy, black-eyed-Susan)
snapdragons
stocks
sweet peas
verbenas
violets (Johnny-jump-ups,
pansies, violets)
wildflowers
ornamental cabbage and kale
**Transplant or divide and
replant in October most
perennials and some annuals,
including:**
acanthus
agapanthus
Japanese anemone
astilbe
bergenia
bleeding hearts (dicentra)
calendulas
evergreen candytuft
columbine
coralbell (huechera)

coreopsis
michealmas and Shasta daisies
daylilies
delphiniums
dianthus (carnation, pinks,
sweet William)
dusty miller
foxgloves
helleborus (Christmas rose,
Lenten rose)
hollyhocks
bearded irises
peonies
phloxes
Oriental poppies
primroses
rudbeckias (gloriosa daisy,
coneflower, echinacea,
monarch daisy, black-eyed
Susan)
statice
stock
stokesia
Veronica
yarrow

Plant in October for fall color, including

barberry (berberis)
cotoneaster
nandina
Oregon grape (mahonia)
pyracantha
raphiolepis
viburnum

Trees to plant in October for fall color, including

Chinese pistache
sapium
persimmon
Bradford and Aristocrat pear
gingko
Raywood ash

Transplant in October

azaleas
camellias
hardy evergreens
Bulbs to plant in early October for spring bloom, including:
alliums
amaryllis
anemones

brodiaeas
daffodils
freesias
fritillarias
galanthus
baby glads
glory-of-the-snows
hyacinths-grape,
Dutch, wood
Dutch irises
ixias
leucojums
lycoris
montbretias
narcissus
paperwhites
peonies
ranunculus
scilla
snowdrops
sparaxis
tigridia
triteleia
tritonias
dogtooth violets
watsonias
winter aconites

Seed new lawns or reseed thin spots in established lawns in October

Plant "green manures" in October:

fava (broad) beans
clover
mustard
oats
annual rye
wheat
vetch



NOVEMBER

Sow or transplant in November for

Spring harvest:

fava beans
beets
broccoli
Brussels sprouts
cabbage
chard
coriander (cilantro)
garlic
kale
kohlrabi
leeks
lettuce (especially romaine, small-heading
bibb and buttercrunch types)
mustards
green and bulb onions
parsley (flat-leaf)
peas
radishes
spinach (especially curley-leafed savoy types)

Transplant in November:

strawberries

Sow or transplant in November:

alyssums
Japanese anemone
baby's breath (gypsophila)
bachelor's buttons (cornflower)
bleeding hearts
calendulas
campanulas (canerbury bells, bellflower)
candytuft
columbines
coralbell
coreopsis
cyclamen

gazania
English and Shasta daisies
delphiniums
dianthus (carnation, pinks, sweet William)
forget-me-nots
foxgloves
gaillardias
hollyhocks
larkspur
linaria
lunaria (honesty, money plant, silver dollar plant)
lupine
ornamental cabbage and kale
penstemon
phloxes
California, Iceland and Shirley poppies
primroses (primula)
rudbeckias (coneflower, gloriosa daisy, black eyed-Susan)
snapdragons
stocks
sweet peas
violets (Johnny-jump-ups, pansy violet)
wildflowers

Plant chilled bulbs in November for Spring bloom primarily:

crocuses
hyacinthis
tulips

Plant winter-color annuals, in November, above spring and summer blooming bulbs for instant and long-lasting color:

calendulas
pansies
Iceland poppies
primroses
violets



DECEMBER

Sow in December:

chard
kale
leeks
bibb, buttercrunch and romaine lettuces
mustards
green and bulb onions
flat-leaf parsley
peas
radishes
savoy-leafed spinaches

Transplant in December:

globe artichokes
Jerusalem artichokes
asparagus
broccoli
cabbages
cauliflower
horseradish
rhubarb

Sow in December:

African daisy (ganzia)
ageratum
alyssums
baby-blue-eyes
baby's breath (gypsophila)
bachelor's button (cornflower)
calendulas
candytuft
delphiniums
forget-me-nots
hollyhocks
impatiens
larkspur
lobelia

lunarias (honesty, money plant, silver dollar plant)
lupines
nasturtiums
pansies
sweet peas
California, Iceland and Oriental
poppies
verbena
wildflowers

Transplant in December

astilbes
azaleas
bleeding hearts
calendulas
camellias
canterbury bells (campanula, bellflower)
cinerarias
columbines (aquilegia)
cyclamen
delphiniums
dianthus
forget-me-nots
foxgloves
gaillardias
hollyhocks
lilies-of-the-valley
ornamental cabbage and kale
pansies
peonies
Iceland and Oriental poppies
primroses
snapdragons
stocks
violas
violets



JANUARY

Sow outside in January:

chard
kale
leeks
bibb and iceberg lettuces
mustards
green and bulb onions
flat-leaf parsley
peas
radishes
savoy spinaches

Plant outside in January

for summer harvest:

garlic cloves
bulb onion sets
shallots

Sow inside in January:

broccoli
Brussel sprouts
cabbages
chamomile
caraway
cauliflower
chervil
chives
coriander (cilantro)
dill
fennel
lettuces
marjoram
mint
oregano
curly-leafed parsley
peppers (start end of month)
sage
spinaches
tarragon
thyme
tomatoes (start end of month)

Sow outside in January:

chard
kale
leeks
bibb and iceberg lettuces
mustards
green and bulb onions
flat-leaf parsley
peas
radishes

savoy spinaches

Transplant in January:

artichoke crowns
asparagus crowns
rhubarb rhizomes
broccoli
Brussels sprouts
cabbages
cauliflower
chard
garlic
kale
leeks
lettuce
green and bulb onions
flat-leaf parsley
radishes
savoy spinach
strawberries

Plant bare root in January

fruit and nut trees
berries
grapes
Sow outdoors in January:
ageratums
alyssums
bachelor's button (cornflower)
calendulas
candytuft
celosia (cockscomb)
columbines
coreopsis
English daisy (bellis)
delphiniums
dianthus
forget-me-nots
four o'clocks
hollyhocks
larkspur
lunarias (honesty, money, plant
silver dollar plant)
pansies
California and Shirley poppies
salvias
snapdragons
stocks
sweet peas
sweet William
native wildflowers

Sow inside in January:

California poppies
asters
balsam
cosmos
African daisies (gazania)
dianthus
gaillardias
impatiens
lobelia
marigolds
nicotiana
petunias
phlox
statice
verbena
vincas

Transplant in January:

transplant above, sow inside in January
agapanthus
hardy amaryllis
azaleas
bleeding hearts
camellias
cinerarias
clematis
cyclamens
ornamental cabbage and kale
gaillardias
hollys
primroses
Iceland and Oriental poppies
bareroot rose
sweet peas (minimum of handling and watering with
mild solution of balanced fertilizer)
violets
violet
wisteria

Divide and replant perennials in January:

agapanthus
chrysanthemums
coreopsis
African daisies (gazania)
English daisies (bellis)
gloriosa daisies (rudbeckia)
Shasta daisies
daylilies (hermerocallis)
delphiniums
dianthus
statice (limonium)
violets



FEBRUARY

Sow outside in February:

beets
caraway
celery
carrots
chervil
chives
collards
cilantro (coriander)
dill
endive
fennel
garlic
kohlrabi
leeks
lettuces
mustards
green onions
bulb onion sets
parsley
peas
white potatoes
radishes
shallots
spinaches
turnips

Sow inside in February:

eggplants
peppers
tomatoes

Transplant in February:

artichoke crowns
asparagus crowns
rhubarb rhizomes
broccoli
Brussels sprouts
cabbage
cauliflower
celery
horseradish
kale
leeks
lettuce
onions
peas
parsley
strawberries

Plant bareroot in February:

fruit and nut trees
berries
grapes
ageratums
alyssums
asters
baby-blue-eyes
baby's breath
bachelor's buttons (cornflower)
calendulas
campanulas (Canterbury bells)
candytuft
carnations
clarkias (godetia)
coreopsis
columbines
coral bells
cosmos
African daisies (gazania)
Shasta daisies
delphiniums
dianthus
forget-me-nots
foxgloves
hollyhocks
impatiens
larkspur
linaria
lobelia
lunarias (honesty, money plant,
silver dollar plant)
lupines
marigolds
morning glories
nasturtiums
nemesia
pansies
petunias
phlox
California and Shirley poppies
salvia
scabiosa (pincushion flower)
snapdragons
stocks
strawflowers (helichrysum)
sweet peas

Sow outside in February:

sweet William
verbena
violas
wildflowers

Transplant in February:

(except California and Shirley poppies)
azaleas
bleeding hearts
camellias
cinerarias
chrysanthemums
coreopsis
dusty miller
euryops
Australian fuchias
gardenias
gaillardias
geraniums
gerberas
helleborus (Christmas or Easter rose)
Iceland poppies
lavendar
lupines
peonies
primroses
rhododendrons
bareroot roses
rubbekias (gloriosa daisy, coneflower,
black-eyed Susan)
deciduous shade trees
**Plant bulbs in February for spring and
early summer blooms, including:**
achimenens
agapanthus
amaryllis
tuberous begonians
caladiums
calla lilies
canna lilies
colchicums
dahlias
daffodils
daylilies
gladiolus
bearded and Dutch iris
sternbergias
tigridias
tuberoses