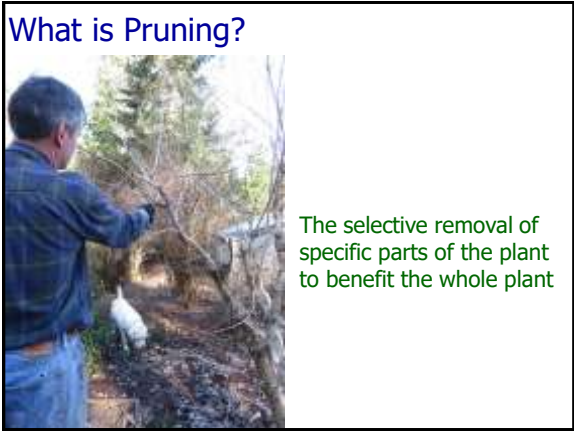




**Contents:**

- What is pruning?
- Pruning principles
  - Growth of woody plants
- Group exercise: Identification of plant parts
- Pruning principles
  - Directing growth
  - Principal pruning cuts
- Identifying flowering and growth habit
- Pruning references
- Group exercise: Pruning problem worksheets





**Pruning is NOT:**  
 a way to compensate for inappropriate plant placement!

**Plant placement**  
 Consider the mature size of plants and available space

**There is an exception...**

BarndtHydrangea: Hydrangea paniculata PinAynalokk®

**Principles of Pruning**

Growth of woody plants

Directing growth

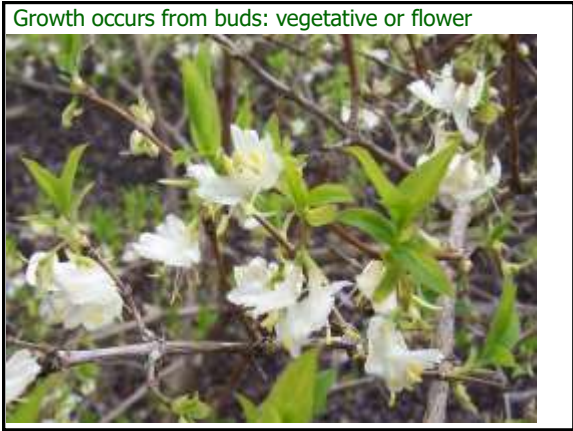
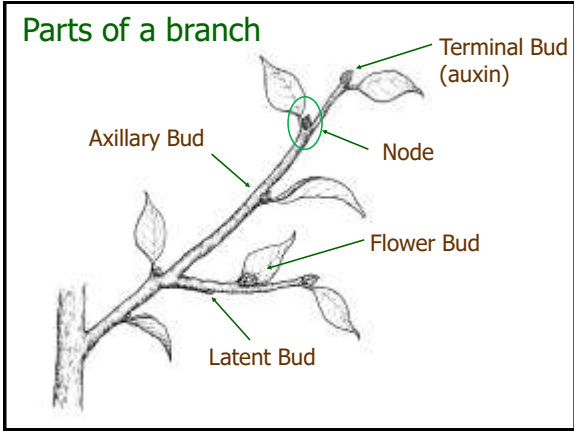
Principal pruning cuts

**Growth habit of woody plants**

Lilac: *Syringa vulgaris* Spring 2019

- Growth resumes at shoot tip
- Not all buds develop
- Shoot length decreases yearly
- Twig diameter increases with age





Vegetative buds live (more or less) indefinitely



Flower buds/flowers/fruit are for one season only...



Serviceberry (Saskatoon): *Amelanchier alnifolia*



Boxwood: *Buxus* 'Vardar Valley'



Wintersweet: *Chimonanthus praecox*



Bay Laurel: *Laurus nobilis*



Flowering currant: *Ribes sanguineum*



Winter-flowering Honeysuckle: *Lonicera x purpusii*



Chaparral Currant: *Ribes malvaceum*



Sweetbox: *Sarcococca hookeriana*



February Daphne: *Daphne odora*



Spiraea: *Spiraea thunbergii* 'Fujino Pink'

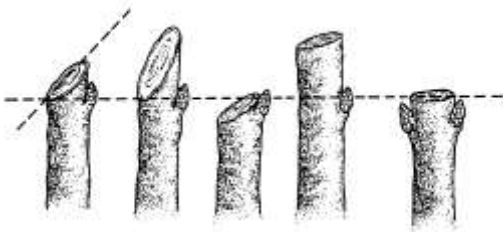


Evergreen Huckleberry: *Vaccinium ovatum*



### Directing growth:

Cutting above a bud



45° angle Good!  
Too angular  
Too low  
Too high

Alternate-budded plants

Opposite

### Response to pruning

> removing terminal bud allows lateral development

> topmost remaining bud(s) grows most strongly



alternate

opposite

### Another way to force branching...



### Cutting back branches

Cut back always to a part that will continue to grow



At least 1/2 the size of the part being removed

### Pruning cuts

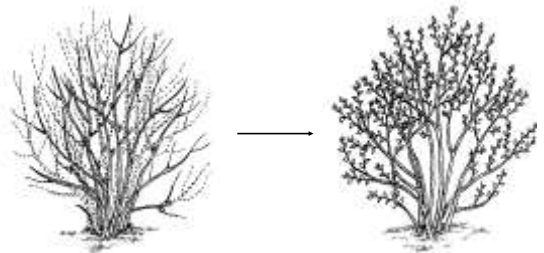


### Thinning

> removal of entire stem or section of stem

> opens up the plant to admit light

> reduces overall height and promotes regrowth



### Thinning cut



*Philadelphus lewisii*

### Heading (selective)

- Cutting back to a bud or shoot
- Promotes branching, will "fill in" the plant



### Heading cut





## Shearing

- > Non-selective heading: dense growth at branch tips
- > Appropriate for formal hedges



Privet: *Ligustrum* sp.



Port Orford Cedar: *Chamaecyparis lawsoniana*



Atlas Blue Cedar: *Cedrus atlantica*

## Heading, Thinning and "Pinching"

Thinning



## Pruning Shrubs

When and how to prune a shrub depends on...

1. Flowering habit

2. Growth habit



*Calycanthus x raulstonii*



*Forsythia x intermedia*



Determining time to prune flowering shrubs  
The "flowering habit"

1. Blooms on "old" wood: after flowering
2. Blooms on "new" wood: early spring



The issue is:  
When does the shrub  
form the flower buds?



Distinguishing between "old" and "new" wood

- Spring blooming shrubs develop buds in fall  
> Tend to bloom early in season



Flowering Quince: *Chaenomeles* sp.

- Summer/fall blooming shrubs form buds as they grow  
> Tend to bloom later in season



Japanese Spiraea: *Spiraea japonica*

Length of bloom period

- Spring bloomers: 2 weeks?



*Rhododendron*

Summer bloomers: often more than a month



Hardy Fuchsia: *Fuchsia magellanica*

Flower type: terminal or axillary

Axillary



Fuchsia-flowered gooseberry: *Ribes speciosum*

Terminal flowers



*Hydrangea paniculata*



*Spiraea thunbergii* 'Fujino Pink'



*Hypericum* sp.

"New" wood versus "old" wood



i.e. *Buddleja*

- May-October
- Long bloom time
- Terminal flowers
- = Current season wood

i.e. *Chaenomeles*

- November-May
- Short bloom time
- Axillary flowers
- = Previous season wood





*Berberis x lolongensis*



Chinese Abelia: *Abelia chinensis*

Some shrubs cause confusion!



Mophead Hydrangea: *Hydrangea macrophylla*



*Hydrangea macrophylla* Endless Summer™



How to prune: depends on growth habit

General framework:  
i.e. *Rhododendron*



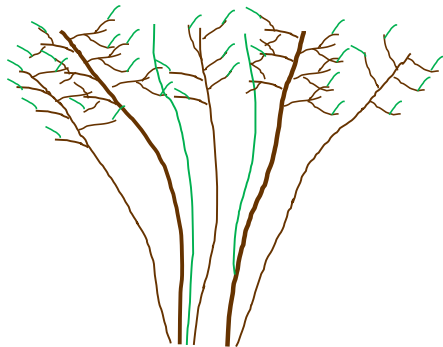
Cane growers are easy to identify



*Hydrangea macrophylla*



Cane growers



*Deutzia* sp.

"Cane" growers

- Deutzia*
- Forsythia*
- Hydrangea* (Mophead etc.)
- Kolkwitzia* (Beautybush)
- Philadelphus* (Mock orange)
- Physocarpus* (Ninebark)
- Ribes* (Currant/Gooseberry)
- Sambucus* (Elderberry)
- Spiraea* ("Bridal Wreath")
- Rosa* (Rose: shrub types)
- Viburnum*
- Weigela*





### Permanent framework

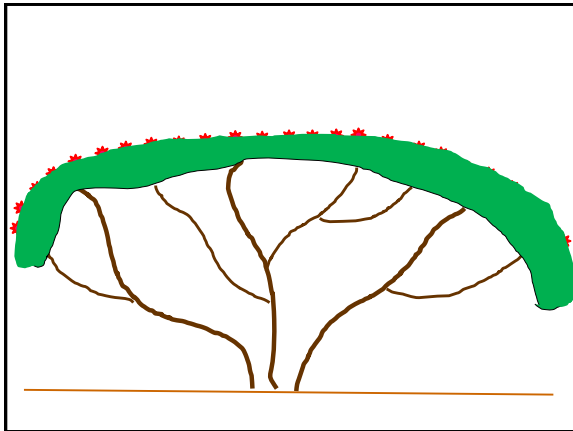
- Have a "tree-like" structure
- Do not renew themselves from the base
- Often are evergreen shrubs



*Pieris japonica*



*Rosmarinus officinalis* 'Arp'



*Hebe* 'Red Edge'

### Permanent Framework



- Arctostaphylos* (Manzanita)
- Ceanothus* (Wild lilac)
- Cistus* (Rockrose)
- Daphne*
- Hamamelis* (Witchhazel)
- Hebe*
- Hibiscus* (Rose of Sharon)
- Ilex* (Holly)
- Lavandula* (Lavender)
- Pieris* (Andromeda)
- Rhododendron* (and azalea)
- Rosmarinus* (Rosemary)



*Arctostaphylos catalinae*

Some are deciduous...



Witch Hazel: *Hamamelis*



Rose of Sharon:  
*Hibiscus syriacus*

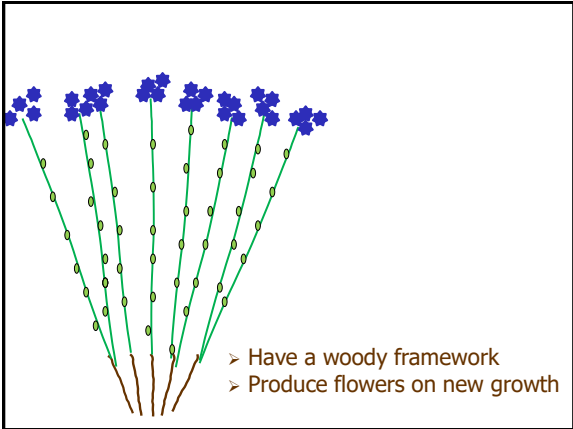
Subshrubs



*Salvia microphylla*



*Phygelius capensis*





### Some examples of subshrubs



*Lavatera* spp.

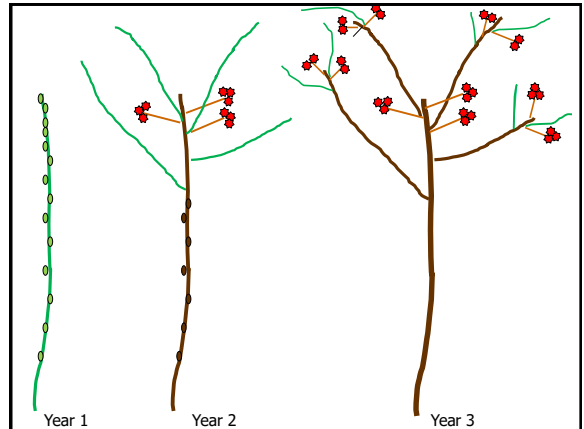
- Artemisia* (Wormwood)
- Caryopteris* (Bluebeard)
- Epilobium canum* (CA Fuchsia)
- Fuchsia magellanica* (etc.)
- Gaura lindheimeri* (Windflower)
- Heptacodium* (7 Sons Plant)
- Hydrangea paniculata*
- Lavatera* (Tree mallow)
- Salvia* (Sage)
- Perovskia* (Russian sage)
- Penstemon* (woody types)
- Phygelius* (Cape Fuchsia)
- Rosa* (repeat-flowering shrubs)
- Vitex* (Chaste tree)

### Pruning Cane growers



- Remove:
  - dead
  - damaged
  - crossing
  - twiggy growth

*Deutzia* 'Pride of Rochester'

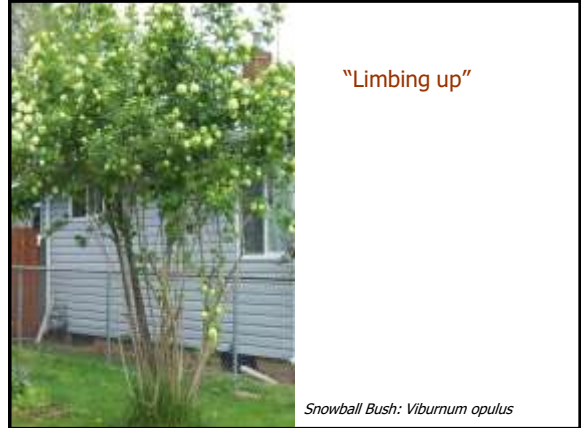


*Deutzia* 'Pride of Rochester'





Fuzzy Deutzia: *Deutzia scabra*



"Limbing up"

Snowball Bush: *Viburnum opulus*



Shearing cane growers

Snowball Bush: *Viburnum opulus*

Japanese Barberry:  
*Berberis thunbergii*



Over-thinning (and topping)

Forsythia: *Forsythia x intermedia*



Effects of topping canes (i.e. heading)

Snowball Bush: *Viburnum opulus*

Few flowers!





## Pruning permanent framework

Generally assume regular shape



*Ceanothus* 'Julia Phelps'



*Pieris* 'Valley Valentine'

Many of these plants form a dome-shaped canopy



Remove dead or damaged growth



Rockrose: *Cistus x argenteus* 'Silver Pink'



Lavender  
*Lavandula* spp.



Removal of errant shoots help shape







Think about flowering time before pruning!



Rosemary: *Rosmarinus officinalis*



Escallonia: *Escallonia* sp.



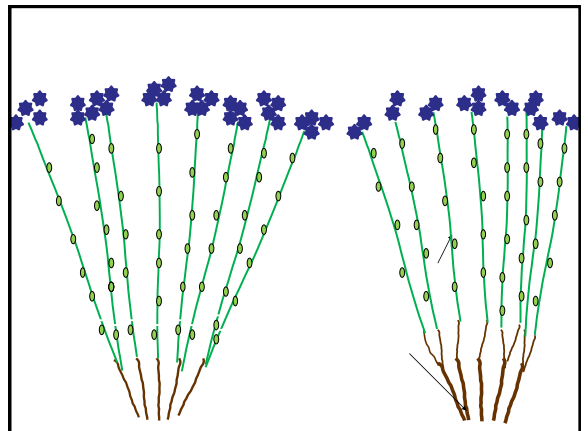
Rhododendron sp.

## Pruning subshrubs



> avoid pruning until after risk of severe freeze

*Salvia desoleana*





Small subshrubs which may be sheared:



California Fuchsia: *Epilobium canum*



Pineleaf Beardtongue: *Penstemon pinifolius*

Remove most shoot growth to base



August 2011



After...



*Salvia desoleana*

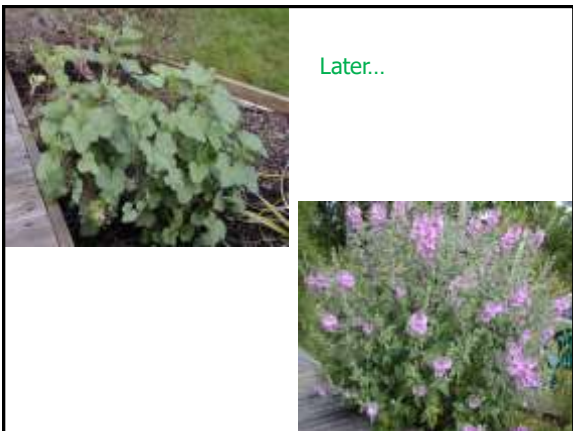
Larger subshrubs...



*Hypericum* sp.



*Spiraea*





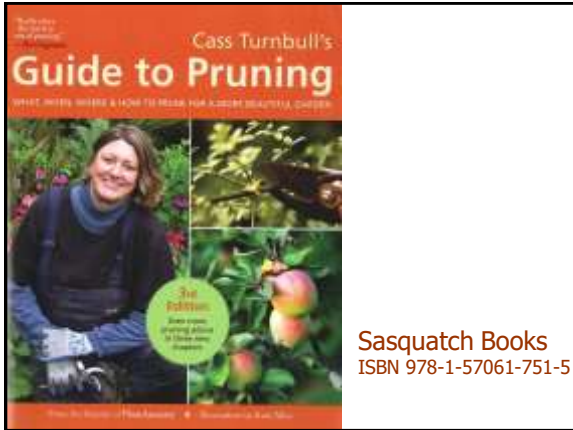


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Other references:

PNW-International Society of Arboriculture

<http://www.pnwisa.org/>

- > Pruning information
- > Publications
- > Lists of Consulting Arborists

PlantAmnesty

<http://www.plantamnesty.org/>

- > Pruning tips



<http://www.plantamnesty.org/>



Mock Orange: *Philadelphus lewisii*



Russian Sage: *Perovskia atriplicifolia*



Smooth Hydrangea: *Hydrangea arborescens* 'Annabelle'





Snowball Bush: *Viburnum opulus*



Wild Lilac: *Ceanothus 'Victoria'*



Fuchsia



Elderberry: *Sambucus sp.*



Mount Etna Broom: *Genista aetnensis*



Jerusalem Sage: *Phlomis fruticosa*



Bridal Wreath: *Spiraea 'Arguta'*



Anemone Bush  
*Carpenteria californica*



Privet: *Ligustrum* sp.