

LANDSCAPING WITH TREES AND SHRUBS SELECTIONS FOR THE FOOTHILLS

Presented by

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COURSE OUTLINE

1. Getting Started
2. Basic Landscape Concepts
3. Site Considerations
4. Selection Considerations
5. Shrub Selections
6. Tree Selections
7. Drought Tolerant Selections
8. Bringing It All Together
9. Planting, Pruning and Maintenance
10. Hedges

1. GETTING STARTED

- Determine your goals for your landscape
- Identify your wants
- Consider features



GOALS FOR THE LANDSCAPE

- Privacy
- Safety
- Entertainment
- Recreation
- Fire safety
- Modify climate
- Beautify property
- Reduce water use
- Attract or repel wildlife

WANTS

- Think about what you want
- Your favorite plants
- Write it down
- Make lists
 - Brainstorm
 - Organize/prioritize them



FEATURES TO CONSIDER

- Patio for parties
- Outdoor cooking area
- Secluded area
- Play area
- Swimming pool/spa
- Orchard
- Vegetable garden
- Flower garden
- Utility/work area



2. BASIC LANDSCAPE CONCEPTS

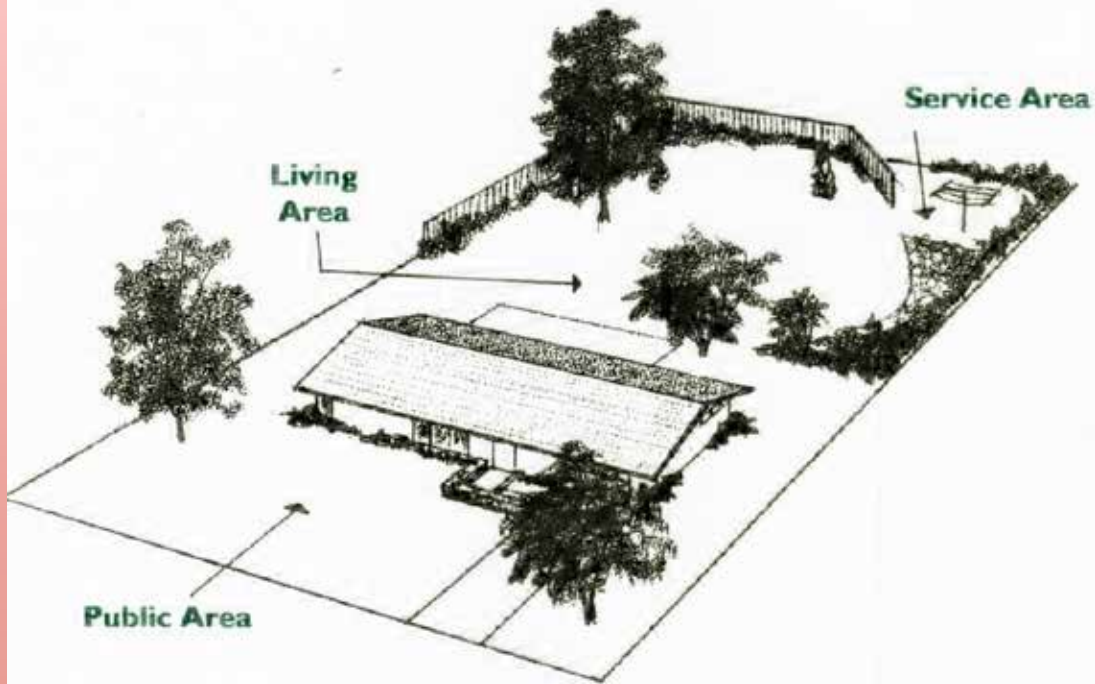
- Traditional home landscape areas
- Create rough designs
- Design considerations
- Design principles

BASIC LANDSCAPE CONCEPTS

Traditional areas in the home landscape:

- Public area
- Living area
- Service area

Three Basic Areas of a Landscape



- Public Area** - from the street to the house
- Living Area** - located at the rear of the property (should provide privacy enclosure)
- Service Area** - located to the side or rear of the property

Let's talk a little bit about each of these...

PUBLIC AREA – THE FRONT YARD

Function

- Frame the house for viewing foundation plantings



Problems

- On large lots, your house can appear isolated
- On hill-top lots, your house may look like a pimple
- Over planting
- Large garage up front

LIVING AREA – BACK YARD

Function

- Outdoor living & entertainment area
- Utilitarian – storage, garden, etc.
- Visual extension of house
- Recreation



Problems

- Area too small or poorly defined
- Plants not suited to space or design
- Landscape too labor intensive

SERVICE AREA (A.K.A. SIDE YARD)

Function

- Transport path from front to back yard
- Clothes line
- Storage
- Wood pile
- Dog run
- Trash cans



SERVICE AREA (A.K.A. SIDE YARD)

Problems

- Plants should be small and well-behaved
- Narrow or enclosed space
- Transport path further limits space
- Subject to extremes of
 - Light/dark
 - Hot/cold
- Unsightly storage →



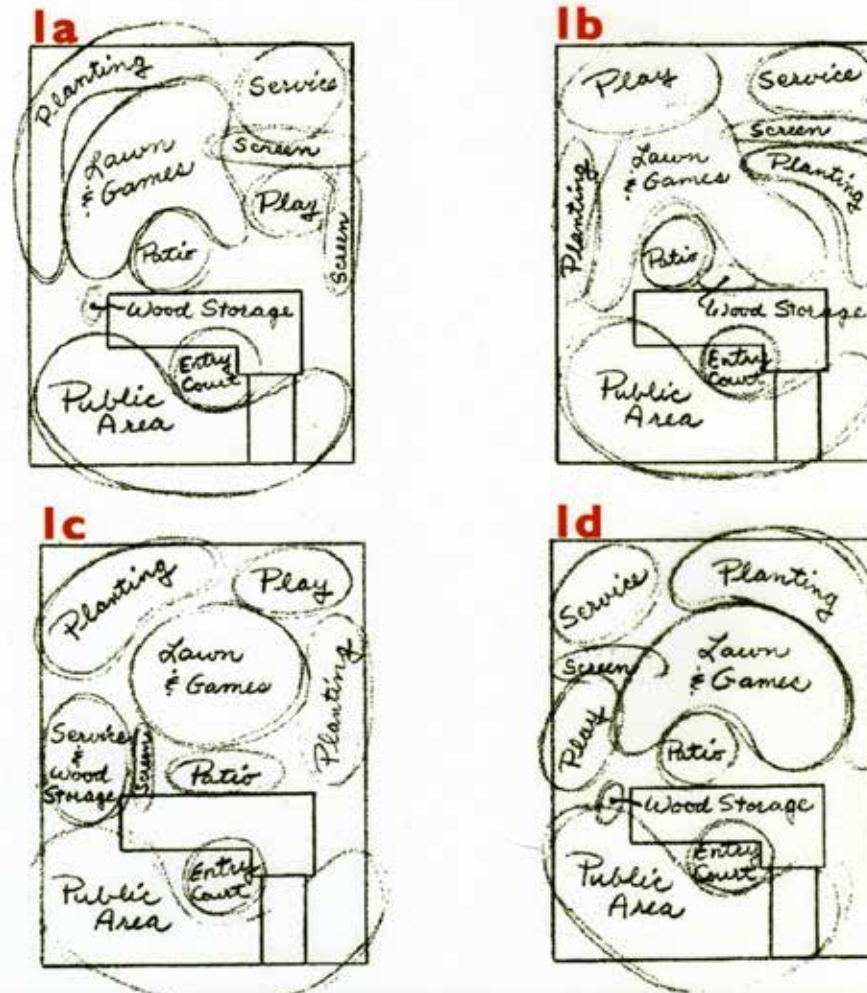
CREATE SOME ROUGH DESIGNS

- Brainstorm
- Create rough sketches
- Use oval (goose egg/bubble) drawings
- Make several different designs

INCLUDE IN YOUR DESIGN...

- House
- Driveway, sidewalks, etc.
- Existing trees
- Lawn areas
- Planting area
- Areas to be screened
- Service areas

Analyzing the Site



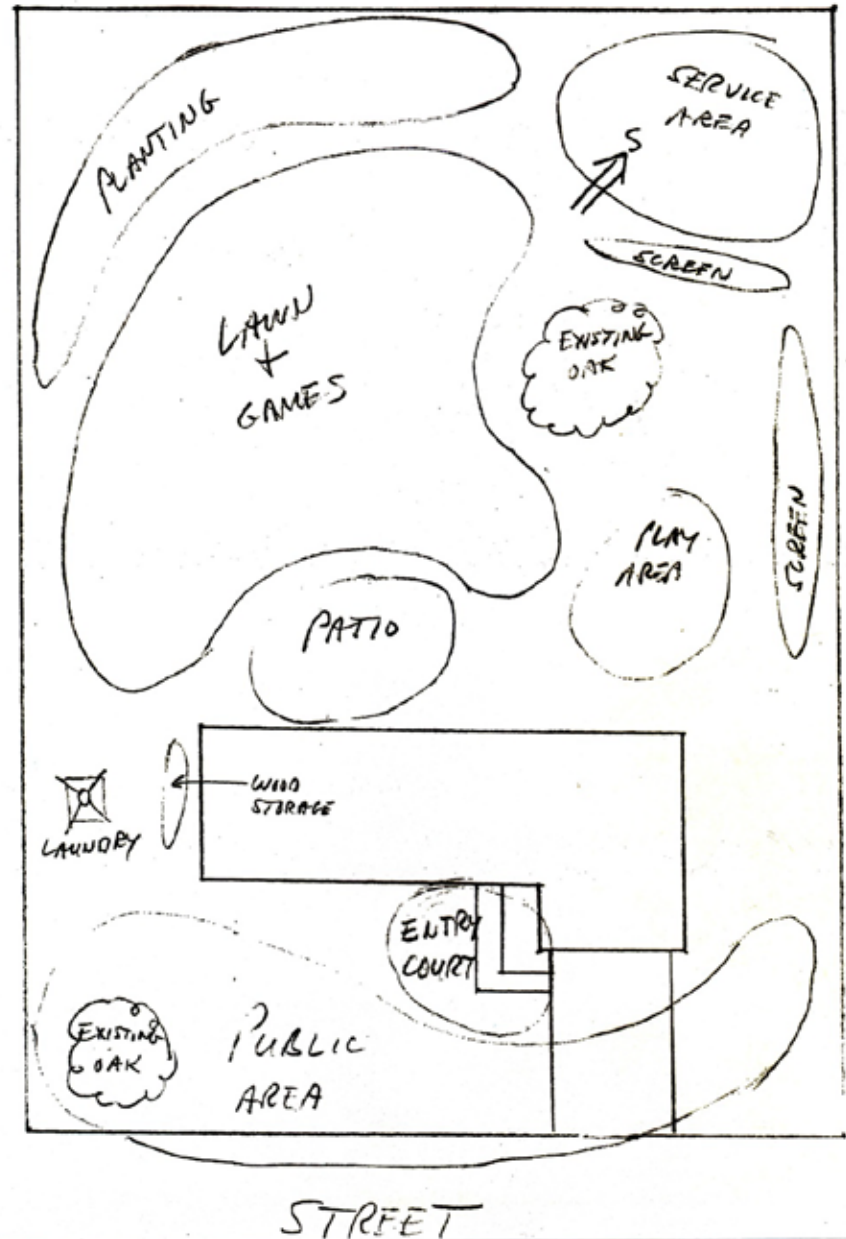
Do several goose-egg drawings. Above are four alternative locations for specific design elements. You must decide whether the various elements are compatible with each other and whether the arrangement best fits your site.

PICK THE BEST DESIGN

The one that...

- Is most suitable to your needs
- Fits your property
- Fits your maintenance priorities
- Fits your budget

#1 GOOSE EGG DRAWING OF GENERAL IDEAS



DESIGN CONSIDERATIONS

Design considerations set the overall direction of the landscape design.

DESIGN CONSIDERATIONS

- View
- Wind
- Mature height and spread
- Life span
- Form
- Texture
- Color
- Domination and subordination



DESIGN CONSIDERATIONS



Views and screening



Wind

KNOW MATURE SPREAD & HEIGHT

It helps you avoid

- Overcrowding
- Overplanting



LIFE SPAN

Avoid these fast growing trees

- Chinese elm
- Alder
- Poplar
- Willow
- Silver maple



LIFE SPAN

Better fast growing choices

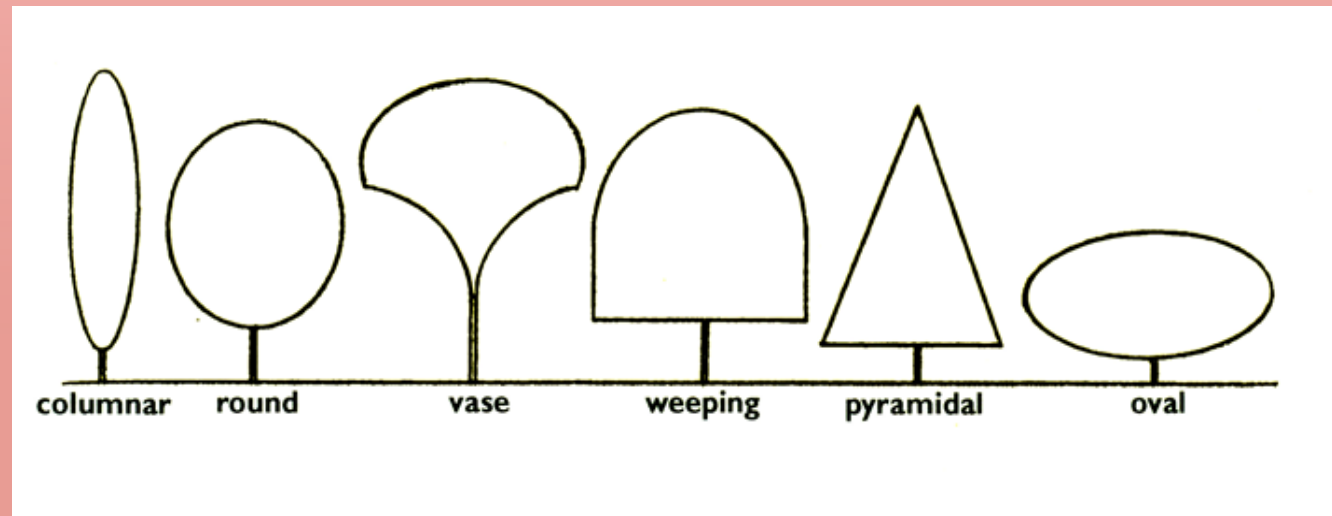
- Hackberry
- Liriodendron
- Sycamore



FORM

Some characteristics of form:

- Weeping (pendulous)
- Horizontal and spreading
- Vertical
- Round

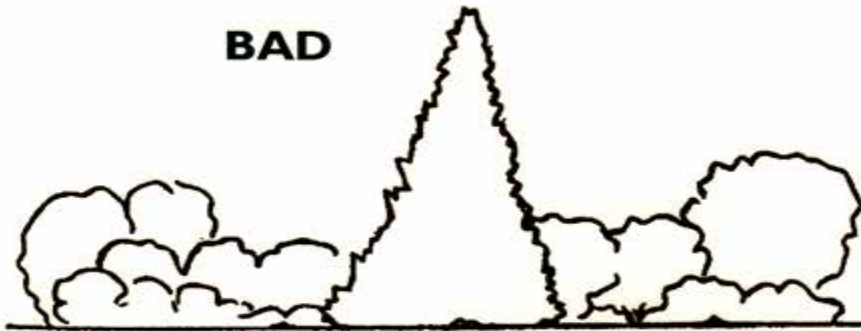


CAUTIONS ON FORM

- Don't use all plants of the same shape – it's boring!
- Don't combine too many forms – it's confusing and lacks connection.
- Choose a plant that will mature into the desired shape.
- Don't depend on pruning to get the desired shape.

Combining Forms

BAD



Strong conical or pyramidal form dominates the planting and overwhelms the balance of the shrub border.

BETTER



Here, a smaller pyramidal evergreen is used as an accent. This evergreen is in scale with the overall planting and its placement is off center.

TEXTURE

Texture – the relationship between foliage, twig size and the remainder of the plant

Texture includes qualities of:

- Coarseness vs. fineness
- Roughness vs. smoothness
- Heaviness vs. lightness
- Thinness vs. denseness

TEXTURE

Caution: Vary texture, but don't go to extremes!



TEXTURE



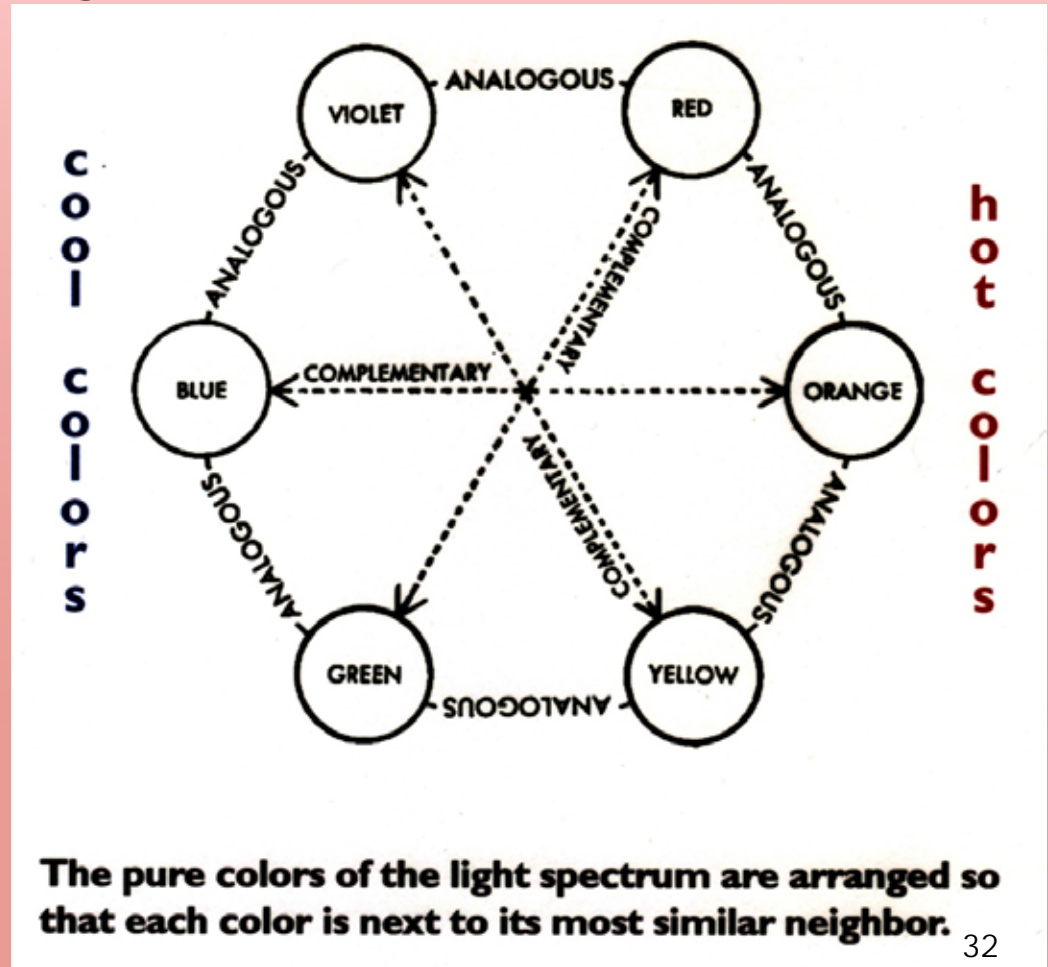
COLOR

Color has the greatest appeal and creates the greatest response.



COLOR

- Warm vs. cool
- Advancing vs. receding
- Complementary
- Analogous

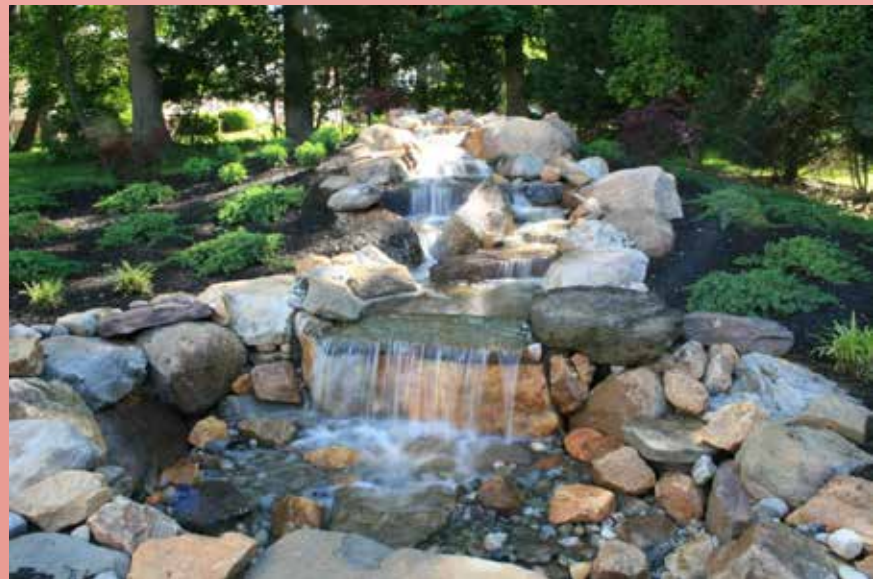


COLOR



DOMINANCE AND SUBORDINATION

- Decide which elements will be dominant and which subordinate.
- Contrast between dominance and subordination gives interest to the design.

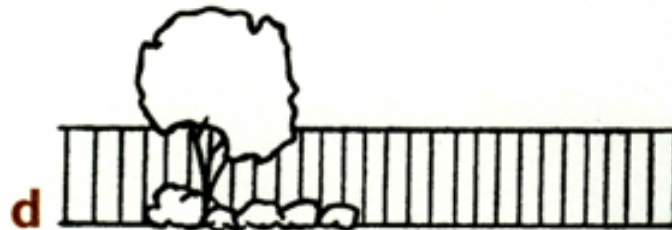


DESIGN PRINCIPLES

Design principles provide the unifying elements which tie the landscape together:

- Simplicity
- Variety
- Balance
- Emphasis
- Scale
- Sequence

Simplicity



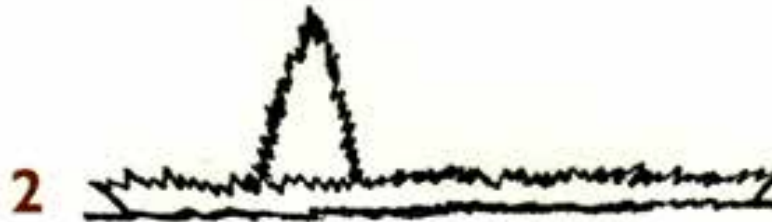
a - shrub border composed of same type of plant, simple but boring

b - using a plant of contrasting size or form adds variety

c - monotonous fence

d - relieving monotony using a small tree and some shrubs

Variety



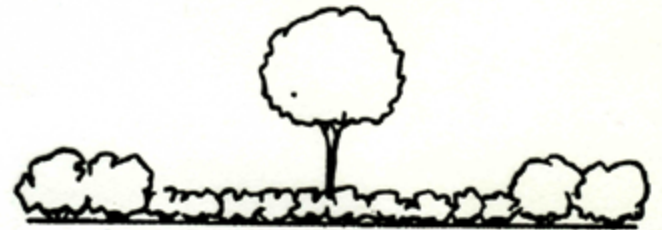
**1 & 2 - variety created
through sharp opposition
between low horizontal
mass and the vertical**

**3 - variety using a larger size
of the same plant form**

BALANCE

Formal Balance

Formal Balance is built around a central axis or feature. One side is identical to the other.



Asymmetrical Balance

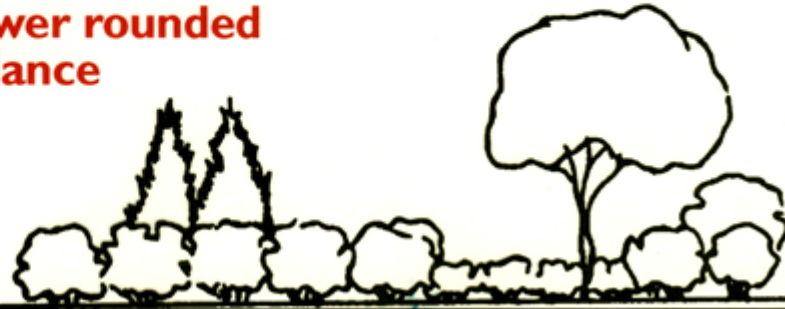
Though not identical on each side, balance is achieved through visually balancing weight and mass on each side.



Combining Simplicity, Variety and Balance

Simplicity through Repetition

Simplicity provided by lower rounded plants which also give balance and proportion. Variety provided by 2 small evergreens and small tree



Overkill

- Too much variety
- Too many vertical elements
- Too many different forms
- The composition is distracting because there is no focal point.



EMPHASIS

Differentiating the more important elements from the less important

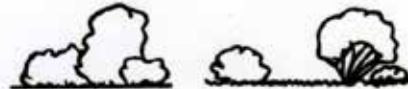
Emphasis

Emphasis can be achieved thru ...

- differences in size



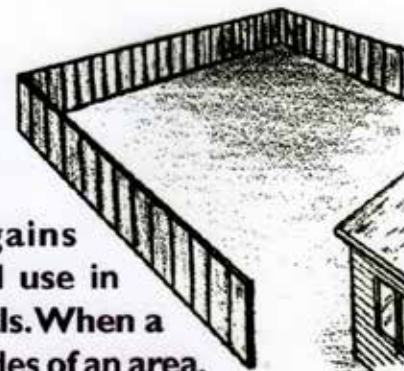
- grouping



- bold shapes



- the unusual or unexpected



A short section of fence gains emphasis because of its limited use in combination with other materials. When a fence is extended around three sides of an area, however, it loses emphasis

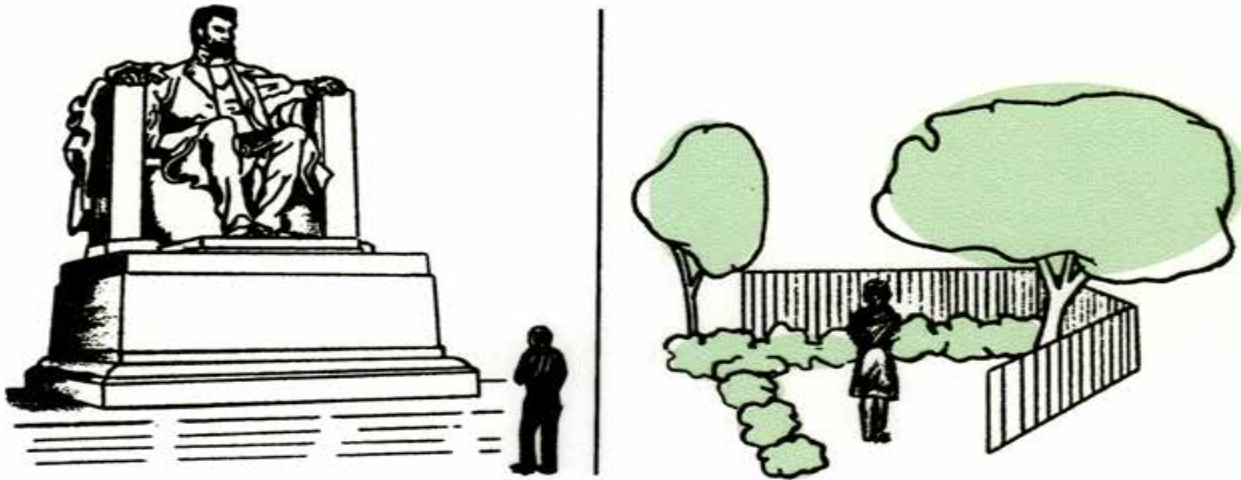
SCALE

The absolute or relative size of objects to each other

Two kinds –

- Monumental
- Intimate

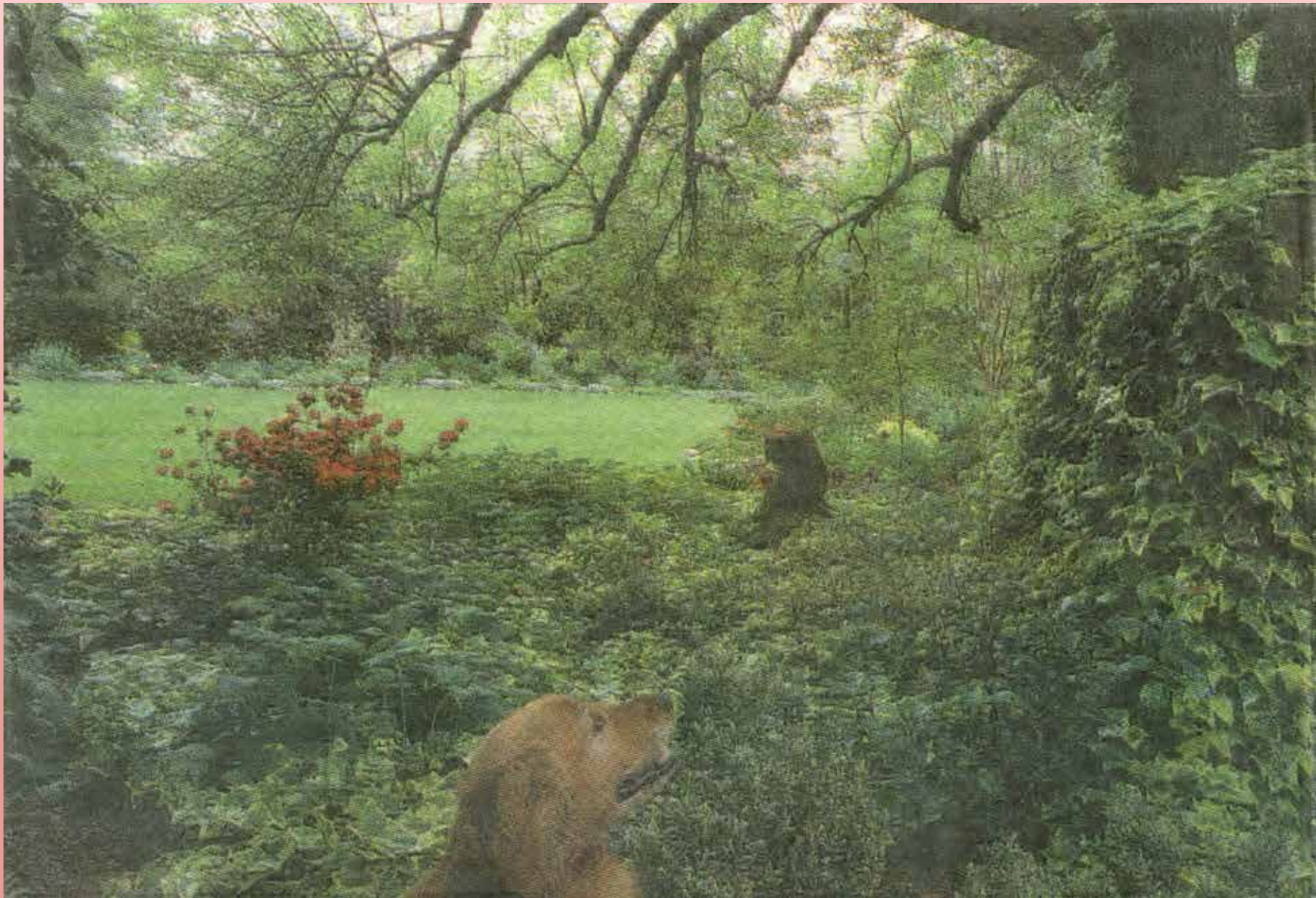
S^cA^LE



Monumental scale (left) is overwhelming, and may result in a sense of insignificance. Intimate scale (right), in which objects are underscored or smaller than expected, give the viewer a sense of complete control over the environment.







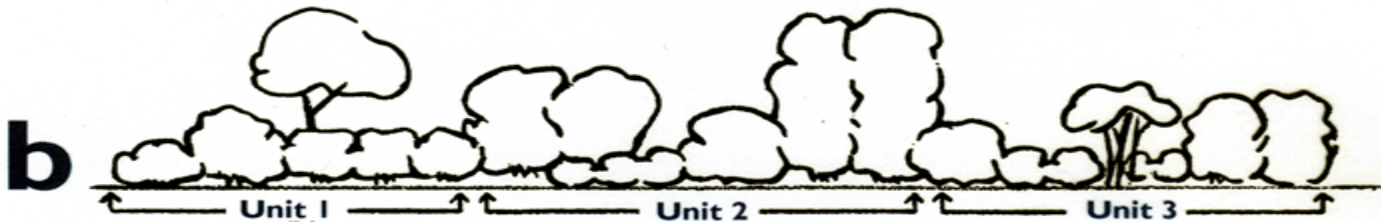
SEQUENCE

This is a sequential change of form, color, texture, size or pattern to control the viewer's attention and direct it toward a specific location.

Sequence



Sequence can be achieved most simply through changes in size (indicated by arrow). it can also be gained through the use of color, texture and form.



Sequence can be a reoccurrence of units in linear movement. The composition shown above, has 3 units. the viewer's attention is initially drawn to unit 1 because of the tree form. The viewer "reads" this unit as a self-contained element that is satisfying because of its emphasis, balance, simplicity, and variety. The viewer's attention then moves to unit 2, and finally, to unit 3.



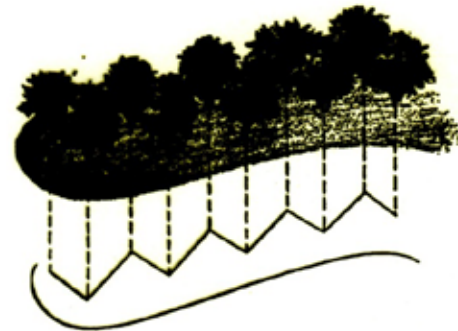
Sequence is obtained in the above drawing by alternating a large mass of shrubs with a small mass of trees.

Sequence, more

Plants may be set in a triangular staggered
line (left)

in a checkerboard pattern
(middle),

or in a staggered flowing
line (right)



3. SITE CONSIDERATIONS

- Soil type
- Moisture availability
- Light conditions
- Animal problems

SOIL TYPE

- Clay vs. sand
- Acid vs. alkaline
- To amend or not to amend



MOISTURE

- Group plants with similar needs.
- Don't overwater.
- Consider water needs rating (in July):
 - Low - 1.6 inches/month
 - Medium - 4.1 inches/month
 - High - 6.6 inches/month

MOISTURE

Water availability

- Well vs. EID
- Well flow rate
- Nearness of hose bib
- Proximity of turf areas and sprinklers to dry planting areas

LIGHT CONDITIONS

- Note areas of sun, shade and partial shade.
- If you desire flowers, note photoperiodicity of plant.
- Plant sun lovers in sun and shade lovers in shade.
- Crowd those plants which need protection from elements.

ANIMAL PROBLEMS

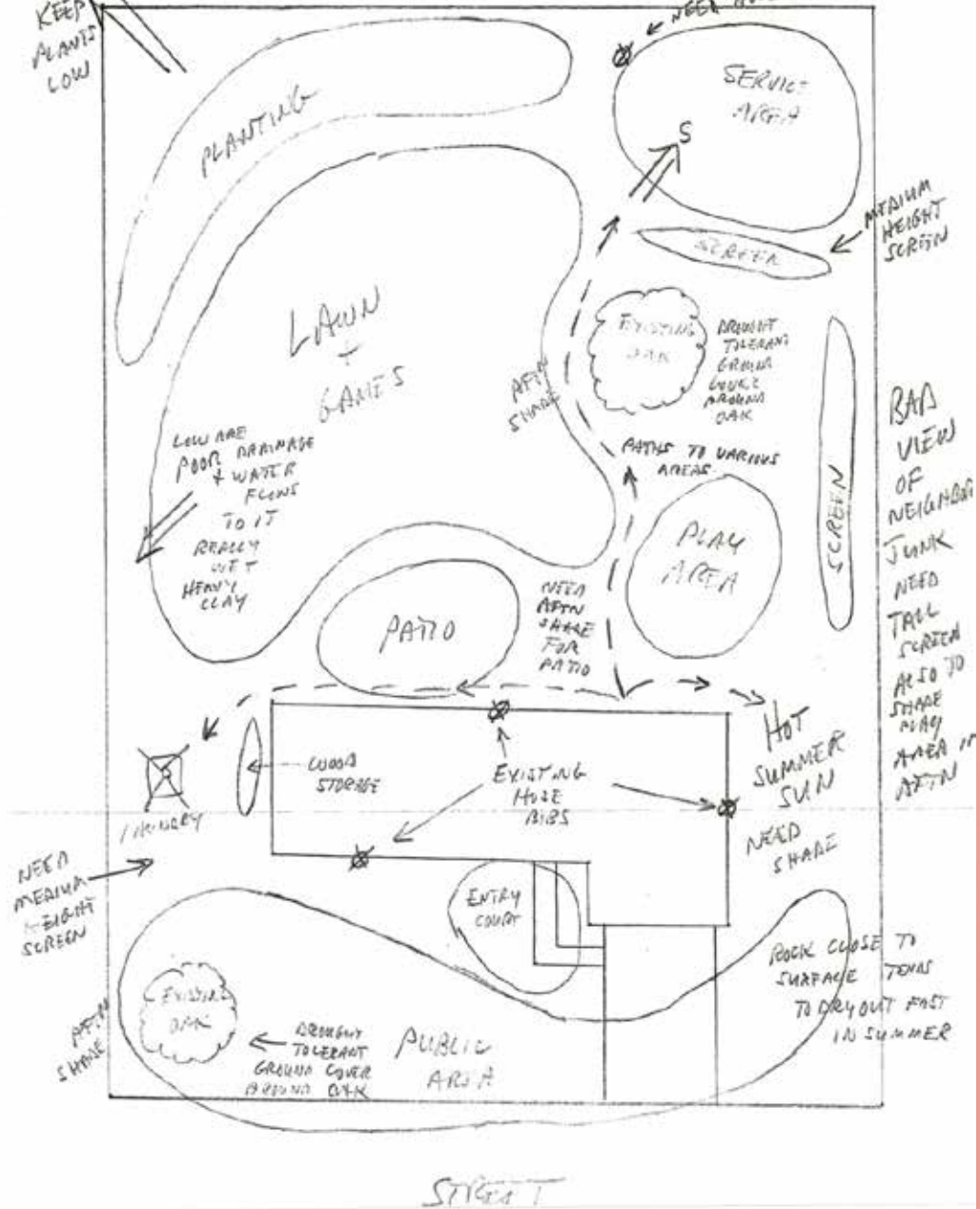
- Deer
- Gophers
- Moles
- Turkeys
- Skunks
- Squirrels



SPECIAL AREAS AND FACTORS

- Views and screens
- Drainage/wet & dry areas
- Sun vs. shade
- Water availability

NICE VIEW #2
 KEEP PLANTS LOW
 NOTE SPECIAL AREAS



INTEGRATE

- Use your goose egg drawing as a starting point.
- Use knowledge of design considerations and principles to make a more detailed drawing showing what kinds of plants to use.

Tall or short

Evergreen or deciduous

Color

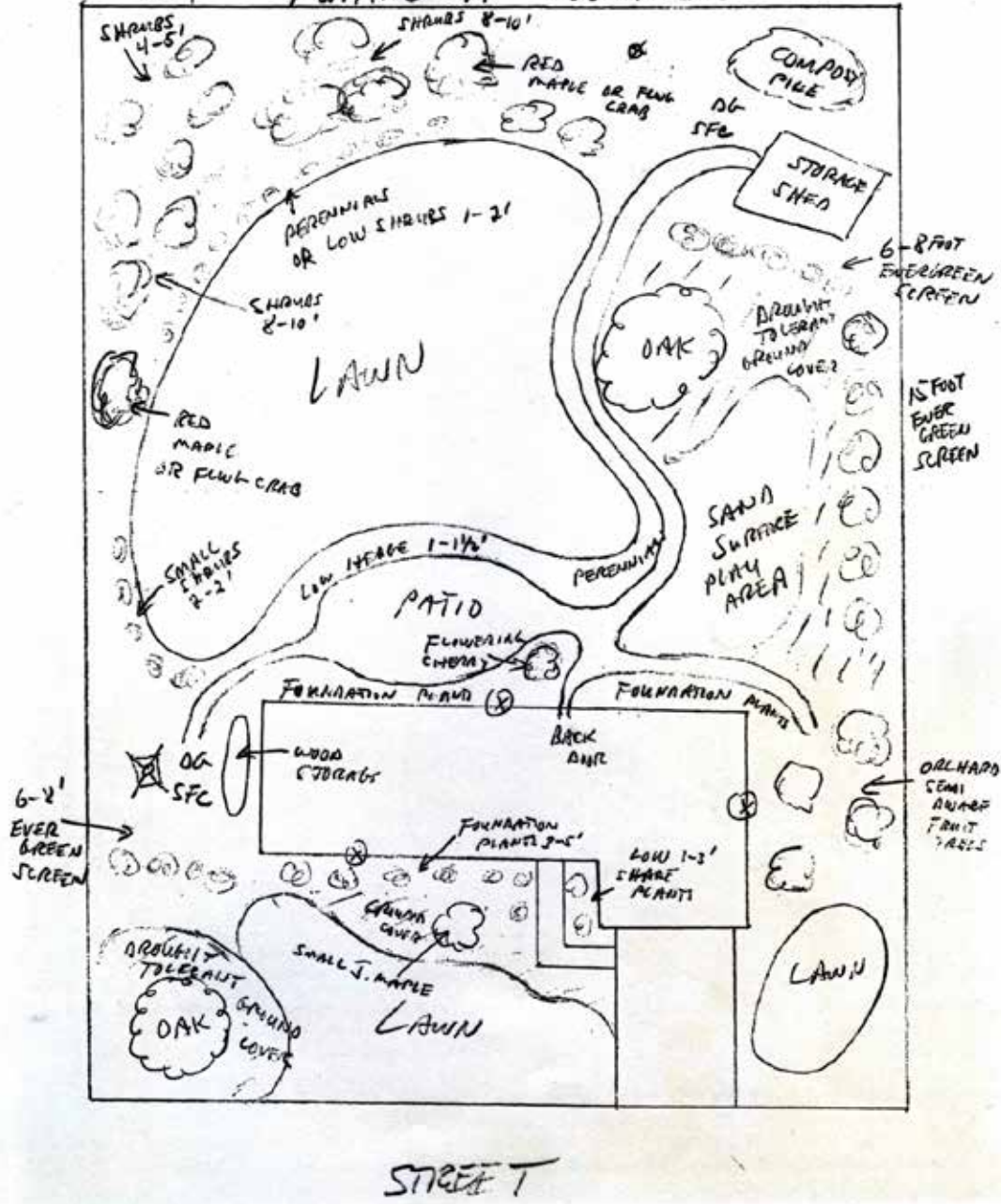
Form

Texture

Sequence

- It's not necessary to identify specific plants just yet.

#4 PUTTING IT TOGETHER



4. SELECTION CONSIDERATIONS

Do your homework.

Know your zone.

Decide what cost/size is right for you.

Examine the plants carefully at the nursery.

THINGS TO CONSIDER

Do your homework:

- Find books, magazines and websites oriented to the West.
- Know your zone!
- Know the plant's zone.
- Be sure plants are available locally (or can be reliably ordered and shipped online).

USDA/SUNSET ZONES

- Sunset zones - based on a combination of extremes and averages of minimum, maximum, and mean temperature, rainfall, humidity, and growing season length
- USDA zones - based on the average minimum temperature in a given region
- West Slope - mostly Sunset Zone 7 or 9 and USDA Zone 9a or 9b or some 8b

COST DECISIONS

- How many plants of what size?
- 1 gallon vs. 5 gallon
- Discount store vs. local nursery

EXAMINE PLANTS

Avoid plants with:

- Damaged trunks
- Defoliated branches
- Off-color leaves
- Insect infestation
- Wilting
- Girdling roots
- Roots coming out of bottom of can



THE PLANTS

Let's take a look at some of the trees and shrubs that are particularly appropriate for our locale.

KEY TO THE HANDOUT

- Exposure:
 - S = sun
 - P/Sh = part shade
 - Sh = shade
- Water
- Deer Resistance:
 - Y, N, Y/N

5. SHRUB SELECTIONS



SHRUBS

Evergreen	Sun
Evergreen	Part Sun/Part Shade
Evergreen	Shade
Deciduous	Sun
Deciduous	Part Sun/Part Shade
Deciduous	Shade

EVERGREEN - SUN

- *Arctostaphylos* – manzanita
- *Callistemon citrinus* - bottlebrush
- *Ceanothus*
- *Cistus* - rockrose
- *Cotoneaster*
- *Euonymus japonica aureo variegata*
- *Grevillea*
- *Nandina* – heavenly bamboo
- *Photinia*
- *Pinus mugo*
- *Teucrium fruticans* – bush germander
- *Viburnum tinus* - 'Spring Bouquet'



MANZANITA – WHICH WOULD YOU PREFER ON YOUR PROPERTY?





BOTTLE BRUSH



CEANOTHUS



CISTUS



COTONEASTER



EUONYMUS JAPONICA



GREVILLIA



PHOTINIA



PINUS MUGO

NANDINA





BUSH GERMANDER



VIBURNUM TINUS



EVERGREEN – PART SUN/PART SHADE

- *Abelia grandiflora*
- *Choisya ternata* – Mexican orange
- *Cotoneaster*
- *Daphne odora*
- *Euonymus fortunei* – 'Emerald Gaiety'
- *Loropetalum Chinense* – Chinese Witch Hazel
- *Nandina* – heavenly bamboo
- *Pieris japonica* – lily of the valley
- *Pittosporum*
- *Viburnum davidii*
- *Viburnum tinus*



ABELIA GRANDIFLORA



MEXICAN ORANGE



Already shown
COTONEASTER
NANDINA
VIBURNUM TINUS





DAPHNE ODORA
(TOO BAD YOU CAN'T SMELL IT)



EUONYMOUS FORTUNEI 'EMERALD
GAIETY'



LOROPETALUM CHINENSE –
CHINESE WITCH HAZEL



VIBURNUM DAVIDII



PITTOSPORUM



PIERIS JAPONICA –
LILY OF THE VALLY



EVERGREEN – SHADE

- *Choisya ternate* – Mexican orange
- *Daphne odora*
- *Nandina* – heavenly bamboo
- *Viburnum davidii*

(But you just saw those!)

DECIDUOUS – SUN

- *Berberis* – Japanese barberry
- *Buddleia* – butterfly bush
- *Chaenomeles* – flowering quince
- *Deutzia gracilis*
- *Euonymus alatus* – burning bush
- *Forsythia*
- *Hibiscus syriacus* – rose of Sharon

DECIDUOUS – SUN (cont.)

- Berbe Philadelphus – Mock orange
- Prunus glandulosa – dwarf flowering almond
- Punica granatum v. 'Legrellei' - flowering pomegranate
- Potentilla fruticosa
- Spirea
- Viburnum plicatum v. 'Tomentosam – Japanese snowball
- Viburnum opulus v. 'Roseum' – common snowball bush



JAPANESE BARBERRY



BUDDLEA



FLOWERING QUINCE





DEUTZIA GRACILIS



EUONYMUS ALATUS – BURNING BUSH



FORSYTHIA



ROSE OF SHARON



MONROVIA
MOCK ORANGE



DWARF FLOWERING
ALMOND



FLOWERING
POMEGRANATE



POTENTILLA FRUTICOSA



SPIREA



VIBURNUM PLICATUM
V. 'TOMENTOSAM'



VIBURNUM OPULUS
V. 'ROSEUM'

DECIDUOUS – PART SUN/PART SHADE

- Berberis – Japanese Barberry
- Cotoneaster
- Deutzia gracilis
- Philadelphus
- Viburnum burkwoodii



VIBURNUM BURKWOODII

6. TREE SELECTIONS



WHY TREES?

To provide...

- Mass
- Background
- Wind break
- Shade
- Accent or specimen

To form or delineate boundaries...

SELECTION CONSIDERATIONS

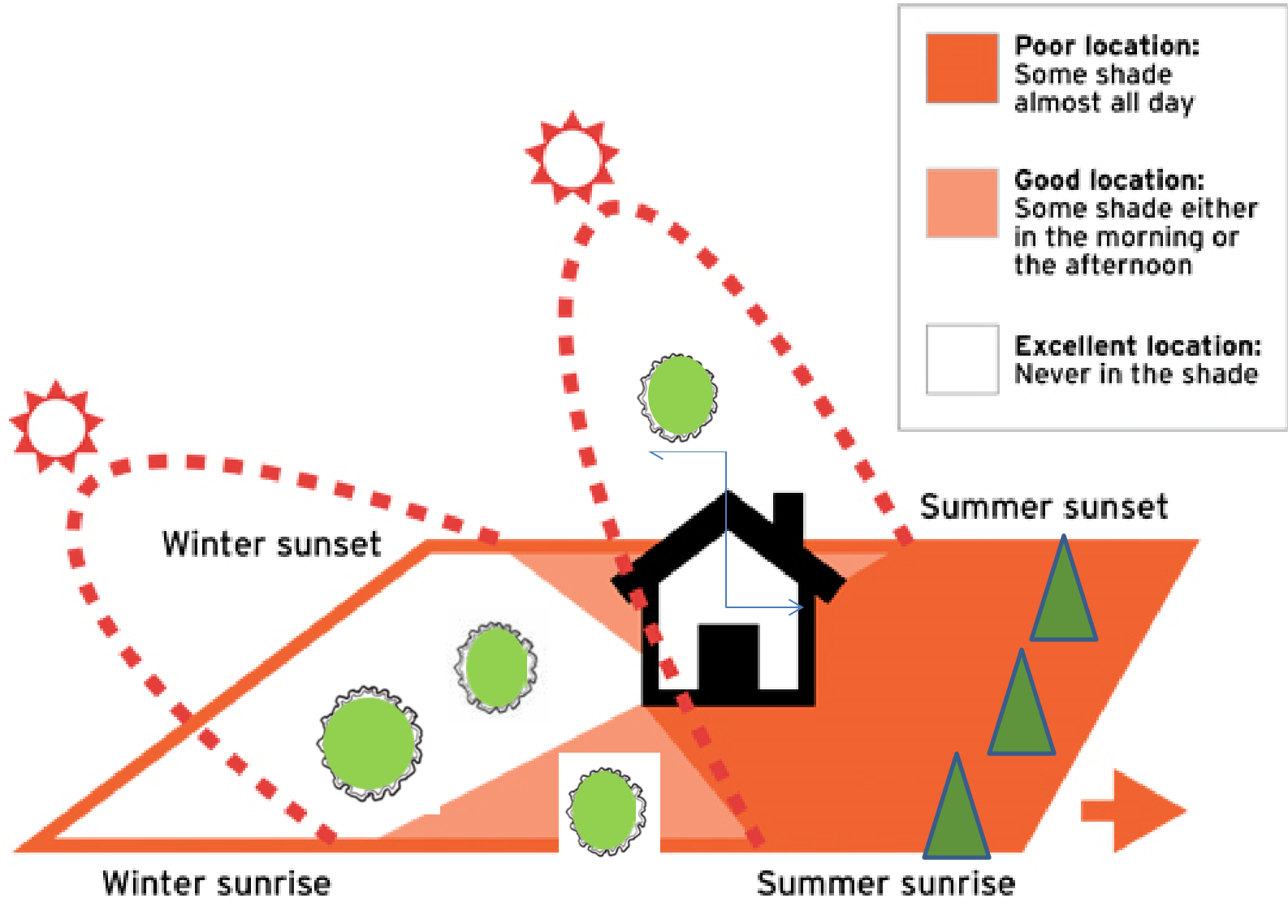
- Size at maturity – height and spread
- Wind resistance – brittle branches
- Adaptability to soil
- Fruit and flower production
- Water and drainage needs
- Root system
- Insect and disease problems
- Hardiness to the climate

SELECTION CONSIDERATIONS

Check out the Urban Forest Ecosystem Institute at Cal Poly San Luis Obispo:

- It allows you to enter your zip code and find trees that are appropriate for your zone.
- You enter specific criteria (flowering, tree shape, fire safe, etc.) and it gives you a list of trees appropriate for your location and needs.

LOCATING TREES AROUND HOME



EVERGREEN

- *Arbutus unedo* – strawberry tree
- *Calocedrus decurrens* – incense cedar
- *Cedrus deodora* – deodar cedar
- *Cupressus arizonica* – Arizona smooth cypress
- *Laurus nobilis* – sweet bay
- *Magnolia grandiflora* – southern magnolia
- *Pseudotsuga Menziesii* – Douglas fir
- *Umbellularia californica* – California bay laurel



STRAWBERRY TREE



INCENSE CEDAR



DEODAR CEDAR



ARIZONA SMOOTH
CYPRESS



SWEET BAY



SOUTHERN
MAGNOLIA





DOUGLAS FIR



REMEMBER THAT MATURE
SIZE MAY SURPRISE YOU!



CALIFORNIA BAY LAUREL
BUYER BEWARE; ONLY
BUY LOCALLY.

DECIDUOUS

- *Acer buergerianum* – trident maple
- *Acer campestre* – hedge maple
- *Acer palmatum* – Japanese maple
- *Acer rubrum* – red maple (October Glory)
- *Celtis* – hackberry
- *Cornus Florida* – dogwood
- *Ginkgo biloba* – ginkgo (maidenhair)
- *Lagerstroemia indica* – crape myrtle

DECIDUOUS (CONT.)

- *Nyssa sylvatica* – sour gum (Tupelo)
- *Pistacia chinensis* – Chinese pistache
- *Platanus acerifolia* – London plane tree
- *Platanus racemosa* – California sycamore
- *Pyrus calleryana* – Bradford pear
- *Tillia dordata* – little leaf linden



HEDGE MAPLE



TRIDENT MAPLE



JAPANESE MAPLE



RED MAPLE (OCTOBER
GLORY)



HACKBERRY



DOGWOOD



GINKO



CRAPE MYRTLE





SOUR GUM (TUPELO)



LONDON PLANE



CHINESE PISTACHE





CALIFORNIA SYCAMORE



BRADFORD PEAR



Photo © Karina Helm, Arbor Day Foundation

LITTLE LEAF LINDEN

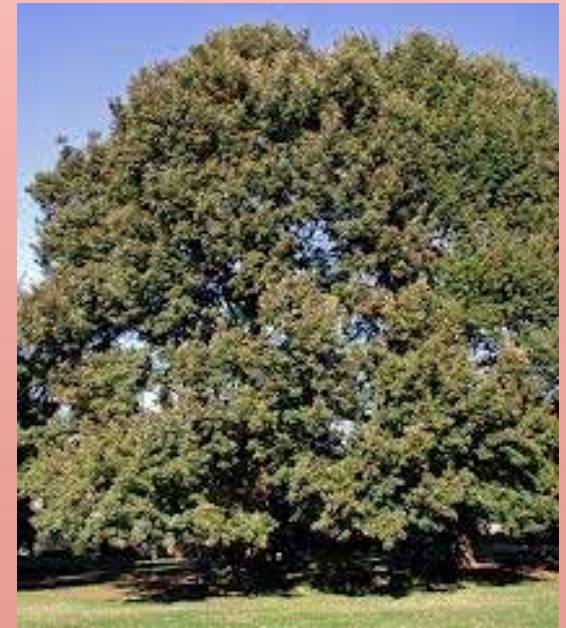


TREES FOR SPECIAL SITUATIONS

compliments of Pat Rubin, Sacramento Bee

Medium to large trees to shade a yard or house

- California sycamore
- Chestnut leaf oak
- Hackberry
- London plane
- Magnolia
- Red maple
- Tupelo

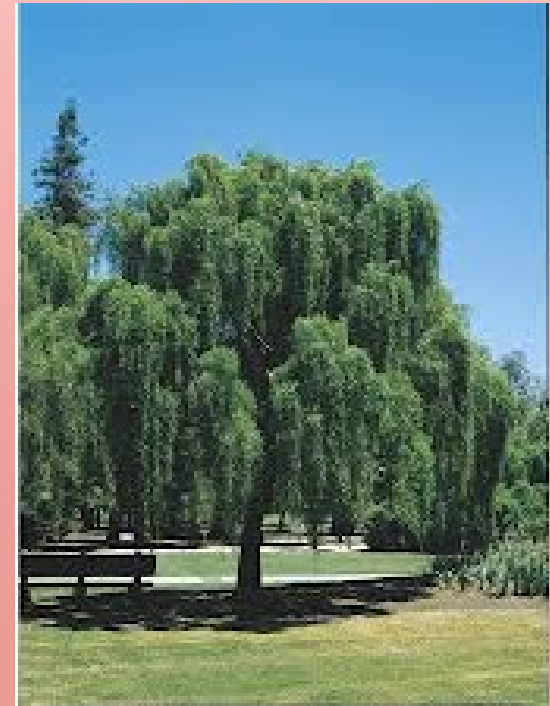


CHESTNUT LEAF OAK

TREES TO SHADE A SMALL AREA

compliments of Pat Rubin Sacramento Bee

- Citrus
- Crape myrtle
- Hawthorn
- Japanese crabapple
- Japanese snowbell
- Mayten



MAYTEN

TREES TO AVOID IN A YARD

compliments of Pat Rubin, Sacramento Bee

- Black walnut (inhibits growth of other plants)
- Tree of Heaven (sends up suckers everywhere)
- Privet (messy fruit, reseeds prolifically)
- Fruiting mulberry (messy fruit stains)
- Chestnut (prickly covers on nuts)
- Liquidambar (messy fruit, intrusive roots)
- Sycamore (messy fruit, intrusive roots)

TREES FOR FALL COLOR

compliments of Pat Rubin, Sacramento Bee

- Chinese flame tree
- Chinese pistache
- Crape myrtle
- Ginko
- Hawthorn
- Hedge Maple
- Liquidambar
- Persimmon
- Red maple
- Tallow
- Trident maple
- Tupelo



HAWTHORN 108

7. DROUGHT TOLERANT SELECTIONS

TREES

DROUGHT TOLERANT SELECTIONS - TREES

- **Arizona cypress (D)**

(Cupressus arizonica)



40'H x 20'W; grey to grey-blue

- **Douglas fir(D)**

(Pseudotsuga menziesii)



80-160'H x 30'W; resistant to oak root fungus

DROUGHT TOLERANT SELECTIONS - TREES

- **Incense cedar (D)**
(*Calocedrus decurrens*)



75-90'H x 25'W; native

- **Deodar cedar (D)**
(*Calocedrus deodara*)



80-90'H x 50'W; fast

DROUGHT TOLERANT SELECTIONS - TREES

- Smoke tree

(*Cotinus coggygria*)



- Strawberry tree

(*Arbutus unedo*)



Up to 15'H x W; multi-stemmed

DROUGHT TOLERANT SELECTIONS - TREES

- Crape myrtle

(Lagerstroemia indica)



15-25'H x W; single or multi-stemmed

- Western redbud (D)

(Cercis occidentalis)

15-20'H x W; multi-stemmed; native



DROUGHT TOLERANT SELECTIONS - TREES

- **Chinese pistache**
(*Pistacia chinensis*)



30-60'H x W; great fall color; resistant to oak root fungus

- **Sweet bay (D)**
(*Laurus nobilis*)



20-40'H x W; leaves used in cooking

DROUGHT TOLERANT SELECTIONS - SHRUBS

- Heavenly bamboo (D) • Rockrose (D)
(*Nandina spp.*) (*Cistus spp.*)



2-8'H x W; great color



3-4'H x wider

DROUGHT TOLERANT SELECTIONS - SHRUBS

- **Cotoneasters**

(*Cotoneaster spp.*)



Many varieties and sizes; most deer-resistant

- **Bush germander (D)**

(*Teucrium fruticans*)



6-8'H x W; grey to silver foliage

DROUGHT TOLERANT SELECTIONS - SHRUBS

- **Ornamental pomegranate (D)**
(*Punica granatum*)



8-10'H x W; small

- **Butterfly bush (D)**
(*Buddleya davidii*)



5-15'H x W; flowers mid-summer

DROUGHT TOLERANT SELECTIONS - SHRUBS

- Toyon (Hollyberry) (D)
(*Heteromeles arbutifolia*)
- Wild lilac
(*Ceanothus spp.*)



8-15'H x W; subject to fireblight; native



Height varies according to species;
native; deer-resistant

DROUGHT TOLERANT SELECTIONS - SHRUBS

- Photinia

(Photinia fraserii)



15-25'H x W; subject to aphids

- Pineapple guava (D)

(Feijoa sellowiana)



15-25'H x W; needs regular watering for best fruit

DROUGHT TOLERANT SELECTIONS - SHRUBS

- **Bush anemone (D)**
(*Carpenteria californica*)



4-8'H x W; native; deer resistant

- **Spice bush**
(*Calycanthus occidentalis*)



4-8'H x W; native

DROUGHT TOLERANT SELECTIONS - SHRUBS

- Oregon grape (D)
(*Mahonia aquifolium*)



5-6'H x 3-4'W; native; sun or shade;
deer resistant

- Manzanita (D)
(*Arctostaphylos spp.*)



'Pacific Mist'



Varies; many species; deer resistant

DROUGHT TOLERANT SELECTIONS - PERENNIALS

- **Russian sage (D)**
(*Perovskia atriplicifolia*)



3-4'H x as wide; deer resistant;
attracts hummingbirds

- **Blue Mist Spirea**
'First Choice'
(*Caryopteris clandonnesis*)



3-4'H x 4'W; attracts Butterflies

DROUGHT TOLERANT SELECTIONS - PERENNIALS

- **Lavanders (D)**

(Lavandula angustifolia)



'Hidcote'



'Munstead'



'Jean Davis'

2-4'H x W; many varieties; deer resistant; attracts hummingbirds

DROUGHT TOLERANT SELECTIONS - PERENNIALS

- Penstemons

(*Penstemon spp.*)



P. pseudospectabilis
'Coconino County'



P. 'Loganberry Ice'



P. barbatus 'Ruby Cunda'



P. mensarum

1.5-4'H x W; many varieties; all shown here are deer-resistant; attracts hummingbirds

DROUGHT TOLERANT SELECTIONS - PERENNIALS

- **Salvias**

(*Salvia spp.*)



S. 'Burgundy Seduction'



S. 'Raspberry Delight'



S. Azurea 'Santa Fe County'



S. arizonica 'Deep Blue'

1.5-4'H x W; many varieties; all shown here are deer-resistant; attracts hummingbirds

DROUGHT TOLERANT SELECTIONS - PERENNIALS

- **Salvias**

(*Salvia spp.*)



S. 'Endless Love'



S. greggii 'Cold-hardy Pink'



S. reptans



S. penstemonoides

1.5-4'H x W; many varieties; many deer-resistant; attracts hummingbirds

DROUGHT TOLERANT SELECTIONS - PERENNIALS

- **Salvias**

(Salvia spp.)



S. gregii 'Furman's Red'



S. 'Ultra violet'

1.5-4'H x W; many varieties; many deer-resistant; attracts hummingbirds

DROUGHT TOLERANT SELECTIONS - PERENNIALS

- **Agastaches**
(*Agastache* spp.)



A. 'Red Happiness'



A. 'Ava'



A. 'Desert Solstice'



A. 'Neomexicana'

1.5-3.5'H x W; many varieties; all shown here are deer-resistant; attracts hummingbirds

DROUGHT TOLERANT SELECTIONS - PERENNIALS

- **Agastaches**

(*Agastache* spp.)



A. rupestris 'Licorice Mint'



A. 'Acapulco Orange'



A. pstessene 'Coronado Red'



A. cana

1.5-3.5'H x W; many varieties;
many deer-resistant; attracts
hummingbirds

DROUGHT TOLERANT SELECTIONS - PERENNIALS

- Mexican marigold (D)
(*Tagetes lemmonii*
'Compacta')
- Coreops daisies (D)
(*Coreopsis* spp.)



2'H x 3'W



1-2'H x 2'W; attracts butterflies

DROUGHT TOLERANT SELECTIONS - PERENNIALS

- **Yarrow (D)**
(*Achillea* spp.)



A. filipendulina 'Goldplate'

1-2'H x W; attract beneficial insects



A. millefolium 'Cassis'



A. 'Terracotta'



A. millefolium californica

DROUGHT TOLERANT SELECTIONS - GROUNDCOVER



Creeping Germander (D)
Teucrium chamaedrys



Lavender cotton (D)
Santolina chamaecyparissus



Bearberry (D)
Arctostaphylos uva-ursi

DROUGHT TOLERANT SELECTIONS - GROUNDCOVER



Creeping Rosemary (D)
Rosmarinus prostratus



St. John's wort (D)
Hypericum calycinum

DROUGHT TOLERANT SELECTIONS - GROUNDCOVER



Coyote bush (D)
Baccharis pilularis 'Pidgeon Point'



Blue woolly speedwell (D)
Veronica pectinata



Creeping Phlox (D)
Phlox subulata

8. BRINGING IT ALL TOGETHER



WORDS TO THE WISE

- Know your hardiness zone.
- Research plants and know their zones.
- Buy small sizes – they transplant more successfully than large ones.

MORE WORDS TO THE WISE

- Learn to speak the language of your plant.
- Learn a little of the language of botany.
- Keep a gardening diary.
- Try new plants and new forms of familiar ones.
- The above suggestions will save you a lot of time – effort – money – frustration.

RESOURCES

Home Landscaping for Fire

UC ANR Publication #8228

Monrovia Nursery

www.monrovia.com

Sacramento Tree Foundation

www.sactree.com

Sunset Western Garden Book

www.sunset.com

Trees and Shrubs of California

John D. Stuart, John O. Sawyer, UC Press, 2001

UCCE Master Gardeners

http://ucanr.edu/sites/EDC_Master_Gardeners/

Urban Forest Ecosystem Institute

<http://selectree.calpoly.edu/>

THANK YOU FOR COMING

Questions?



9. PLANTING, PRUNING AND MAINTENANCE

PLANTING

- Best time to plant
- Planting guide

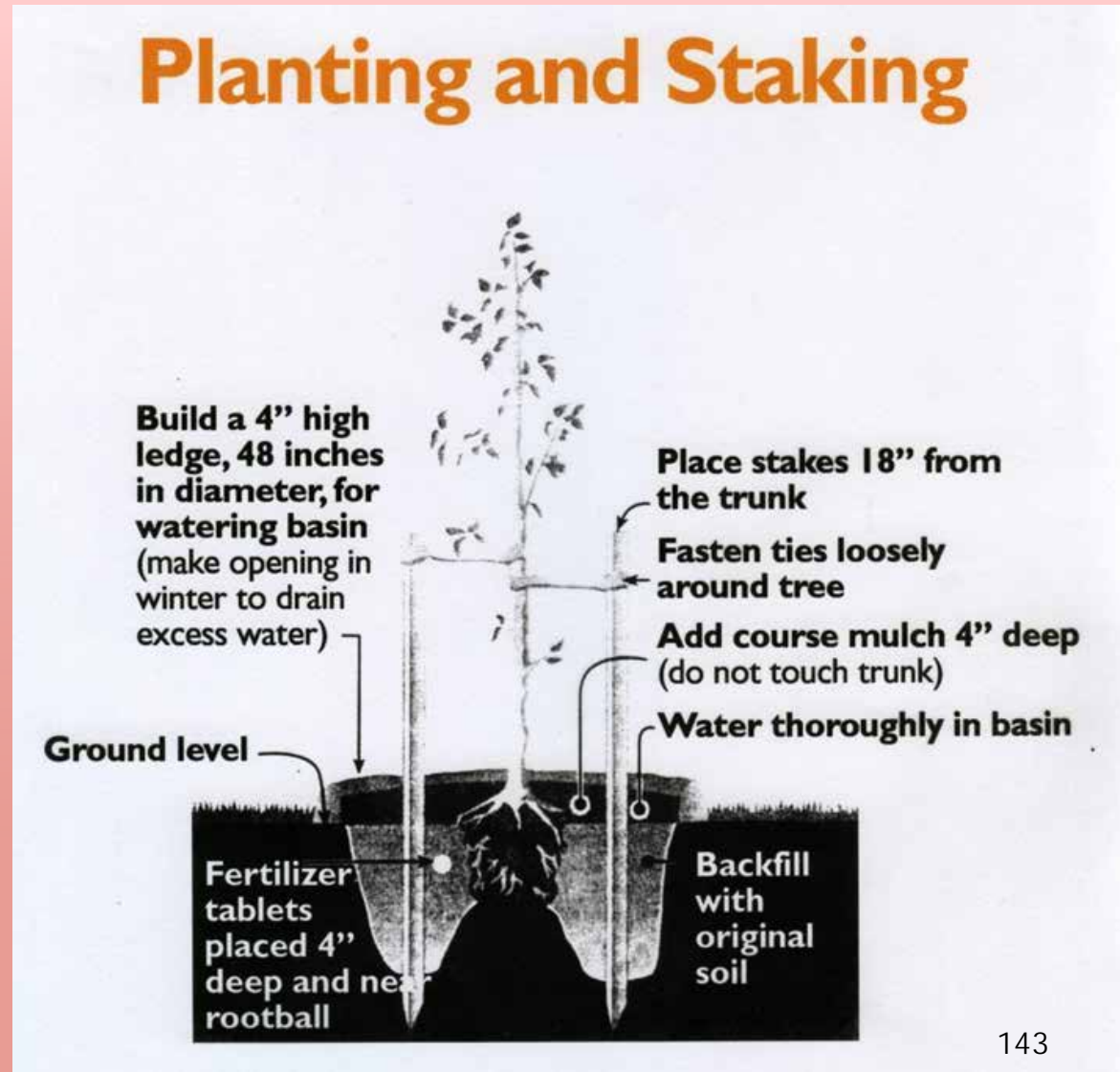
BEST TIME TO PLANT

- Fall is best!
- Spring is next best.



PLANTING GUIDE

- Hole
- Roots
- Fertilizer
- Amendments
- Backfill
- Water Basin
- Stakes
- Mulch
- Watering



PLANTING - THE HOLE

- Dig twice as wide as root ball or root spread.
- Break in sides of hole.
- Dig no deeper than plant is to sit.
- Root ball should sit 1" to 1 ½" above existing grade.

TREES IN LAWN

- Remove grass at least 2' from trunk.
- Keep grass from this area for at least 3-4 years or until tree is well established.

How to Plant a Tree

Remove grass and weeds in 48 inch circular or square area.

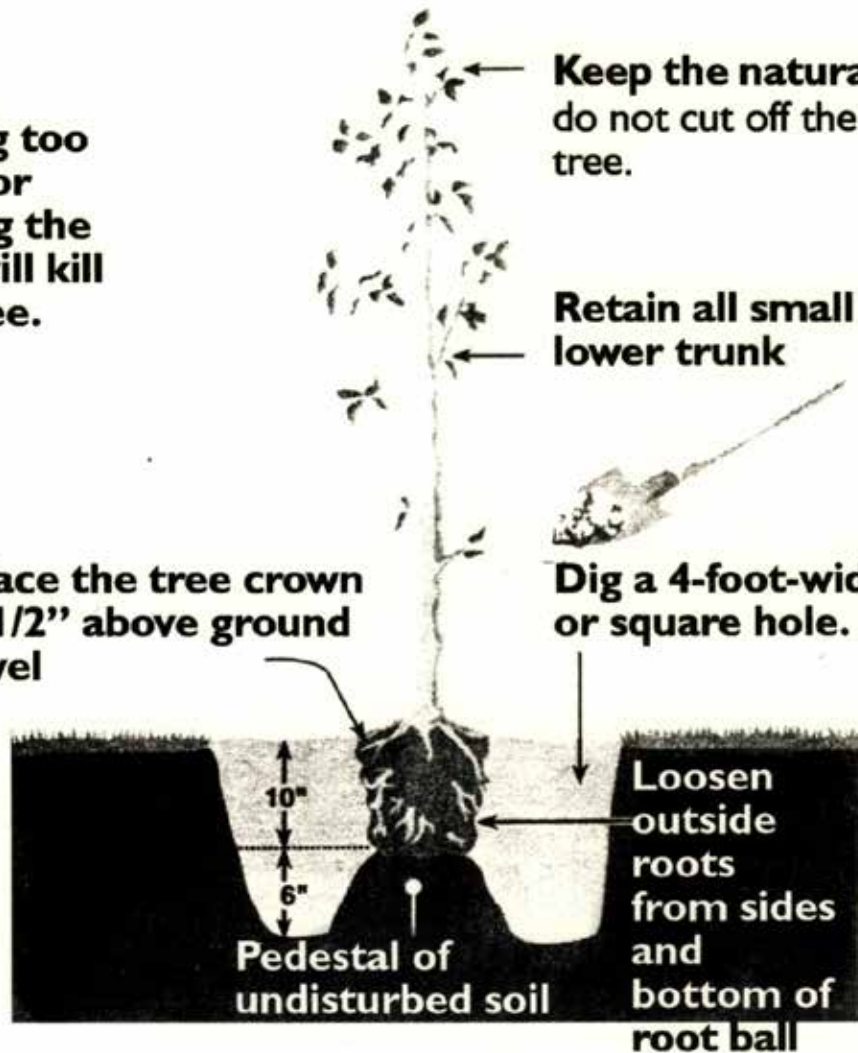
Planting too deeply or covering the trunk will kill your tree.

Keep the natural leader: do not cut off the top of the tree.

Retain all small branches on lower trunk

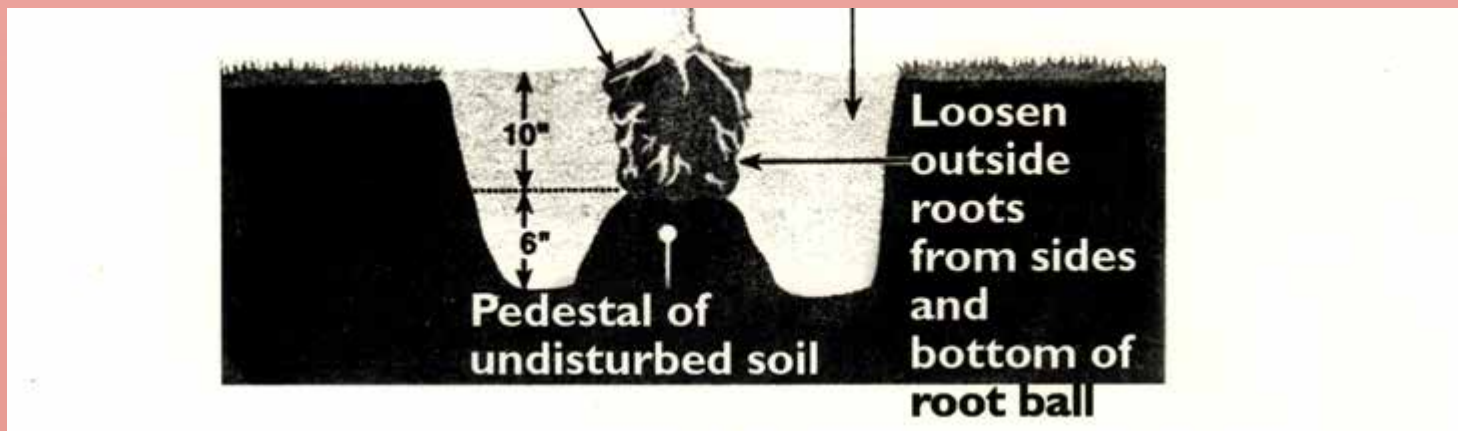
Place the tree crown 1 1/2" above ground level

Dig a 4-foot-wide round or square hole.



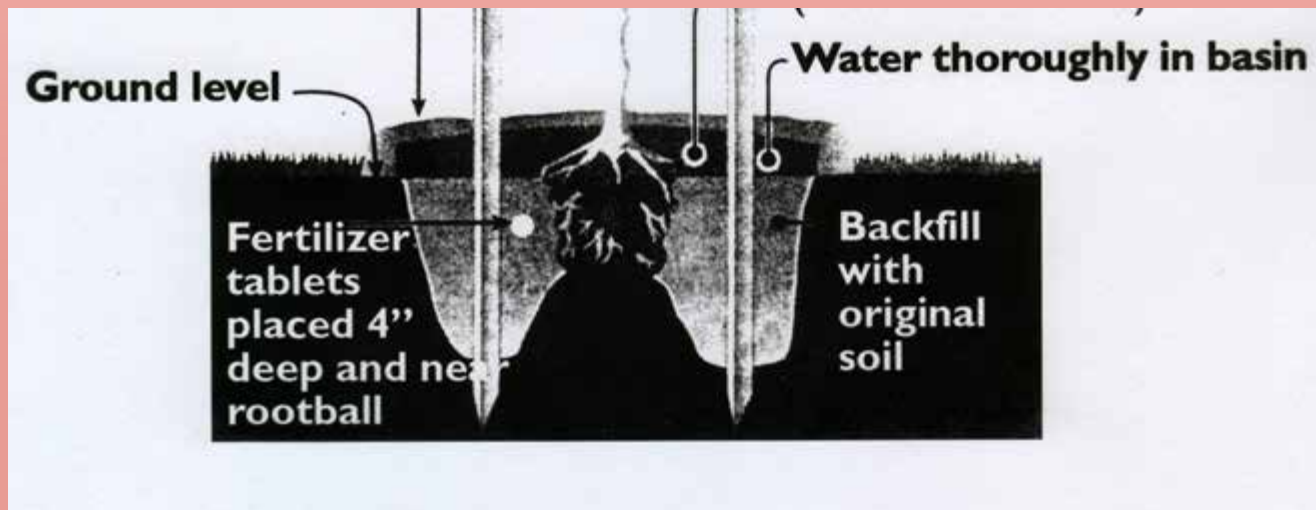
PLANTING - THE ROOTS

- Trim off broken or diseased roots.
- Loosen roots around edge of the bottom of root ball if compacted.
- If bare root, spread roots.



PLANTING - FERTILIZER

- You may use plant tabs 4" deep, near root ball.
- Do not mix granular fertilizers into the back fill.



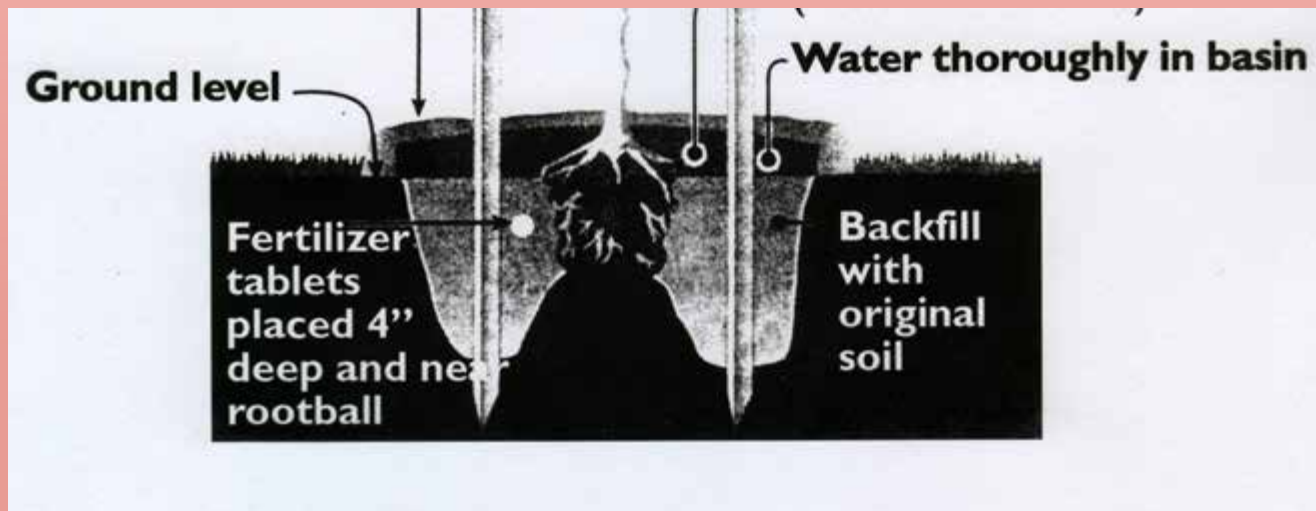
PLANTING – SOIL AMENDMENTS

- They are usually not necessary.
- Make an exception for heavy clay or loose sandy soil/decomposed granite.
- If you do amend soil, add no more than 1 shovel of amendment to 3 shovels of native soil and mix thoroughly.



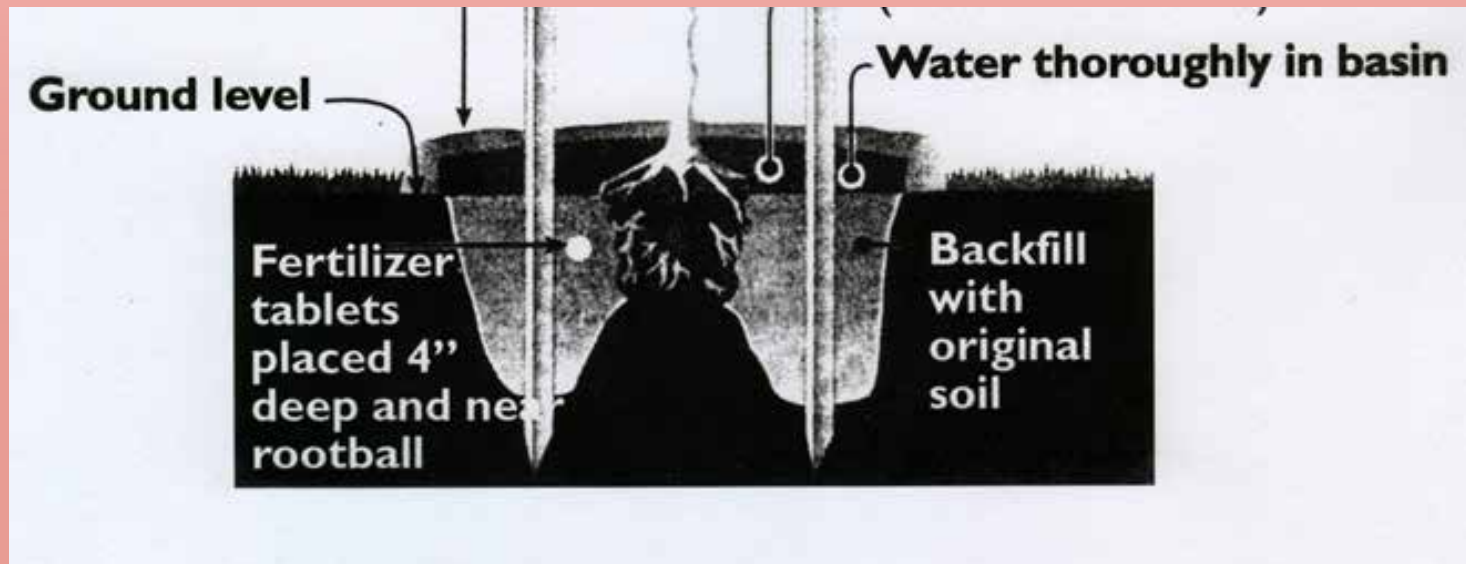
PLANTING - BACKFILL

- Refill the hole half full, lightly tamp and water to remove air pockets.
- Finish backfilling, tamp and water.

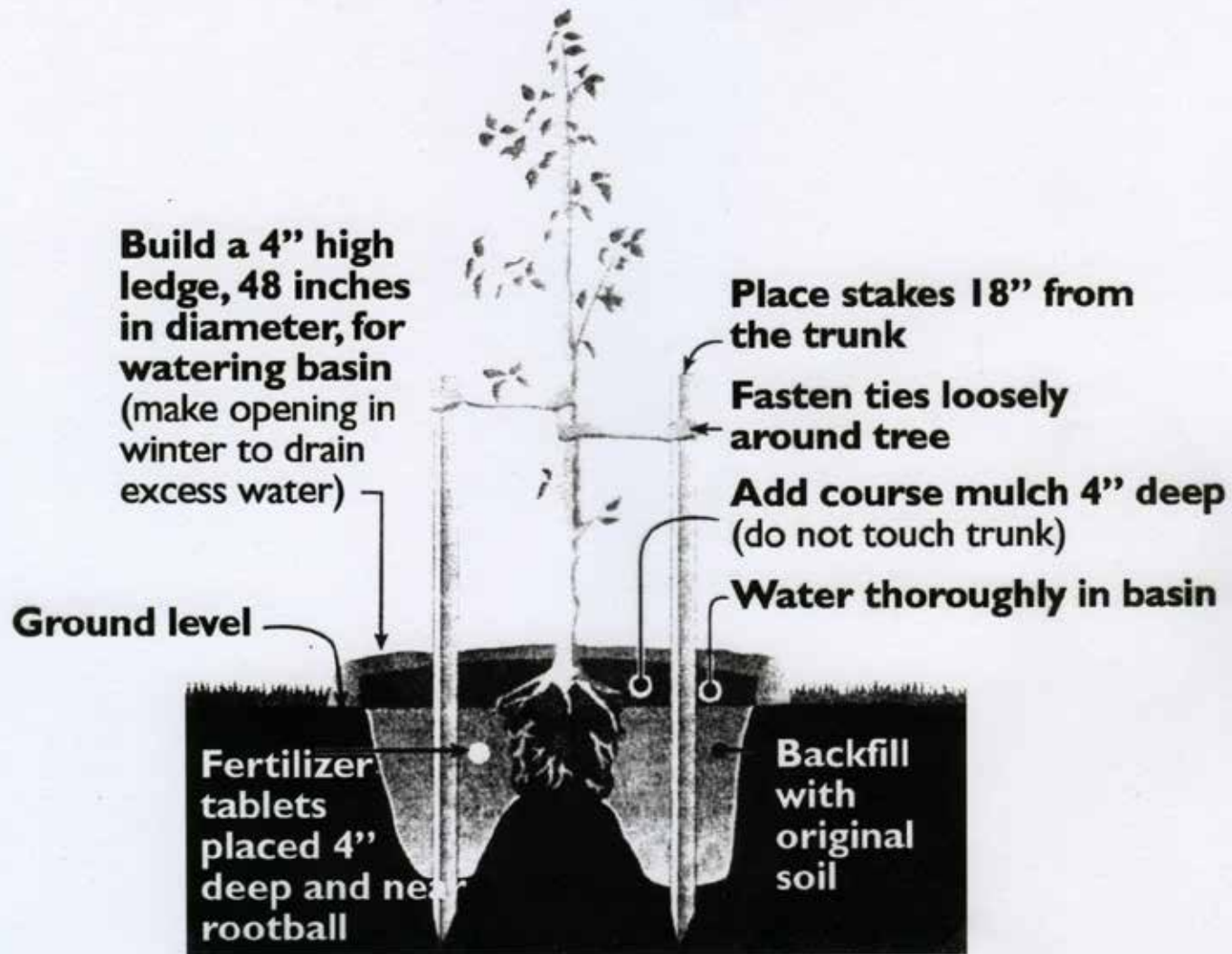


PLANTING - WATER BASIN

- Create a water basin about 5' wide and 8" deep.
- In winter, be sure to remove basin or break open for drainage.



Planting and Staking



STAKING

- Don't stake if you don't have to.
- Two stakes about 18" from trunk.
- Tree must be free to move or sway.
- Fasten ties loosely, only as high as you need to keep tree from leaning.

STAKING

- Stakes should be removed after 6 months to one year.
- Do not remove branches on lower trunk immediately.
- Do not cut off the top of the tree (unless it is a fruit tree).

STAKING

Kinds of ties:

- Hose
- Tree ties
- Nylon stockings
- NO wire or rope



MULCHING

- Mulch around base of tree.
- Keep mulch 4-6" from trunk or growth crown.
- Mulch should be 3-4" deep.



WATERING

- First year – give frequent, deep watering until tree is established.
- Gradually decrease frequency as tree becomes established.
- Established trees want infrequent, deep watering, not the opposite.

PRUNING SHRUBS - THE PURPOSE

- Remove dead and diseased branches and crossing branches.
- Shorten branches.
- Shape.
- Prune to thicken or fill out gangly shrubs.

PRUNING SHRUBS – THE BASICS

- Prune just above the leaf bud using an angle cut
- Does the shrub re-leaf on old wood? If not, cut back older branches to ground.

PRUNING TREES

Remove

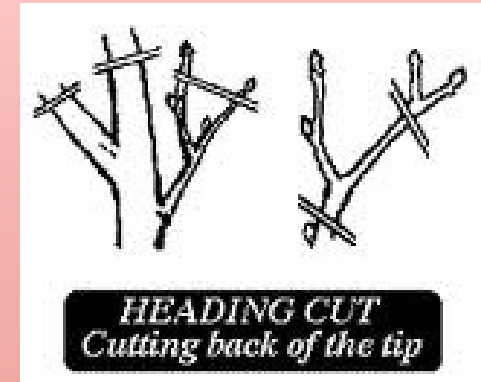
- Dead and diseased branches
- Crossing or overcrowded branches
- Water sprouts and suckers
- Lower branches gradually until first branch is at desired height



PRUNING TREES

Heading cut - back to a bud

- Used to shorten branches
- Direct growth - thicken



Thinning cut

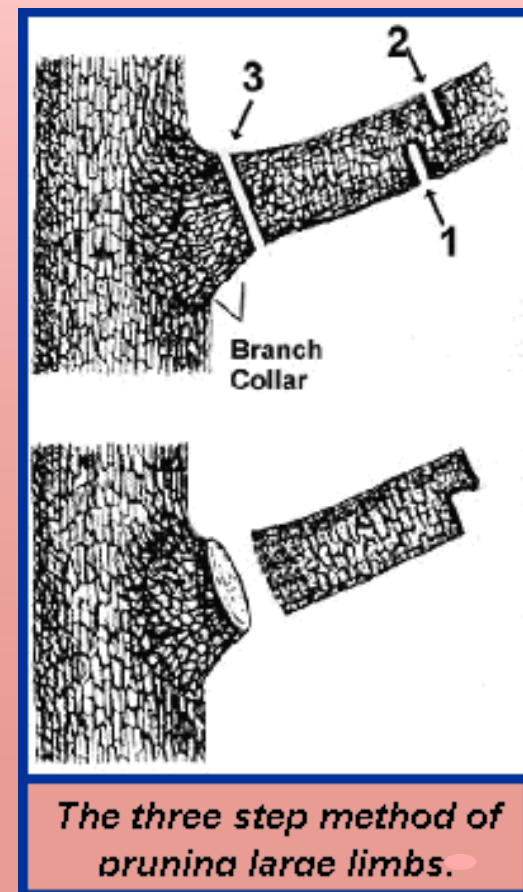
- Whole branch is removed, back to bark ring color



PRUNING HEAVY BRANCHES

Use this three step method:

- 1 - Make cut in the bottom
- 2 - Cut top to remove branch (prevents tearing and splitting)
- 3 - Remove stub to bark ring collar



MAINTENANCE IS CRUCIAL

Know and follow the state fire code of 100 feet of defensible space.

Maintain vertical and horizontal spacing on your property for the:

- Health of your landscape
- Safety of your landscape
- Protection of your house

100' DEFENSIBLE SPACE

Make Your Home

FIRE SAFE



10. HEDGES

A short overview for those who are interested...



THOUGHTS ON HEDGES

Consider

- Purpose/Use
- Forms
- Qualities
- Planting
- Care

PURPOSE/USE

PURPOSE

- Fix the major lines of the design and establish a background.

USE

- Provide enclosure.
- Screen for privacy.
- Form a barrier.
- Define a border.
- Form a windbreak.
- Provide a background for flowering plants.

FORMS

Informal



Formal



QUALITIES

Hedges can

- Be interesting in texture but not obtrusive
- Vary in size from small edging plants (santolina) only 1' tall to towering trees.

Evergreen hedges provide year-round privacy.

Deciduous hedges are

- Less expensive
- Grow faster
- Generally more hardy

QUALITIES

In theory, hedges can be kept to a desired dimension by pruning, but in practice, you must allow for some growth so the plants can rejuvenate themselves.

PLANTING

- Hedges must have well prepared soil - 1 ton of amendment (manure or compost) per 200 linear feet.
- Place plants close together so individual plants are not distinguishable in the general mass.
- Have good air and light on both sides.
- Hedges under trees or close to walls rarely do well.
- Plants must be absolutely vertical and in line with each other.

CARE

- Informal require minimal care; formal ones require a lot.
- When establishing, cut back annual growth by about half until the ultimate height and width are reached.
- Cutting back also encourages dense branches and a strong structure when establishing.

CARE

- Trimming – keeps the hedge neat and within bounds.
- Formal hedges need 1 or more trimming each year.
 - Boxwood = 1
 - Privet = 3-4
- Informal hedges may be trimmed lightly to thicken the mass of foliage.

CARE

- Avoid trimming a hedge that is narrow at bottom and wide at top Use a string line to ensure neat straight appearance when trimming a formal hedge.
- Clean out seedling trees that try to establish in the hedge early on so their removal doesn't leave a hole.



CARE

- A yearly application of a complete fertilizer keeps the hedge growing well and looking good.



SUCCESS WITH HEDGES

To be satisfactory as a hedge, the tree or shrub must

- Have thick foliage of fine texture
- Be capable of even growth
- Have branches and foliage close to the ground
- Have branches capable of forming new leaves on old wood
- For formal hedges, plants must be able to withstand repeated cutting

THANK YOU FOR COMING

Questions?

