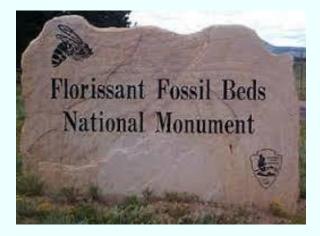
Roses in the Rockies 101



Peggy Williams, American Rose Society Master Rosarian pegwilliams22@comcast.net

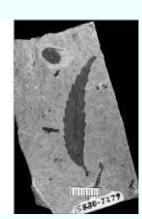
Florissant Fossil Beds National Monument











A rose is a rose...

3 main groups
 Species, Old Garden Roses, Modern



Classes

Damasks, Alba, Hybrid Tea, Floribunda, Minis, Shrubs

Varieties (names)'Peace' ~ 'Iceberg'



7 Habits of Highly Effective Rose Growers

- Choose a good site
- Prepare your soil, plant properly
- Mulch
- Water
- Fertilize
- Be observant and use gentle intervention for pests and diseases
- Know what you want, choose the best varieties (hardy, disease and pest resistant)







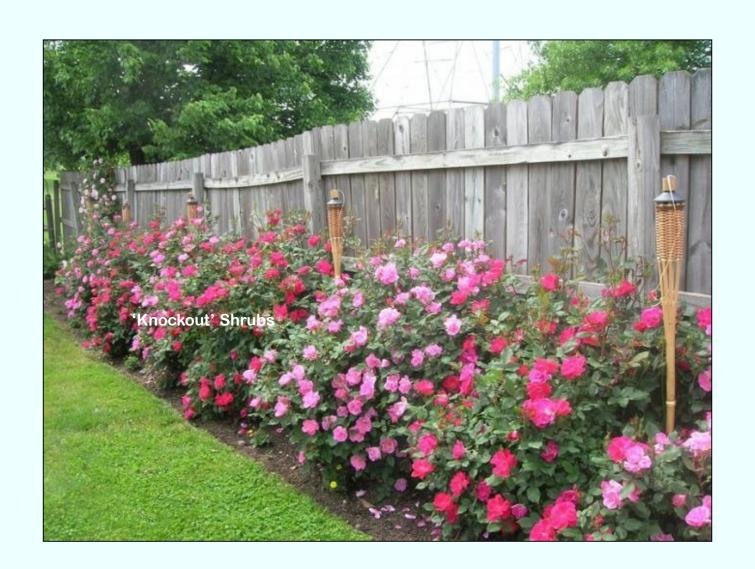
Site Selection

- Level site with 6 hours sun
- No competing tree roots
- Accessible for care
- Adequate drainage
- East or south facing best

Plan For Mature Size



Plan For Airflow



Soil

 Soil conditions coupled with watering contribute to 80% of all landscape plant problems

Physical –

Not

Chemical

SOIL TEST



Soil

• 3 Most Frequent causes of poor plant growth as related to soil:

- Drainage
- Poor O2 conduction
- Compaction
- 12,000 grains of clay
- = 1 inch of soil



Managing Soil Tilth – Clay

Tilth = physical condition, suitability for growing plants

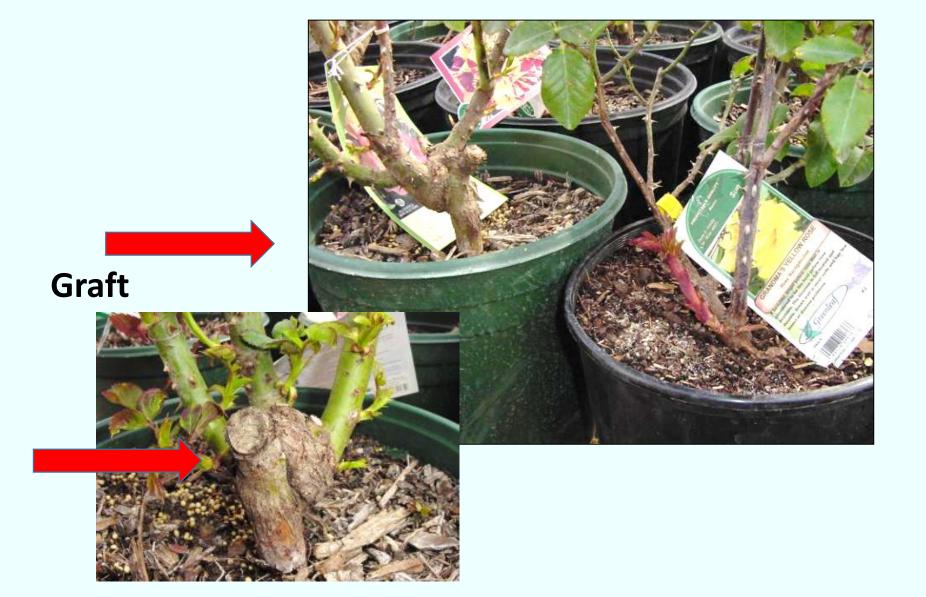
- Add plant based organic material,
 manure based can contain too much salt
- 5% organic matter ideal
- Foster activity of soil
 micro-organisms (decomposers)
 and earthworms
- Don't work when wet-compaction
- Avoid soil interfaces



Planting



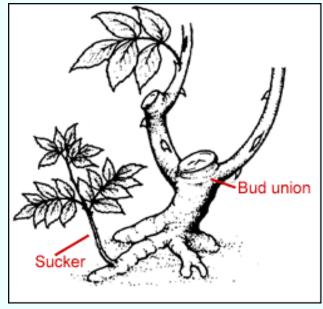
Grafted or Own Root?



'Dr Huey' Rootstock







Planting Container Grown

- Plant after May 15, harden off if greenhouse grown
- Hole 18-24" wide 14-18" deep
- Do not plant container
- Keep root ball intact
- Plant 1-4" below ground level if grafted, own root 1-2" below
- Water (every day first 3 days, 2 times week for 2 weeks, then 1 time per week)



Planting Bare Root Roses

- Plant as soon as soil workable (prepare hole in fall if possible) finish by mid April
- Keep cool and moist until planted (within 24-48 hrs) can be soaked in water with root stimulator 24 hrs
- Prune canes to outward facing bud eye
- If must be held over ~ bury horizontally under burlap and layer of soil
- After planted protect canes with burlap or compost until danger of frost over. Uncover gradually.

Mulch!



Mulch

- Moderates soil temperature
 pull back in late May, re-apply early July
- Conserves water
- Organic mulch enriches soil
- Keeps down weeds
- Gravel not recommended



Watering





- Dependent on weather, drainage, and soil structure
- A mature, full size rose needs avg 1" week
- Check soil moisture
- Always water at base if possible or in the AM
- Winter water as needed

Fertilizing

- No universally accepted right fertilizer
- N P K (7 8 4) balanced
- Chemical vs. Organic
- Every 4-6 weeks, last one mid-August
- Water before and after (especially important if using chemical)







Pruning Tips



- Prune once bloomers after they bloom
- Prune relentlessly to clean, white pith
- Remove weak, twiggy, unproductive growth
- Not in the Fall
- Buy the best tools possible
- Tetanus up to date
- **Do it!** Helps prevent disease and insect problems, promotes growth

Insects (mostly)





Identifying Good things in the garden.

Lady Beetle





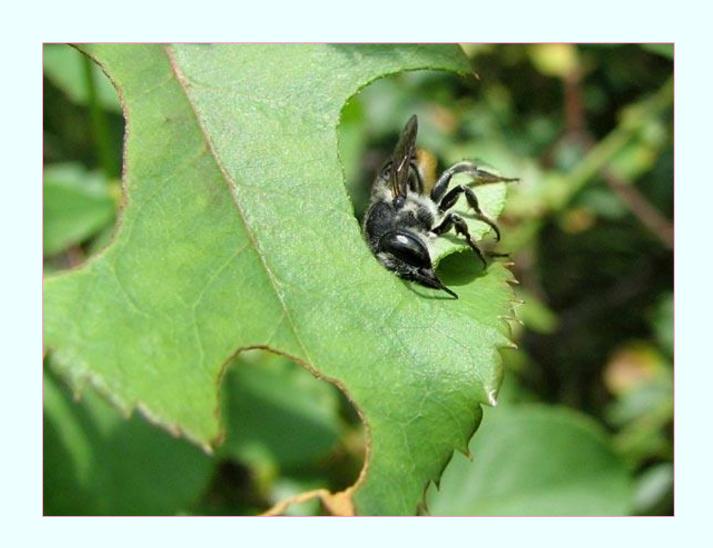


Green Lacewings





Leaf Cutter Bee



Spiders



Spiders eat between 400 and 800 million **TONS** of insects annually





Rose Pests

- Rose Curculio
- Small Carpenter Bees
- Thrips
- Rose Gall Wasps



- Aphids
- Two-Spotted
 Spider Mites
- Leaf Rollers
- Rose Slug
- Japanese Beetles

















Integrated Pest Management

A System Of Checks & Balances



- Observe your garden
- Correctly identify the problem
- Decide whether treatment is necessary
- Start with least toxic treatment
- Evaluate the results



Aphids

- Soft-bodied, pink, green, red, tan
- Overwinter as eggs on plants
- Feed (suck) on buds, young foliage and stems
- Heavy in spring, late season
- Low populations cause little damage
- Numerous generations



Aphids

Signs/Symptoms

- Deformed, stunted damaged new growth & blooms
- Weakened plant, curling leaves, sticky honeydew on foliage
- Presence of ants

Control

- Dislodge by hand or with strong water
- Insecticidal soaps,
 Neem oil
- Encourage beneficial insects



Aphid IPM Sprayed with hose



Spider Mites

- Very small, size of pepper grain
- Usually orange
- Eggs laid in clusters underneath leaves
- Overwinters in protected areas, fallen leaves
- Like hot and dry (low humidity)



Spider Mite Damage



Spider Mites

Signs/Symptoms

- Leaves appear light yellow to bronze in color, stippled
- Webs on underside of leaves
- Heavy infestation leaves turn brown, curl and drop off





Control

- Monitor high risk plants
- Minimize drought stress
- Increase humidity, hose underneath leaves
- Remove some bottom foliage, minis
- Don't kill natural enemies
- Miticide sprays not insecticides



Pirate Bug



Thrips

- Small, yellowish brown insects visible with naked eye hide inside buds and blooms
- Damage petals with rasping mouth
- Prefer white and light colored varieties.
- Can attack during bud stage
- May over winter under leaves

Thrips Damage







Thrips

Signs/Symptoms

- Buds remain closed or bent over at sharp angle
- Bumpy petals, scarred and discolored with brown streaks,
- Insects scurry inside flowers

Control

- Remove, destroy spent blooms
- Spray buds & blooms, not entire plant
- Systemic is best
- Insecticidal soap,
 Imidacloprid,
 Bifenthrin, Orthene
- Blue dixie cups ~
 spray adhesive



Small Carpenter Bees



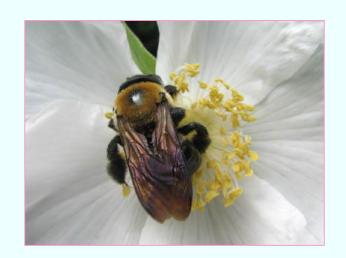
- Adults are dark & metallic colored
- Lay eggs in cut cane and nest in pith
- Bees tunnel into & damage healthy tissue
- Result-hole in center of cane, wilting, dieback, death of cane
- Sawdust like material visible
- Prune infested canes below damage, dispose
- Seal all pruning cuts



Small Carpenter Bees



Bees nest in canes, provide pollen and nectar to young





Japanese Beetles



Grub overwinters in turf





Japanese Beetles

Signs/Symptoms

- Shredded foliage, flowers
- Skeletonized leaves
- Especially favor roses, grapes, crabapples and beans



Control

- Hand-picking in early am, late pm knock adults into soapy water and destroy
- Don't trap
- Chemicals may kill both good guys & bad guys
- Vigilance attracted by others

2 Most Common Diseases

Powdery Mildew (fungus)

Blackspot (fungus)

Blackspot



Powdery Mildew





Powdery Mildew

- Borne by wind & weather
- Spreads in both dry & humid weather
- Early symptoms raised blister like areas



Powdery Mildew Control

- Plant resistant varieties
- Preventative spraying GreenCure, Neem Oil, Rubigan, H2O in AM
- Remove and destroy infected leaves
- Good winter sanitation



Blackspot

- Favored by wet weather & 65-75 temperatures
- Spores spread by water, clothing, tools and hands
- Circular brown to black spots with fringed margins
- Does not survive in soil
- Cane lesions and leaves carry over spores





Blackspot Control

- Plant resistant varieties
- Practice good sanitation
- Controls-neem oil, sulphur, Immunox, Daconil, GreenCure
- Many fungicides used for powdery mildew will give limited protection from Blackspot





Choices ~ 3,000



What do you want?

• Size

Growth habit

Color

• Bloom Form

Hips

Fragrance

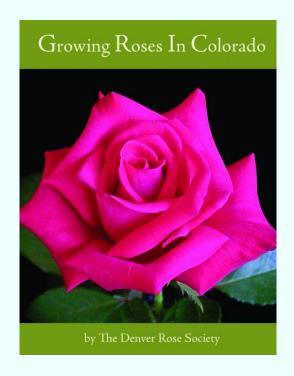
Repeat



Good Choices

- Hardy
- Pest and disease resistant
- Recommended by Denver Rose Society
- American Rose Society rating
 7+
- Purchase reliable nursery
- Make a MAP

'Grandma's Blessing'





Hybrid Tea

- One bloom per long stem
- Classic bloom shape
- Petal count from 5 to 100
- Medium to tall growing habit
- Very good repeat bloom



'Peace'

'All My Loving'



'Double Delight' 8.3





'Peace'

8.0





Floribundas

- Clusters of blooms on each stem
- Informal bloom shape
- Bushy, short to medium growth habit
- Good repeat bloom
- Some fragrance

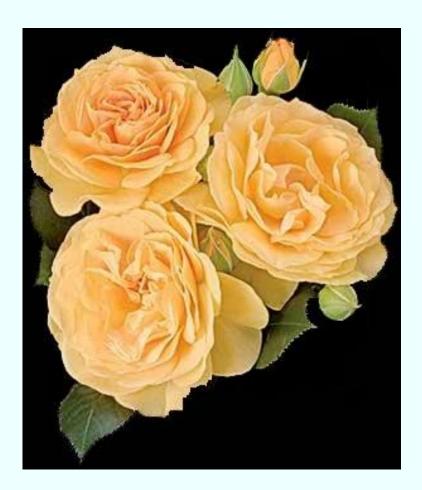
'Trumpeter' 8.2



'Iceberg' 8.5



'Julia Child' 8.2







'Ketchup and Mustard' 7.4



'Lavaglut' 8.6



'Trumpeter' 8.2





Miniatures



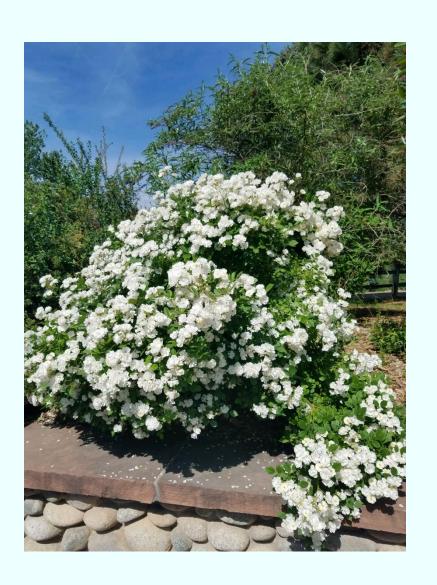
'Child's Play'

- Refers to size of bloom, normally smaller plant, bloom and foliage
- Clusters or one bloom on each stem
- Classic or informal bloom shape
- Bushy plant habit
- Short to medium growing height
- Ideal for containers

'All a Twitter' 7.5



'Gourmet Popcorn' 8.5



'Smoke Rings' 7.5



'Sunblaze' series



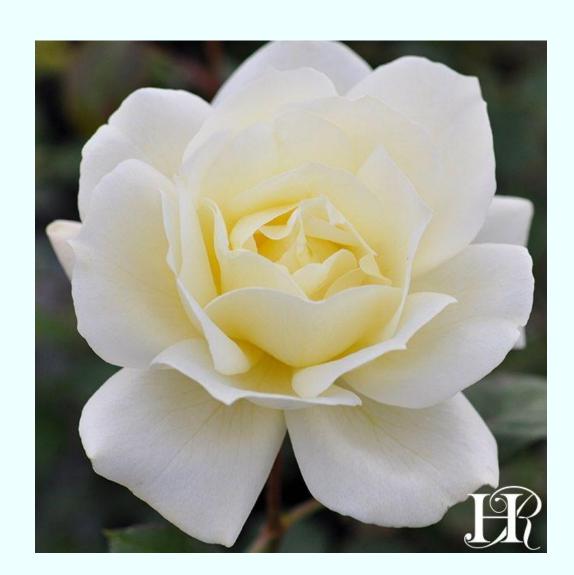




Shrub Roses

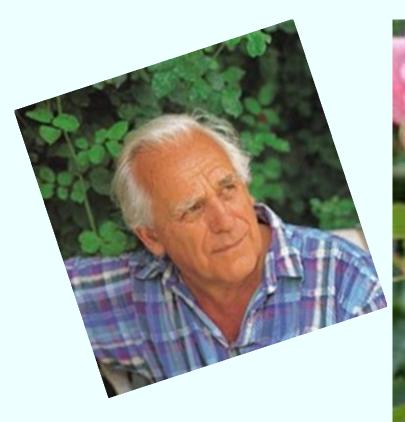
- Clusters or one bloom on each stem
- Informal bloom shape
- Easy care, disease resistant
- Short, medium, tall or very tall height
- Good repeat throughout year
- Many fragrant







'Boscobel' ~ David Austin 7.8





'Coral Cove'



'John Davis' 8.8

'Knockout'

8.5



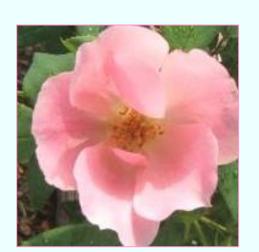












'Screaming Neon' Easy Elegance series



Climbers

- Clusters of blooms on each stem
- Classic or informal bloom shape
- Very tall, climbing growth habit
- Needs support or training
- Best blooms in spring
- Need minimal pruning



'Polka' 8.0

'America'

8.2



'Lady in Red'







'William Baffin' shrub 8.7



Denver Rose Society

- Educational meetings ~ calendar on web
- Rose Show
- Monthly newsletter
- Discounts on Mile Hi Rose Feed and publications
- \$20.00 yearly dues
- www.denverrosesociety.org to join
- Membership Chair, Pat Colburn patcolburn05@hotmail.com



American Rose Society

 4 Months free with new membership in Denver Rose Society

- www.rose.org
- 318-938-5402
- ARS Website 4 months only \$10.00



Consulting Rosarians ~ Free Advice

- Dave Ingram 303-420-8709
- Mary Kirby 303-523-3211
- Ellen Nielsen 303-279-0732
- Barb Kemp 303-421-9602
- Peggy Williams 303-503-8927 website
- denverrosesociety.org



