#### Low-Maintenance Herbs

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## An HERB plant:

- "Any plant that may be used for pleasure, fragrance, or physic:"--Herb Society of America (HSA)
- "A plant or plant part valued for medicinal or savory qualities"—Merriam-Webster Dictionary, 1989
- Herbs may be annual, biennial, or perennial; herbaceous (non-woody stems) or woody (perennials, vines, shrubs, trees)

### **HERB** plants

- May be herbaceous (non-woody stems) or woody
- Herbaceous herb examples: Achillea (yarrow), Echinacea (purple cone flower), Foeniculum (bronze fennel)

## Herbaceous herb plants:



## Woody herb plants:

- Maintain a persistent stem above ground during cold weather
- May or may not lose leaves in cold weather
- Examples: Lavandula (lavender), Rosa (rose), Rosmarinus (rosemary)

## Woody herb plants:



#### Low-maintenance herbs

- Do not need staking under normal conditions
- Are winter cold hardy and summer heat tolerant
- Are resistant to recurring insect and disease infestations
- If perennial do not need to be divided for at least three years
- Possess attractive foliage during entire growing season
- Are not invasive by seeds or roots





http://www.bbc.co.uk/gardening/plants/plant\_finder/plant\_pages/11317.shtml

- Chives
- Full sun
- 12" h x 24" w
- Aromatic cylindrical hollow green leaves
- Pink ball-shaped flower heads; edible
- 'Forescate' larger 24" h and deeper pink color to flowers
- Bulbous perennial; divide bulbs in fall
- Zones 3-9
- Europe, Asia, N. America native
- Leaves, flowers: edible<sub>8/2/2010</sub>



#### Asarum canadense

- Canadian wild ginger
- Part to full shade
- 6" h x 6" w
- Heart shaped leaves
- Brown bell shaped flowers hidden by foliage in spring
- Zones 2-8
- North American native
- Rhizome dried for historicalmedicinal; perfume



## Athyrium nipponicum 'Pictum'

- Japanese painted fern
- Part shade
- 8-12" h x 15-18" w
- Lance shaped silver gray green leaves with maroon midribs
- 'Ursula's Red' bred in SC (origin Japan)
- Zones 5-8
- Historical-medicinal: liquid extract for tapeworm; roots as an ointment for wounds. Dangerous in strong dose.





## Baptisia australis

- False indigo blue
- Sun to part shade
- 5' h x 2' w
- Fern like foliage
- Tiny deep blue blooms in early summer
- Deep blue to black seed pods
- Zones 3-9
- Eastern US native
- Dye plant; historicalmedicinal (purgative, antiseptic)





## Cymbopogon citratus

- Lemongrass
- Sun
- 5' h x 3' w
- Loose panicles of bloom in late summer are rare
- Pale blue-green leaves up to 36" long, rough sharp margin
- Aromatic foliage
- Zones 8-10
- India; Sri Lanka native
- Used in Thai cooking; essential oil for perfumery



## Echinacea purpurea

- Purple coneflower
- Sun
- 4' h x 18" w
- Rosy-purple flowers in midsummer to autumn
- Zones 3-9
- Eastern US native
- Root, fresh historicalmedicinal; attracts bees and butterflies





## Foeniculum vulgare 'Purpureum'

- Bronze fennel
- Sun
- 6' h x 18" w
- Bronze purple foliage is finely cut and feathery on tips
- Zones 4-9
- Southern Europe native
- Seeds, leaves, roots: historical medicinal



## Foeniculum vulgare 'Purpureum'

'Above the lower plants it towers, The Fennel with its yellow flowers;

And in an earlier age than ours
Was gifted with the wondrous
powers

Lost vision to restore.'

-Longfellow in Grieve (1982)



Gerard's Herbal 1633

#### Gaura lindheimeri

- White gaura
- Sun
- 5' h x 3' w
- Pink buds open to white blooms late spring to early autumn
- Slender stems and leaves
- "Siskiyou Pink' cultivar
- Zones 5-9
- Southern US native
- Attracts bees & butterflies



#### Helleborus orientalis

- Lenten rose
- Full to partial shade
- 18" h x 18" w
- Nodding saucer shaped white flowers often stained green and pale pink, in midwinter to midspring
- Basal leathery leaves evergreen
- Zones 4-9
- Native to Greece and Turkey
- Poison. Tincture of root used in homeopathy for diarrhea and indigestion





## Hemerocallis hybrids

- Daylily
- Full sun
- 6-48" h x 12-36" w
- Wide color range of blooms; 'Hyperion' & 'Happy Returns' are yellow
- Basal leathery leaves evergreen
- Zones 3-10
- Native to China, Korea, Japan
- Flowers in tempura, salads



#### Laurus nobilis



- Bay tree
- Full sun to partial shade
- Protect from wind
- 40' h x 30' w
- Aromatic leaves (to 4" long)
- Pyramidal evergreen tree or large shrub
- Zones 8-10
- Mediterranean native
- Leaves, fruit, oil: topiary; cooking; wreaths used by ancients' for heroes and poets crowns



#### Lavandula stoechas

- French lavender
- Full sun
- 24" h x 24" w
- Spikes of fragrant deep purple blooms topped by purple bracts in late spring to summer
- Subspecies pedunculata
   Spanish lavender, bears flowers well above foliage
- Fragrant silver green foliage
- Zones 8-9
- Mediterranean native
- Flowers, leaves, oil: food; perfume-ancient and modern (linens, bath, bodies); antiseptic for wound during wars (France)

8/2/2010

Bees attracted







#### Lavandula stoechas

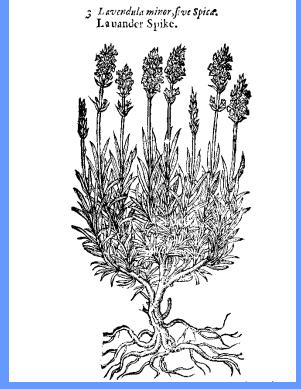
"It comforts the stomach."

-Gerard

"It is used against the biting of serpents, mad dogs and other venomous creatures..."

-Salmon (1710)

A few drops of oil are sufficient
"...either for inward or
outward griefs"
-Culpepper



Gerard's Herbal 1633

#### Lavandula x intermedia 'Provence'

- Lavandin
- Full sun
- 12" h x 24" w
- Spikes of fragrant dark violet blooms in summer
- Fragrant silver green foliage; bushy habit
- Zones 5-8
- Garden origin







Images: http://www.highcountrygardens.com/catalog/product/63155/

Liatris spicata 'Kobold'

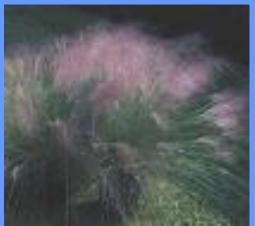
- Spike gayfeather
- Full sun
- 24" h x 24" w
- Pinkish purple flower spikes in mid-late summer into autumn
- 'Kobold' does not need staking
- Zones 3-9
- E and S US native
- Root, in water as a diuretic.
   Additive to tobacco; repels moths



## Muhlenbergia capillaris

- Pink muhly grass
- Full sun
- 4' h x 3' w
- Airy pink blooms in late summer
- Narrow grass leaves
- Zones 6-10
- Native to central and southeastern US
- Leaves: fresh in arrangements; woven in baskets





### Origanum vulgaris 'Aureum'



#### Image:

http://www.bowoodfarms.com/index.cfm/fuseaction/plants.plantDetail/plant\_id/1318/index.htm

- Golden creeping oregano
- Full sun
- 6"-12" h x 12-18" w
- Pink flowers in mid-late summer
- Evergreen aromatic yellowgreen colored leaves
- 'Aureum' spreads less than species
- Zones 5-9
- Native to Europe
- Oil in medicinal and leaves in culinary



http://www.virtualplanttags.com/vpt.asp ?co=410087&pID=47790&cID=&r= GIYP

# Petroselenium crispum; P. 'Italian Plain Leaf'; var. Neopolitan

- Parsley
- Full sun
- 8-12" h x 12" w
- Aromatic leaves: curly or flat; green color bright or dark
- Zones 3-9
- Native to Mediterranean Europe
- Biennial: Star-shaped greenish yellow blooms (32" h) second season
- Roots, seeds, leaves, stems:
   historically not eaten-used in
   sacred ceremonies to honor the
   dead; dye plant; culinary 8/2/2010





#### Rosmarinus officinalis

- Rosemary
- Full sun
- 4' h x 4' w
- Whorls of tiny blue blooms from midspring into summer and again in autumn
- Fragrant evergreen leaves on woody stems, often deer resistant
- 'Arp': is hardier zone 7-10; 'Irene' PP#9,124': prostrate 1.5' h x 3' w
- Zones 8-10
- Native to Mediterranean region
- Leaves, root, oil: historical-medicinal; culinary; perfume; good temperament; strengthens the memory; symbol of love and loyalty used in weddings, funerals, festivals



#### Rosmarinus officinalis

 There's rosemary, That's for remembrance; pray you, love, remember.

-Hamlet



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## Rudbeckia fulgida var. sullivantii 'Goldsturm'

- Black-eyed-Susan
- Full sun
- 36" h x 18" w
- Daisy-like yellow flowers with a mahogany disk from summer into autumn
- Fragrant evergreen leaves on woody stems
- Zones 4-9
- E. US native
- Attracts bees



#### Salvia elegans

- Pineapple sage
- Full sun
- 6' h x 3' w
- Red flowers from winter into spring
- Aromatic leaves
- Zones 8-10
- Mexico, Guatemala native
- Leaves flavor drinks and salads
   Image: http://plants.usda.gov/java/largeImage?imageID=sael6\_001\_avp.jpg





### Salvia officinalis 'Berggarten'

http://www.frogmoregardens.com.au/genus/Salvia

- Sage
- Full sun
- 24" h x w
- Purple flowers in summer; aromatic rounded gray-green leaves
- Compact evergreen perennial
- Zones 5-8
- Mediterranean, N. Africa native
- Leaves: Historical-medicinal; culinary



http://mothersearthgreenhouse.com/mothers\_earth\_greenhouse\_036.htm

#### Salvia officinalis

"Sage helps the nerves and by its powerful might

Palsy is cured and fever put to flight."

-old French saying

"Sage is singularly good for the head and brain, it quickeneth the senses and memory, strengthens the sinews, restoreth health to those who have the palsy...

-Gerard



#### Santolina rosmarinifolia (virens)

- Lavender cotton
- Full sun
- Up to 24" h x 24" w
- Yellow button-like blooms in mid to late summer
- Zones 6-9
- Native to Europe
- Perfume; historical: twigs used to repel moths in linens; historical-medicinal use for 'bites of venomous beasts' (Grieve, Culpepper)



## Scabiosa columbaria 'Butterfly Blue' and 'Pink Mist'

- Scabious
- Full sun
- Up to 24" h x 30" w
- Pincushion like blooms appear during summer and winter
- Zones 5-8
- Native to Europe, W. Asia
- Used historical-medicinally for remedy of sores on skin (Grieve, Gerard, Culpepper)





### Solidago rugosa 'Fireworks'

- Goldenrod
- Full sun
- 24-36" h x 24-36" w
- Yellow blooms in late summer and autumn
- Zones 4-8
- Native N. America, Europe
- Leaves, flowers: dye; historical-medicinal as aromatic, stimulant, astringent, diuretic



## Herbs in the landscape

- May be used in specialty gardens; mixed borders; or containers.
- Tend to effect the senses (aroma, tactile, aesthetics, cultural associations).
- Often create "restorative" experiences for viewers.

#### Restoration -Kaplan & Kaplan, 1989

- Theory is a response to the belief that many people suffer from mental fatigue, decreased attention span, and irritability.
- Few people have a large supply of tranquility, serenity, or peace of mind.
- Natural settings are ideal restorative environments and may be experienced in actuality or through imagination.

#### Soft fascination -Kaplan & Kaplan, 1989, 1998

- A source of interest that keeps people from being bored and uses involuntary (effortless) attention.
- Allows the fatigued mind to rest or restore.
- Examples include viewing or being in a garden; watching bees and butterflies on a flower; seeing plants swaying gently in the breeze; viewing sunsets and sunrises; etc.

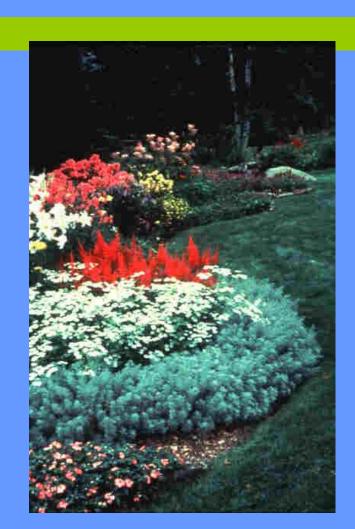
#### **Aromatherapy**

- Aroma- "a usually pleasing odor"-The New Merriam-Webster dictionary 1989
- Therapeutics- "a branch of medical science dealing with the use of remedies"-The New Merriam-Webster dictionary 1989
- Therapy- "treatment of bodily or mental disorders" - The New Merriam-Webster dictionary 1989

# Sissinghurst white garden



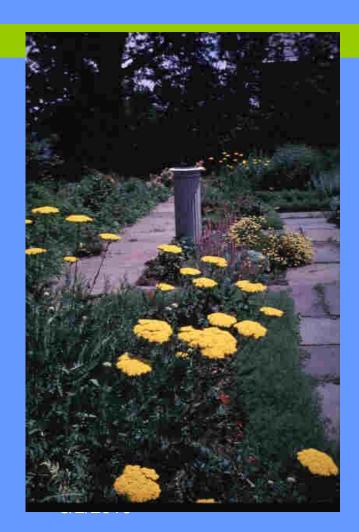
# Fred McGourtey's perennial border, Conn.



# Hidcote red border



# Herb Garden, New York



# Seabrook Island, SC



# Low-Maintenance herbs in the landscape

- Require intensive planning, design, selection, and installation
- Reduce pesticide usage
- Reduce maintenance
- Require less irrigation once established

#### Low-maintenance herbs

- Are specific to place and environment
- Prefer well-drained, moderately fertile soil
- Require ample moisture during establishment
- Prefer a pH of 5.5-7.0
- Perennials may need to be divided every 3 years (in many cases)

### Success in the landscape

- Full sun (six or more hours per day)
- Extremely well-drained soil
- Moderate, not high, soil fertility
- Frequent trimming/cutting back

### Success in the landscape

- Well-drained fertile soil
- Proper sun exposure
- Proper planting techniques
- Proper placement and spacing
- Mulch
- Proper maintenance

#### Soil preparation

- Test soil and follow laboratory recommendations for organic matter and fertilizer
- Till soil 15-18" deep
- Increase drainage and fertility by tilling organic matter (rotted manure, leaf mold peat moss, etc.) into soil
- Drainage is essential. Raised beds or berms may promote drainage. Sandy soils are ideal
- Avoid walking or driving on bed soil to prevent compation; especially wet soil

### Soil tips

- Drainage is essential for healthy plants
- Moderate fertility is the goal for healthy plants
- Planting too deep can cause crown rot, an ancient perennial hazard
- All plants require moisture, especially during drought, for best display
- Water deeply, but only when the soil is dry or almost dry
- Vegetative mulch increases soil organic matter content as it decomposes
- Avoid compacting soil

#### Proper sun exposure

- Plants requiring full sun should receive 6 or more hours of unobstructed sunlight per day
- With inadequate sunlight, plants may:
  - Bloom less or not at all
  - Stretch toward the light
  - Appear leggy
  - Exhibit faded foliar color

# Sun seeking plants





#### Proper sun exposure

- Plants requiring part shade should receive less than 5 hours of direct sunlight per day
- Prefer shade from afternoon sun
- Plants receiving too much sun may:
  - Exhibit foliar browning
  - Appear stunted
  - Show faded foliar color

# Sun scorched perennials

8/2/2010



Needs shade from sun



Proper shaded sun exposure

## Proper planting techniques

- Plant right plant in the right place.
- Fall planting is best for woody plants and perennials because it provides time for roots to become established before onset of summer heat and drought.
- Prepared beds foster root growth.
- Loosen roots before placing in planting hole.
- Crown of plant (root flare) should be level with the ground or slightly higher.

# Planting techniques (cont.)

- Eliminate air pockets by firmly pressing soil around roots
- Water and mulch



## Proper placement and spacing

- Mass planting is popular
- Space plants according to their mature widths and heights. Many perennials will be spaced 18" apart

# **Proper spacing**



## **Avoid overcrowding**

- Disease and insect problems
- Frequent division

#### Mulch

 Mulch should not touch the stem of the plant or cover the crown

## Proper maintenance

- Mulch
- Fertilize
- Dead-head/grooming/harvesting
- Weeding
- Watering
- Division

## Maintenance-vegetative mulch

- Maintain 3-5" of mulch to:
  - Reduce weed seed germination
  - Conserve soil moisture
  - Maintain uniform soil temperature
  - Increase soil organic matter content
  - Keep foliage clean

## **Maintenance-fertilizing**

- Follow soil test recommendations
- Use slow release nitrogen fertilizers when possible
- Place granular fertilizer 2-4" away from crowns of perennials and tree trunks
- Water fertilizer in deeply
- Water slowly to avoid leaching/runoff
- Wash all fertilizer granules off plant
- Do not apply fertilizer near a water body

## Slow release fertilizers



## Maintenancedeadheading/grooming/harvesting

- Remove spent flowers and dead flower stalks throughout growing season.
  - Seed production reduces flowering
- In early winter cut back dead foliage.
- In spring trim woody perennials back to encourage compact habit and fresh stems.
- Harvest tips (1/3 of stem) of leaf foliage frequently to stimulate new growth.

#### **Harvest** -leaves

- Prior to flowering harvest herb leaves in the early day after the dew has dried.
- Place in small bundles or on screens in a shaded location that receives ample air circulation.
- Once chip dry, place in an airtight container.



#### Harvest -flowers

- Clip flowers before they reach prime bloom.
- Store singly between paper and apply weight.
- Hang small bundles in a shaded location that receives ample air circulation.
- Place in a container and pour silica gel (craft store product) around bloom for precise drying.



## **Maintenance-weeding**

- Remove all weeds from flower beds as they:
  - Compete with desirable plants for water and nutrients
  - May harbor insect pests and disease organisms

### **Maintenance-watering**

- Water should reach the entire root zone
- Water slow and deep
- Allow soil to dry slowly between waterings
- Drip or soaker hoses work well in flower beds and borders

## Dangers of over-watering

- Consistently wet soil may lead to:
  - Crown-rot and root rot problems
  - Greater risk of soil compaction
  - Disregard for water quantity issues

#### **Maintenance-division**

- Most perennials need to be divided to maintain vigor
- Expect to divide most perennials at least every three years
- Typical symptoms of perennials needing division include:
  - Floppy foliage
  - Reduced flowering

# Perennial needing to be divided

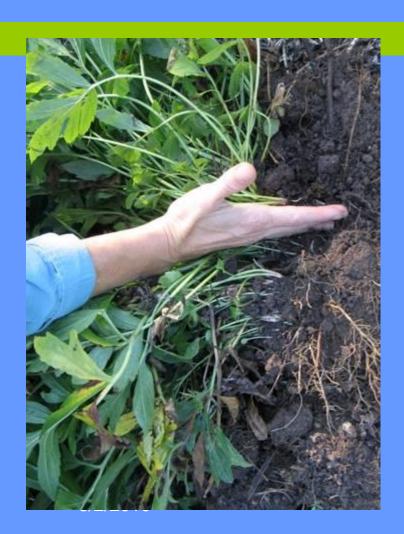


## Divide perennial-sever outer roots

Use sharp tools



# Find center



## Divide in two (if center is healthy)

Discard center if it is bare



Smaller portions take longer to achieve normal size and flower production

# Reset healthy roots and top



# Firm soil, add mulch, and water



#### **Societies & Associations**

- Herb Society of America
  - www.herbsociety.org
- International Herb Society
  - www.iherb.org
- Herb Growing and Marketing Network
  - www.herbworld.com

#### References

The American Horticultural Society A-Z **Encyclopedia of Garden Plants edited** by Christopher Brickell and Judith Zuk Herbaceous Perennial Plants by Allan **Armitage** The Herbal by John Gerard (1633) Manual of Herbaceous Ornamental Plants by Steven Still

#### References

Manual of Woody Landscape Plants by Michael Dirr

Miracle-Gro Guide to Growing Beautiful Flowers, editor Denny Schrock, chapter author Ellen Strother (Vincent)

A Modern Herbal by Maude Grieve Shakespeare's Flowers by Jessica Kerr



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