



# Sustainable Yard Maintenance for Homeowners

Part 2

Presenters: Susan Frame  
Phil Johnson





# Outline

- Right Plant, Right Place
- Planting
- Pruning
- Mulches
- Lawns
- Wrap up



# Right Plant, Right Place

- Climate
- Plant's function
- Size / growth rate & Form
- Ornamental considerations
- Cultural considerations
- Establishment Period

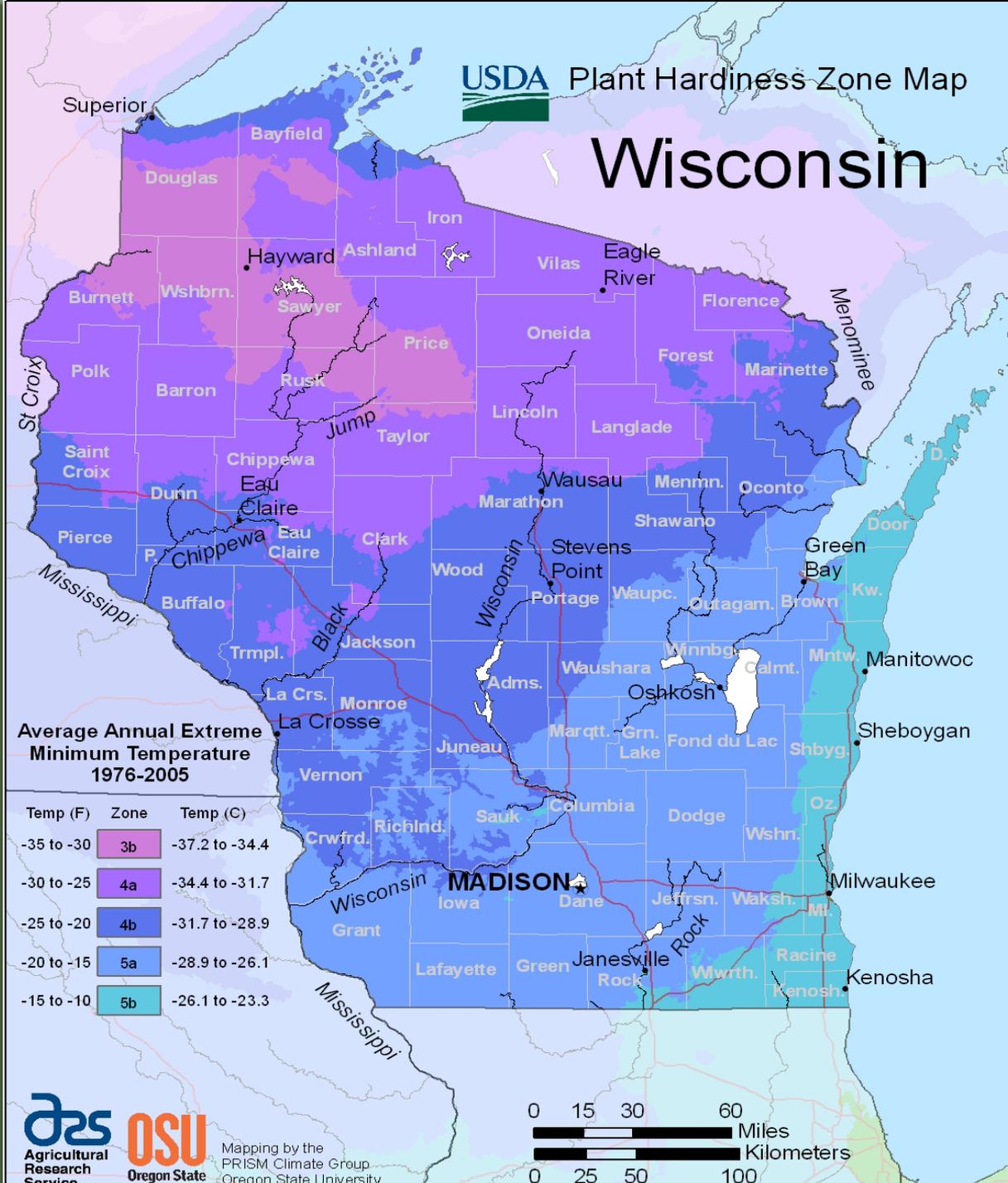


# Climate

- USDA Plant Hardiness Zone
  - Average annual minimum winter temperatures
  - Updated 2012



# Wisconsin



Average Annual Extreme Minimum Temperature 1976-2005

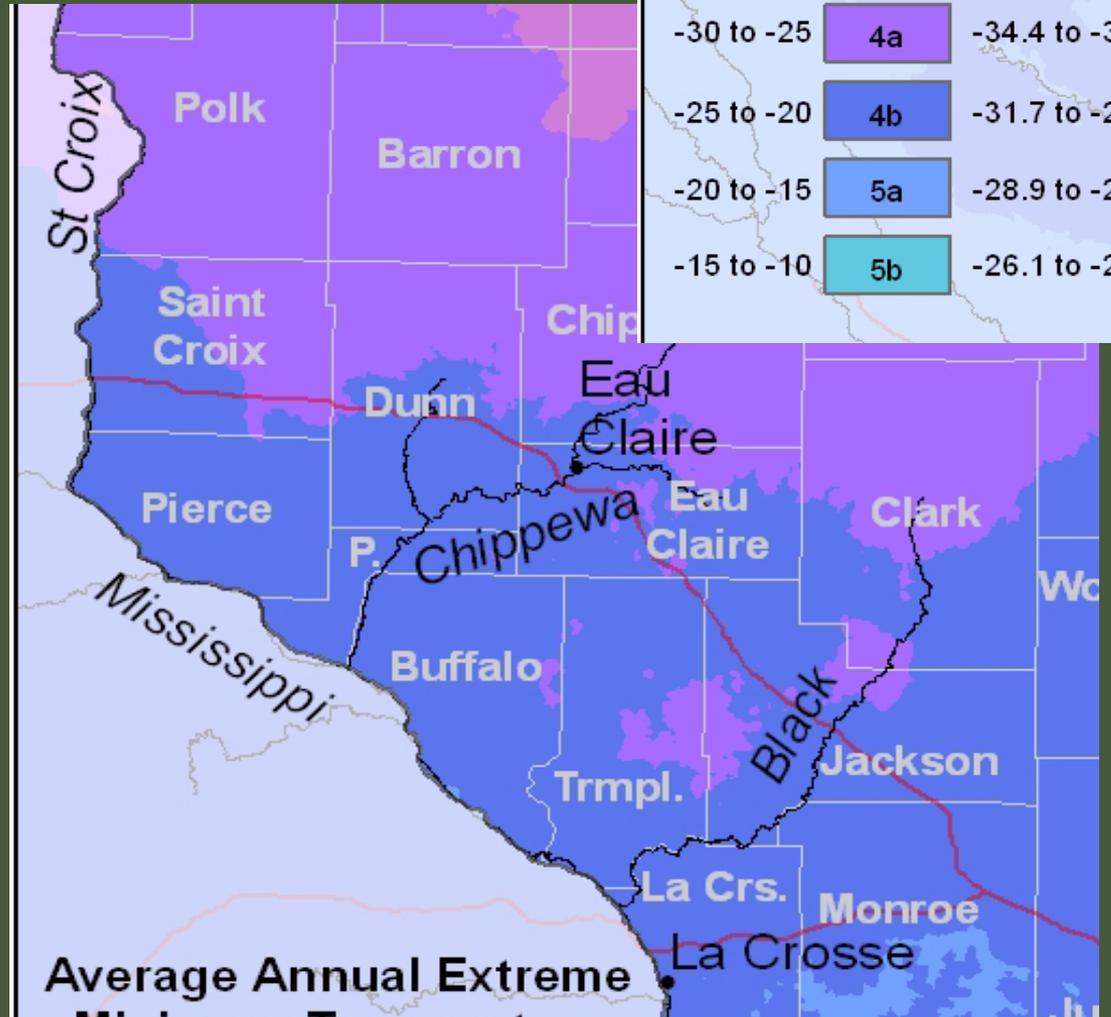
Temp (F)	Zone	Temp (C)
-35 to -30	3b	-37.2 to -34.4
-30 to -25	4a	-34.4 to -31.7
-25 to -20	4b	-31.7 to -28.9
-20 to -15	5a	-28.9 to -26.1
-15 to -10	5b	-26.1 to -23.3



# Climate

**Average Annual Extreme Minimum Temperature 1976-2005**

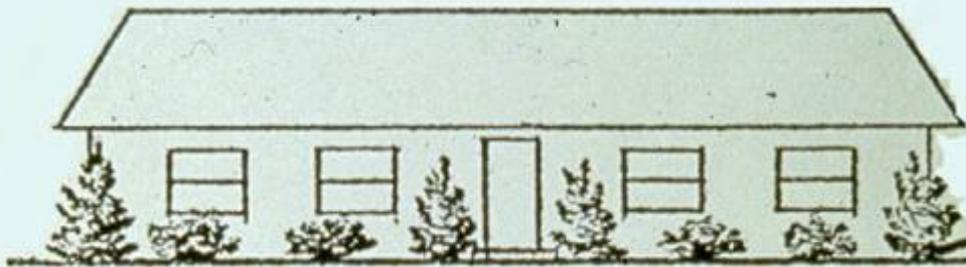
Temp (F)	Zone	Temp (C)
-35 to -30	3b	-37.2 to -34.4
-30 to -25	4a	-34.4 to -31.7
-25 to -20	4b	-31.7 to -28.9
-20 to -15	5a	-28.9 to -26.1
-15 to -10	5b	-26.1 to -23.3



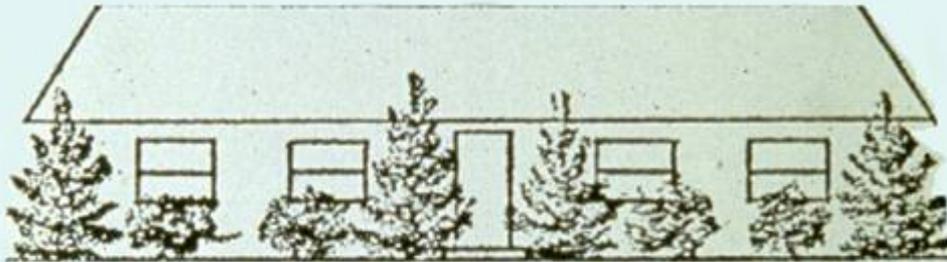


# Plant's function

- Shade or Street tree
- Specimens
- Screens or Windbreaks
- Hedges or Barriers
- Borders or Edges
- Foundation or Masses
- Groundcovers
- Vines
- Container plants



FIFTH YEAR



TENTH YEAR



FIFTEENTH YEAR

# Size / growth rate & Form

- Size / Growth rate
  - Consider mature height
- Form
  - Many variations

## DIFFERENT PLANT FORMS

**ARCHING:** Branches on tree or shrub arch over, creating a fountain or cascading look.



**CLIMBING:** Stems of a plant grow upwards along a fence, trellis, wall, or other structure; common in vines.



**CLUMP:** Main branches or multiple trunks of a tree arise from the base of the plant. Common in ornamental trees that have showy bark; nurseries intentionally grow them this way.



**COLUMNAR:** Branches are closely arranged on the stem creating a narrow, vertical habit. Narrower growth than fastigiata.



**CONICAL:** Geometric cone-shape (like an upside-down ice cream cone), common in evergreens.



**CREeping OR TRAILING:** Branches and foliage lay close to the ground or trail over walls or boulders; common in groundcovers.



**DENSE:** More compact form than typical; branches and foliage are close together, unable to see through.



**DWARF:** Miniature form, much smaller than usual; common in conifers.



**ERECT:** Upright, with tall, straight stems; can also refer to columnar or fastigiata forms. Usually used to describe shrubs.



**FASTIGIATE:** Narrow, upright branching with closely arranged branches. Growth is less tight than columnar.



**HORIZONTAL:** Branches are parallel to the ground, creating a wide-spreading, flat-topped look.



**IRREGULAR:** No distinct shape, but form can be picturesque.



**MOUNDED:** Low, rounded form, close to ground.



**OPEN:** Branches are far enough apart to allow air and light through—you can see through it.



**OVAL:** Egg-shaped; lower and upper portions of plant are narrower than the middle.



**PYRAMIDAL:** Somewhat triangular in outline. Base is widest part and narrows at top; formal looking.



**ROUNDED OR GLOBULAR:** Curved outline; top of plant resembles the upper half of a circle, common in trees.



**SPREADING:** Branches spread upward and outward; common in trees or larger shrubs.



**SUCKERING:** Multiple stems originate below ground from the roots, resulting in new shoots, common in shrubs.



**UPRIGHT:** Branches tend to go upwards and are often rigid.



**VASE-SHAPED:** Upper part of a tree canopy or shrub outline is shaped like a V.



**WEeping:** Stems of a tree or shrub gracefully arch or bend over toward the ground. Often grafted.





# Ornamental considerations

- Flowers
- Fruits
- Foliage
- Bark



# Cultural considerations

- Soil
  - Texture
  - Structure and compaction
  - pH and fertility
  - Temperature
- Moisture
  - 1” per week
- Sunlight



# Planting



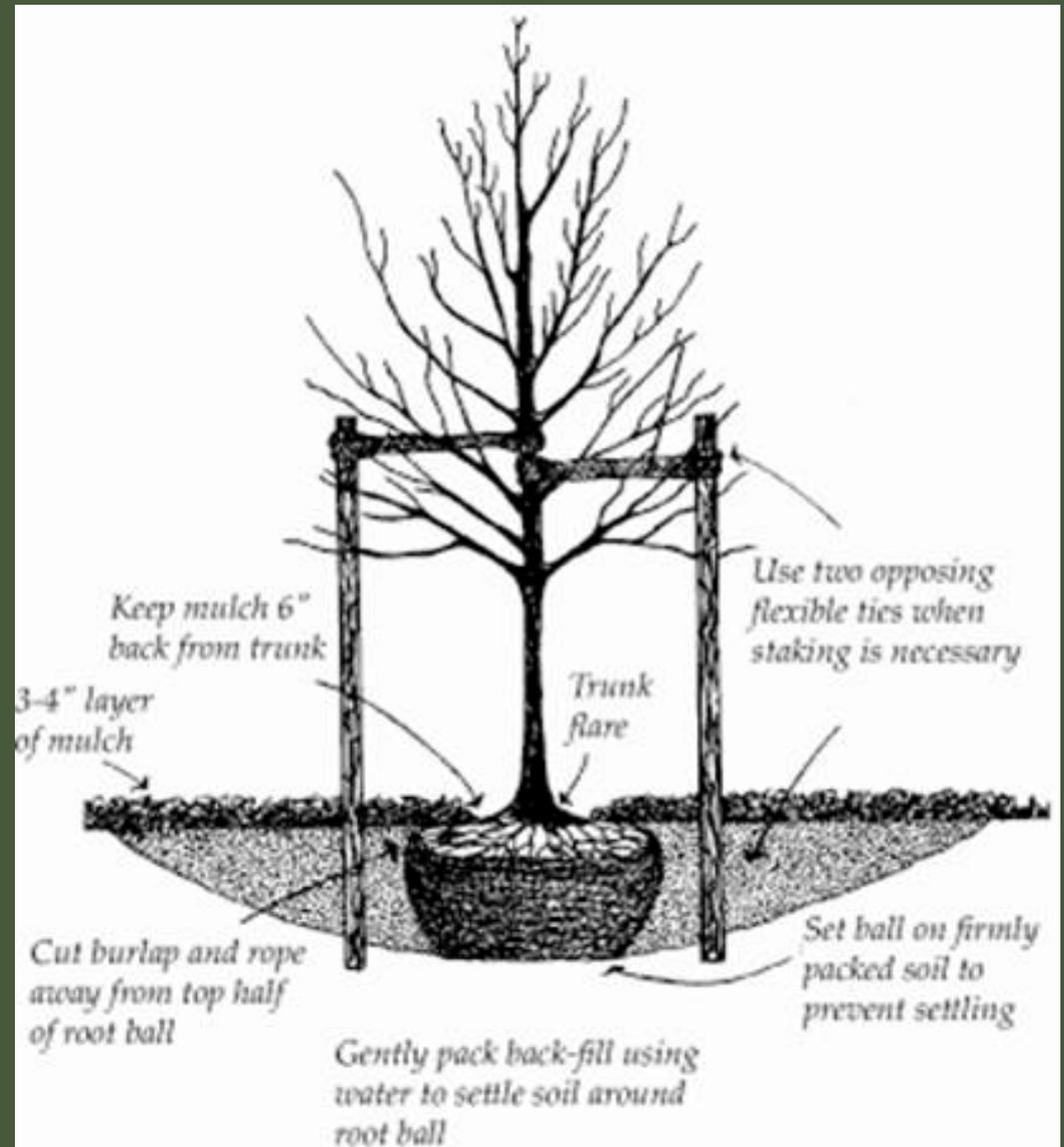


# Types of plants

- Bare root
- Balled and Burlap
- Container

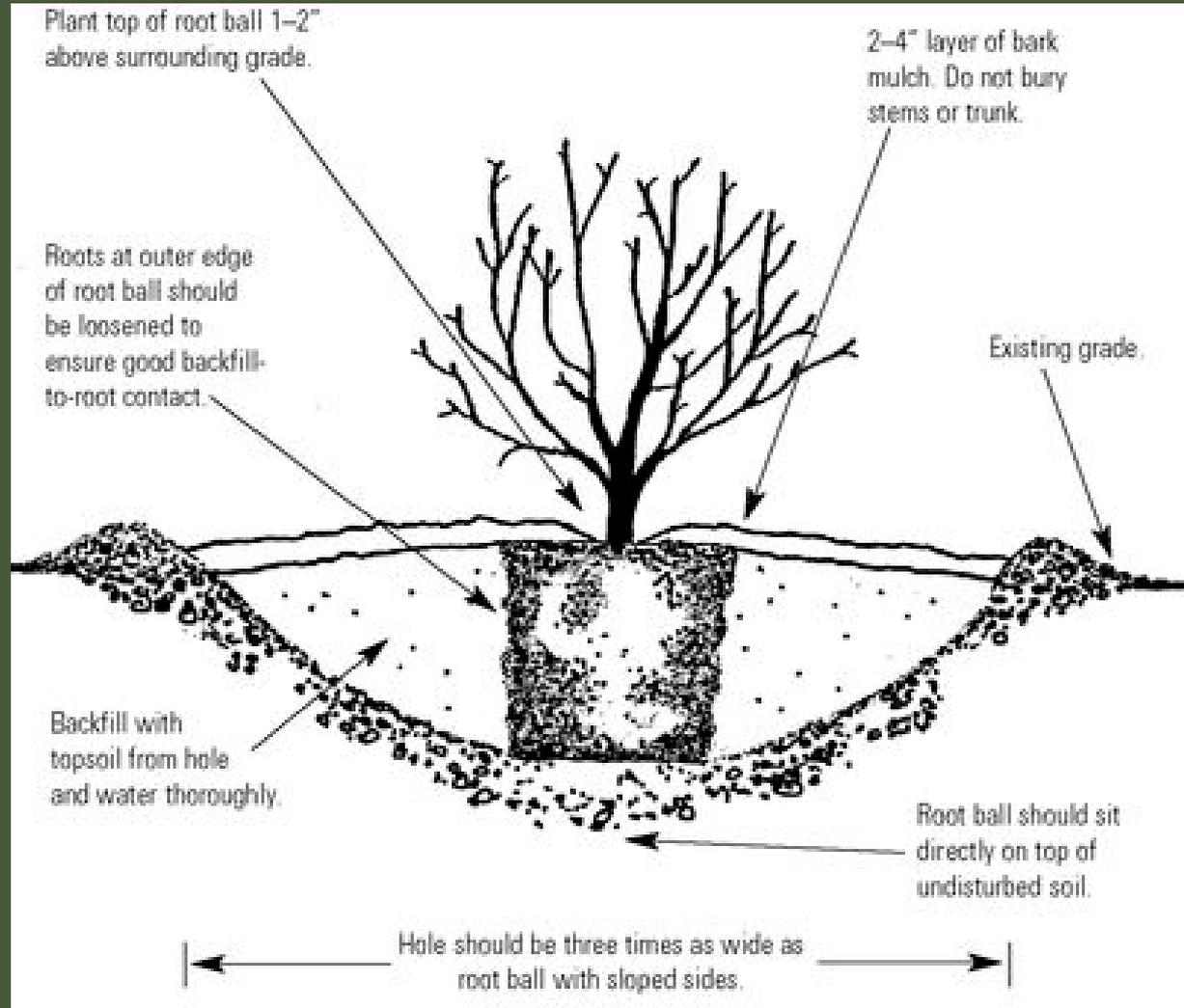


# Planting B&B





# Planting Containers







# Maintenance Questions

- Removal?
- Pruning?



# Tree Pruning

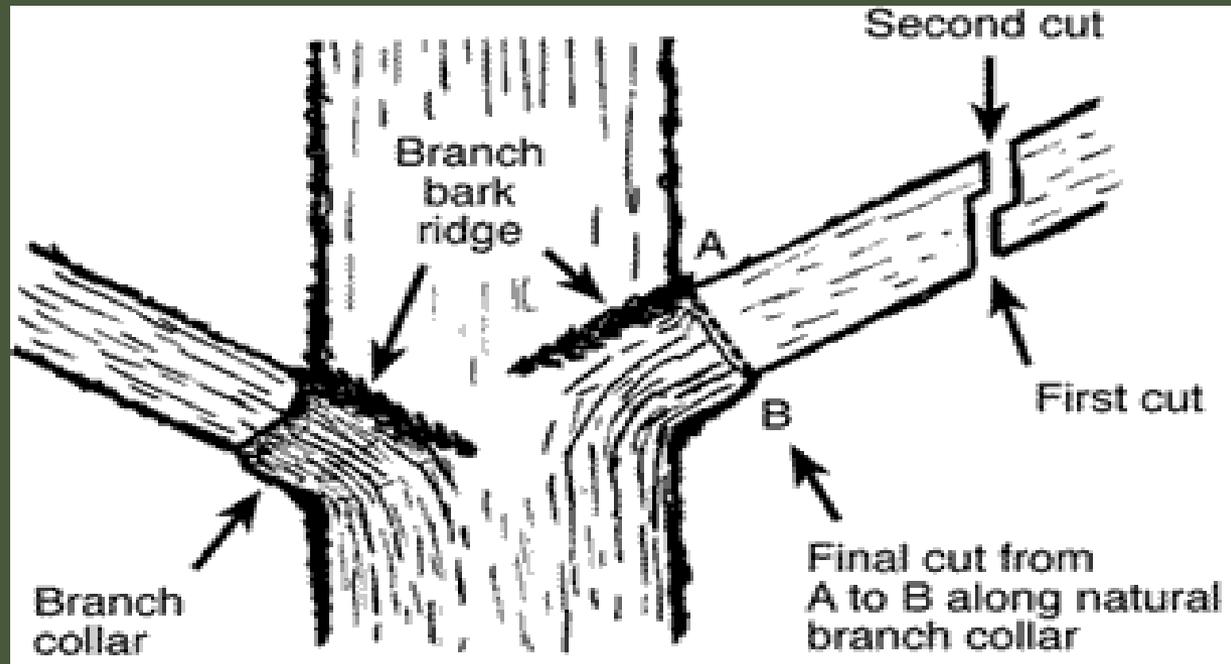
Dead or broken branches

Crossing branches

Branches larger than 1" in size

=

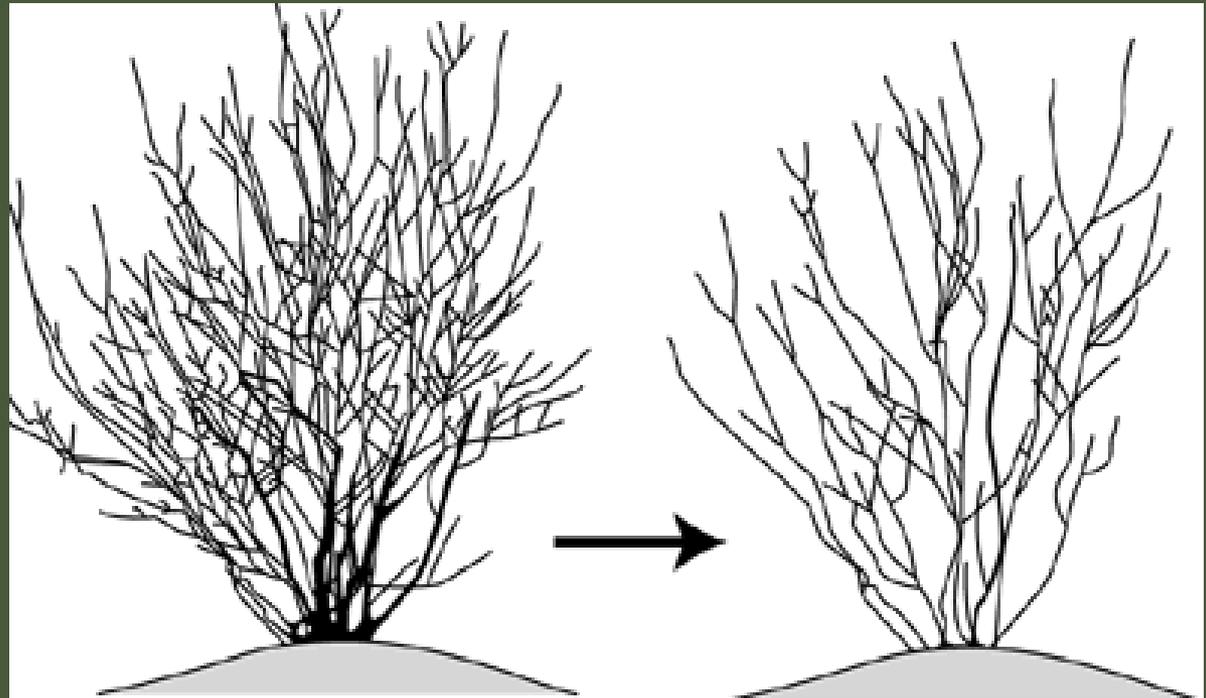
3 Point cut





# Deciduous Shrubs: Renewal Pruning

- Cut back 1/3 of the branches at ground level
- 3 year rotation





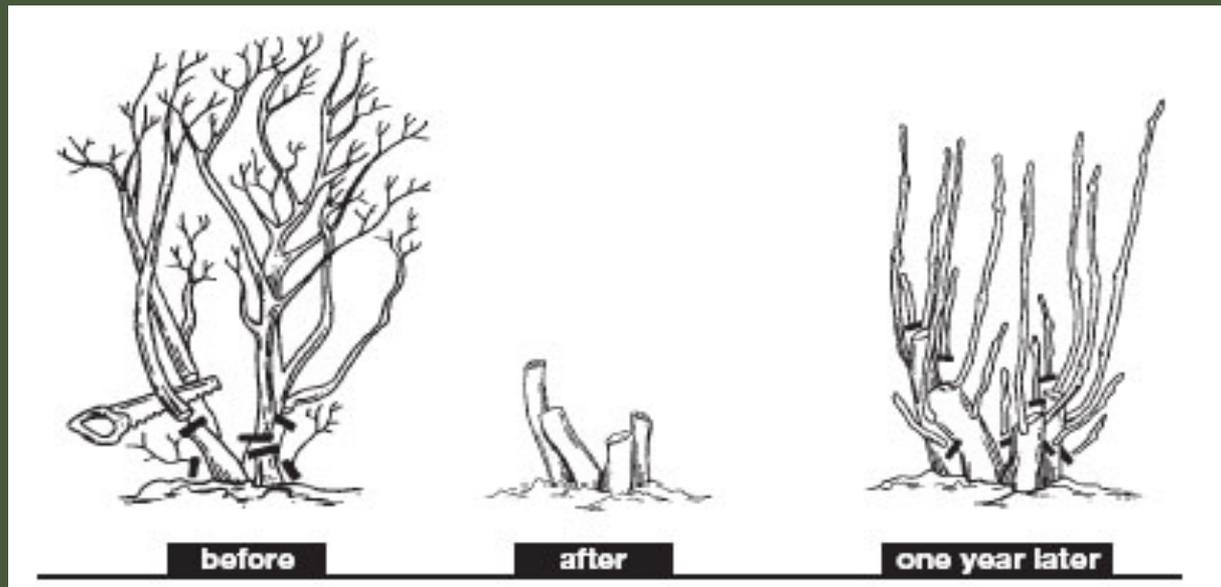
# Deciduous Shrubs: Renewal Pruning

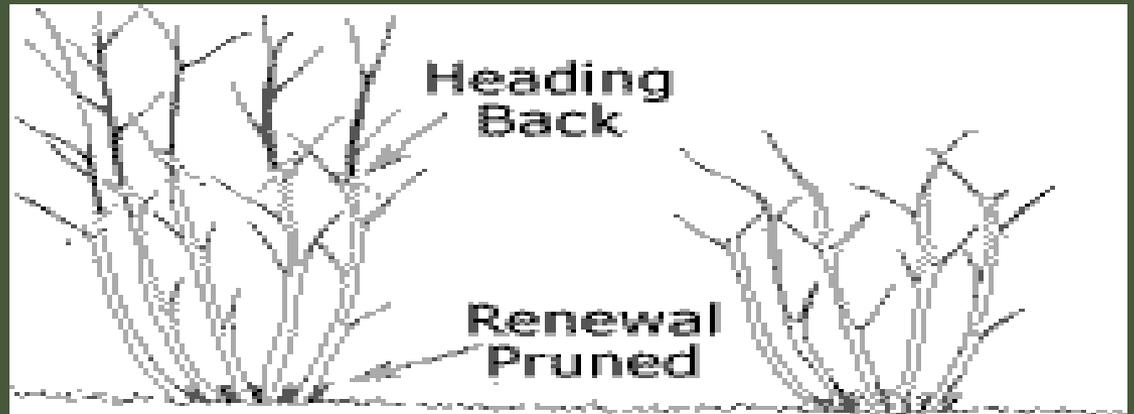
- ✓ Dogwoods
- ✓ Forsythia
- ✓ Lilac
- ✓ Potentilla
- ✓ Purpleleaf sandcherry
- ✓ Sumacs
- ✓ Rugosa rose
- ✓ Shrub willows
- ✓ Spireas



# Deciduous Shrubs: Rejuvenation Pruning

- Start plant over, cut back 6” to 2’
- Used on overgrown leggy plants



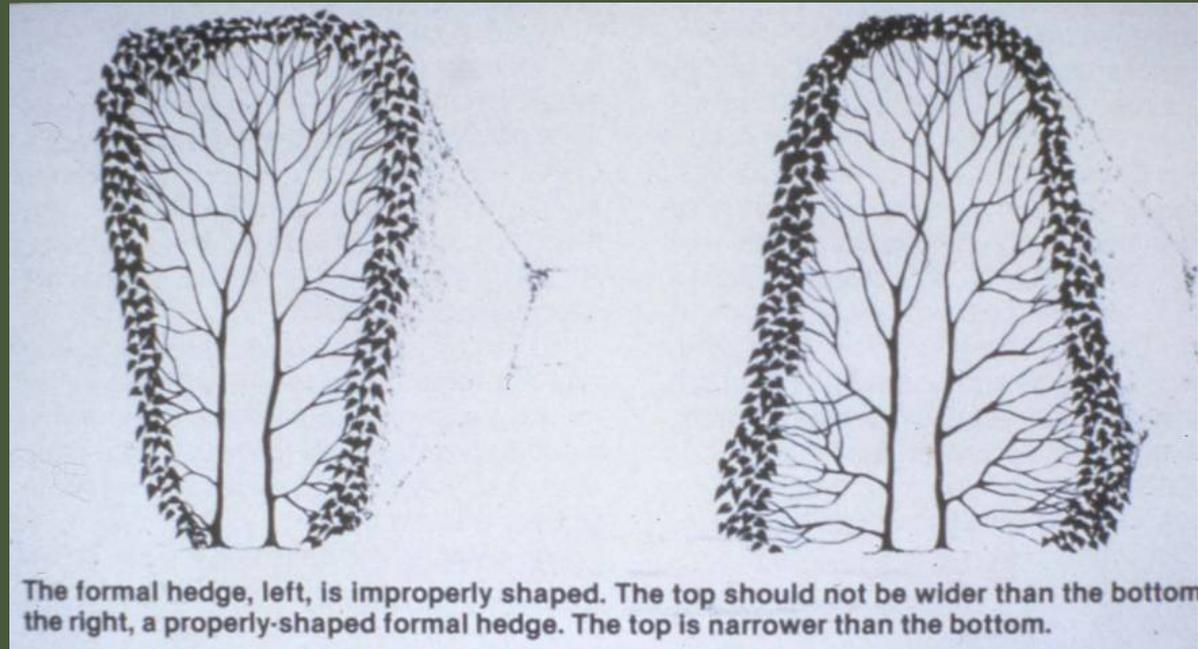




# Deciduous Shrubs: Rejuvenation Pruning

- Dogwood
- Potentilla
- Spirea
- Annabelle hydrangea
- Lilac

# Hedges



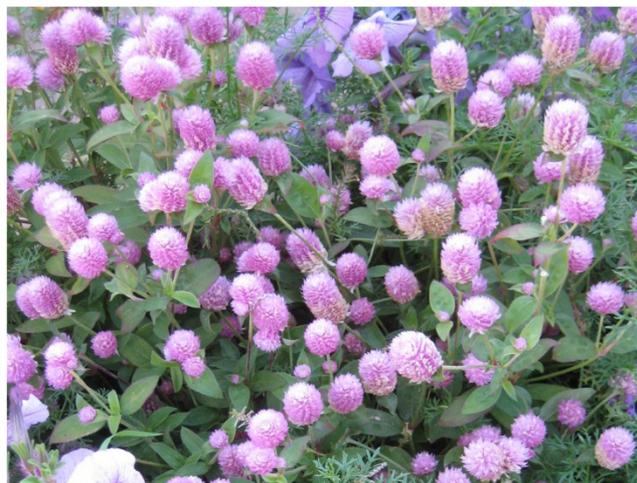


# Evergreen Shrubs

- Do not go back to dead wood
- Pines
  - Remove 1/2 to 2/3 of candle in spring
- Spruce & Fir
  - Branch back to lateral bud
- Yews & Arborvitae
  - Head back or shear
- Juniper
  - Head back



Mulches  
Organic or Inorganic





# Inorganic

- Use a landscape fabric
- Types
  - Rock
  - Stone



# Organic

- Do not use landscape fabric
- Types
  - Chipped or shredded bark
  - Coco beans
  - Leaves
  - Compost
  - Grass clippings
  - Peat moss
  - Straw or hay



# Lawns





# Maintenance

- New areas
  - Seed
  - Sod
- Established
  - Over seeding

A photograph of a landscaped outdoor area. In the foreground, there is a brick path leading to a circular garden bed with dark mulch and some green plants. To the left, there are two large red planters. In the background, there is a wooden deck with a table and chairs, and a young tree. The overall scene is bright and sunny.

# Types of Seed

- Kentucky Blue Grass (KBG)
  - Sunny locations
- Fescues
  - Shady locations
- Rye grass
  - Quick germination

# Seed labels



Seeding Rate:  
New Lawns:  
Overseeding Existing Lawns:

Net Wt. 48 Oz. ( 3 Lbs. )  
1 Lb. Per 350 Sq. Ft.  
1 Lb. Per 700 Sq. Ft.

## HARDY LAWN

Lawn Seed Mixture

Pure Seed	Variety/Kind	Germination	Origin
30.24%	Program Perennial Ryegrass	90%	OR
19.57%	Kelly Kentucky Bluegrass	83%	OR
17.79%	Kenblue Kentucky Bluegrass	80%	WA
14.69%	Boreal Creeping Red Fescue	85%	CAN
14.32%	Gulf Annual Ryegrass	90%	OR
0.05%	Other Crop Seed		
3.31%	Inert Matter		
0.03%	Weed Seed		
Noxious Weed Seeds: None Found			

Lot No. 99101234  
TESTED: 01-2009 SELL BY: 10-2009  
In FL. & LA SELL BY: 08-2009  
In IL,MT,NE,SD,WI, & WY SELL BY: 01-2010  
In AK,AZ,CA,CO,ID,MI,ND,NH,NV,NY,  
OH,OR,PA,UT,VT,WA and DC SELL BY: 04-2010

**NOTICE TO CONSUMER:**  
The seed laws of several states including Arkansas, California, Florida, Georgia, Idaho, Indiana, Mississippi, North Dakota, South Dakota, South Carolina, Texas, and Washington require arbitration or conciliation of disputes involving the quality or performance of seed before litigation. A sworn complaint must be filed with the Commissioner/Director/Secretary of agriculture, or chief agriculture agent within such time as to permit inspection of the seeds, crops, or plants by the designated agency and the seller of the seed. A copy of the complaint must be sent to the manufacturer by certified mail.

cu cualquier área que...  
cantidad que queda es la cantidad de cobertura que requiere el césped.

### SHADY LAWN GRASS SEED MIXTURE

PURE SEED	GERMINATION	ORIGIN
28.31% PROTOCOL 3 PERENNIAL RYEGRASS	85%	OREGON
24.10% BARGENA III CREEPING RED FESCUE	85%	CANADA
19.33% BRIDGEPORT II CHEWINGS FESCUE	85%	OREGON
09.27% PANTERRA ITALIAN RYEGRASS	90%	OREGON
07.36% BARIMPALA KENTUCKY BLUEGRASS *	85%	
02.58% OTHER CROP SEED		
01.45% INERT MATTER		
00.10% WEED SEED		
07.50% WATER SAVER SEED COATING *		
NOXIOUS WEED SEED PER POUND: NONE FOUND		
BARENDRUG USA P O BOX 239 TANGENT OR 97089		
TEST DATE: 1/10 IN PA SELL BY: 4/11		
REF# (115078/011581)		

LOT: 49015  
NET WT.: 1 LB  
GNS 400



# Establishment periods

- Spring  
Soil above 50 degrees until the Memorial Day
- Fall  
When nights become cooler around August 15 until Mid September



# Soil Tests

- Done every 3 to 5 years
- Soil cores should be 5" to 7" deep
- Take soil cores from 10 areas and combine = need 2 cups for testing
- Send to lab, cost \$15.00

# Soil Tests

- pH and Organic matter
- Phosphorus and Potassium



# Fertilizer



**FERTILIZER**  
**21-3-20**  
**N P K**  
50lbs.

**Nitrogen:** key nutrient in plant growth. 21% N in a 50 lb. bag = 10.5 lbs. N

**Phosphorus:** important for establishment. 3% P in a 50 lb. bag = 1.5 lbs. P

**Potassium:** will increase stress tolerance. 20% K in a 50 lb. bag = 10 lbs. K

**P & K needed only as soil test indicates**



# Fertilizer Recommendations

- Follow soil test, maximum 4 lbs nitrogen per year
- One application per year =
  - mid- to late October
- Three applications per year =
  - Late May/ early June
  - Early September
  - Mid to late October
- Four applications per year=
  - Late May/ early June
  - Early to mid July
  - Early September
  - Mid to late October



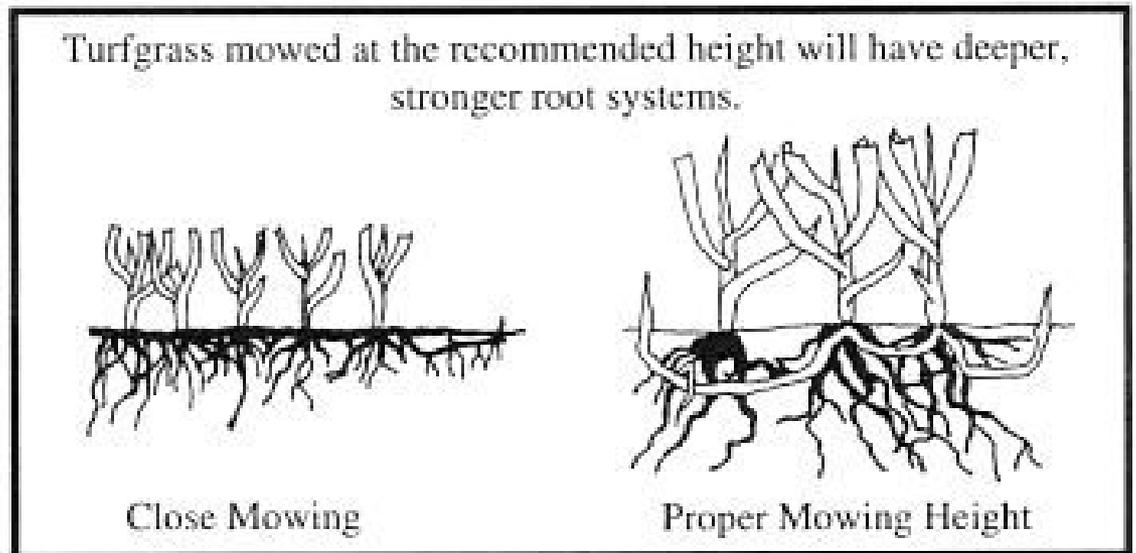
# Watering

- Required: 1" per week
- Lawns can go dormant and rejuvenate with rainfall
- Irrigation
  - Watering bans?
  - Do not do in the heat of the day



# Mowing Heights

- Higher mowing height will have deeper root system
- 2" to 3" preferred





Wrap Up

