



Pruning



Terms

- ◆ pruning - removal of parts of the top or root systems of plants
- ◆ fruit spur - stubby, fruit bearing twig



Terms

- ◆ translocation - movement of water and soluble minerals from one part of the plant to another



Terms

- ◆ inhibit - prohibit or slow action
- ◆ hormones - chemical compounds produced by plant. Regulate plant functions



Terms

- ◆ twig - very small branch of a tree
- ◆ cane - stem of various fruits.
Ex: raspberry



Terms

- ◆ shoot - small outgrowth on a bush



Facts

- ◆ generally has no specific season
- ◆ continuous process
- ◆ serves a purpose for the plant



Facts

- ◆ enhances ornamental value
- ◆ generally prune with natural form of the plant, not against it



Purposes

- ◆ remove diseased, dead, or damaged limbs
- ◆ restrict or promote growth
- ◆ develop certain forms of growth



Methods of pruning

- ◆ root
- ◆ shoot or stem



Stem pruning

- ◆ reduces amount of growth
- ◆ influences vegetative reproductive balance of the plant
- ◆ reduces plant size, yield, and total amount of growth



Stem pruning

- ◆ Increases supply of essential elements to the points of growth that remain



Stem pruning

- ◆ promotes the making of cells and the utilization of carbohydrates
- ◆ stimulates vegetative phase, retards reproductive phase



Root pruning

- ◆ affects total amount of growth made
- ◆ reduces amount of available essential elements - causes dwarfing



Root pruning

- ◆ influences vegetative reproductive balance of plant
- ◆ promotes root growth



Root pruning

- ◆ favors reproduction, retards vegetative phase
- ◆ used to prepare plants for transplanting



Top Pruning

- ◆ heading back
- ◆ thinning out



Heading back

- ◆ terminal - top portion is removed
- ◆ stimulates development of more points of growth



Heading back

- ◆ induces compact, dense, or branched type of growth
- ◆ removes hormones that inhibit branching



Thinning out

- ◆ entire twig, cane, or shoot is removed
- ◆ does not prevent development of lateral buds
- ◆ induces open type of growth



General rules

- ◆ use correct tools for the job
- ◆ prune back to existing bud or to a side branch
- ◆ never leave a stub!!!!!!!!!!!!



General rules

- ◆ cut larger limbs in three steps
- ◆ draw the illustration on the board silly teacher! :)



General Rules

- ◆ pruning in summer results in greater dwarfing than pruning in late winter months



General Rules

- ◆ buy and plant trees and shrubs that have the characteristics and shape that you want



Pruning tools

- ◆ thumb and forefinger
- ◆ pinch off shoots
- ◆ pinch off unwanted buds, long stems, and fruit spurs
- ◆ snap off faded blooms or seed pods



Edgers

- ◆ enable user to stand and cut the edges of lawns
- ◆ also used on ground covers



Grass Shear

- ◆ used to cut grass around sidewalks, driveways and planting beds



Lopping Shears

- ◆ use when added leverage is needed
- ◆ used for reaching into trees
- ◆ small branches or twigs



Pruning Shears

- ◆ many types



Hedge Shears

- ◆ hand operated
- ◆ electric or gas powered



Pruning Saws

- ◆ cut quickly
- ◆ useful in overhead work
- ◆ straight or curved



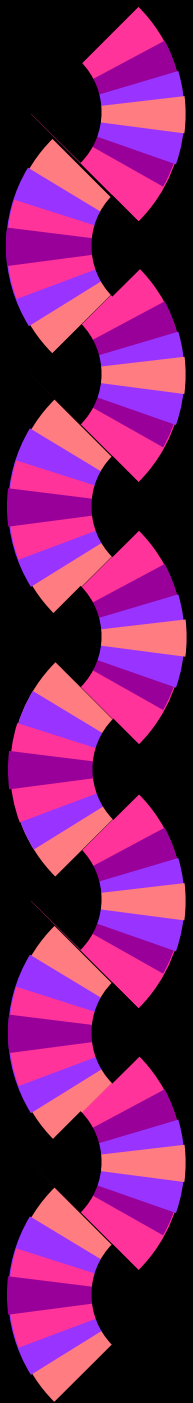
Pole Pruners & Saws

- ◆ used to cut or saw branches high overhead
- ◆ telescoping - go up to 100 feet



How and When

- ◆ Deciduous Shade Trees
- ◆ when - dormant - early spring before leafing out
- ◆ exception - bleeder trees - Mid June



Bleeder trees

- ◆ Sugar Maple



What to look for

- ◆ Central Leader - single leader
- ◆ multiple leaders - narrow crotch angles in time will break



What to Look for

- ◆ scaffold branches
- ◆ crotch angle $45-90$ degrees
- ◆ limbs spirally arranged
- ◆ prune off lower limbs $1-1.5$ feet high



What to Look for

- ◆ distance vertically between scaffold branches
- ◆ lowest branch on SW side
- ◆ remove suckers - weak wood
- ◆ remove hangers



What to Look for

- ◆ remove water sprouts
- ◆ remove parts growing in toward center of trees



Fruit Tree Pruning

- ◆ spurs - majority of fruit production is borne on spurs
- ◆ open tree up to let light into spurs
- ◆ spurs bear fruit every other year



Evergreens

- ◆ don't respond well to pruning
- ◆ broadleaf - like deciduous flowering shrubs



Evergreens

- ◆ needle types - pines, spruce, fir, juniper, yews, respond better
- ◆ spruce or fir - single needle
prune back to $\frac{1}{4}$ inch above axillary bud



Junipers & Yews

- ◆ awl shaped needles
- ◆ prune spring to mid summer
- ◆ when temperature is above freezing



Pine

- ◆ candle growth - new growth from tip of branches, milky green color
- ◆ remove $\frac{1}{3}$ to $\frac{1}{2}$ of candle growth in the spring



Deciduous shrubs

- ◆ spring flowering - lilac, honeysuckle
- ◆ set flower buds during previous year
- ◆ prune after flowering



Summer flowering

- ◆ roses, hydrangia
- ◆ set flower buds same year that they flower in spring
- ◆ prune before bud set



Deciduous shrubs

- ◆ avoid August and September pruning for all deciduous material