

Annuals and Perennials

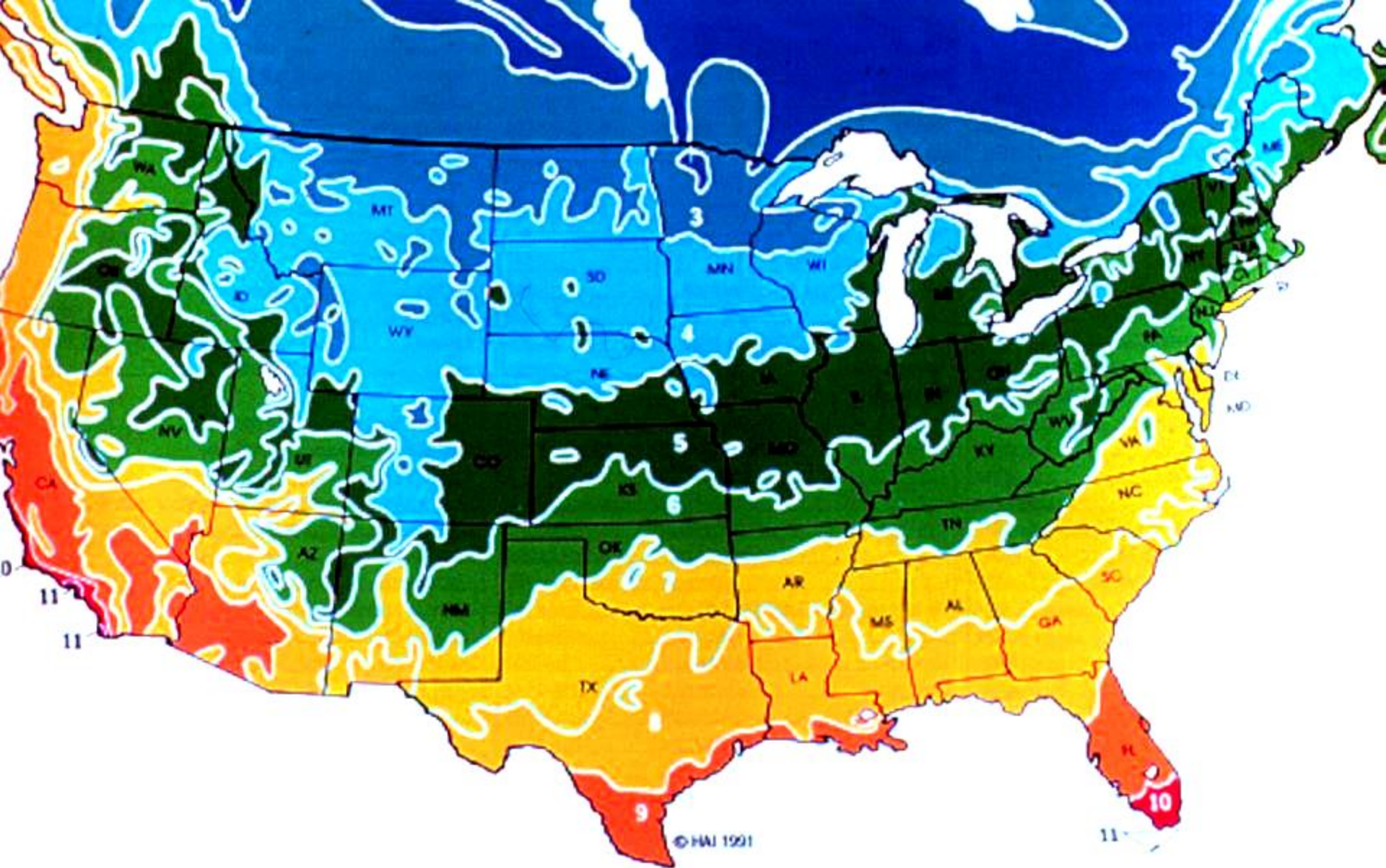
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RESEARCH & EXTENSION

University of Arkansas System





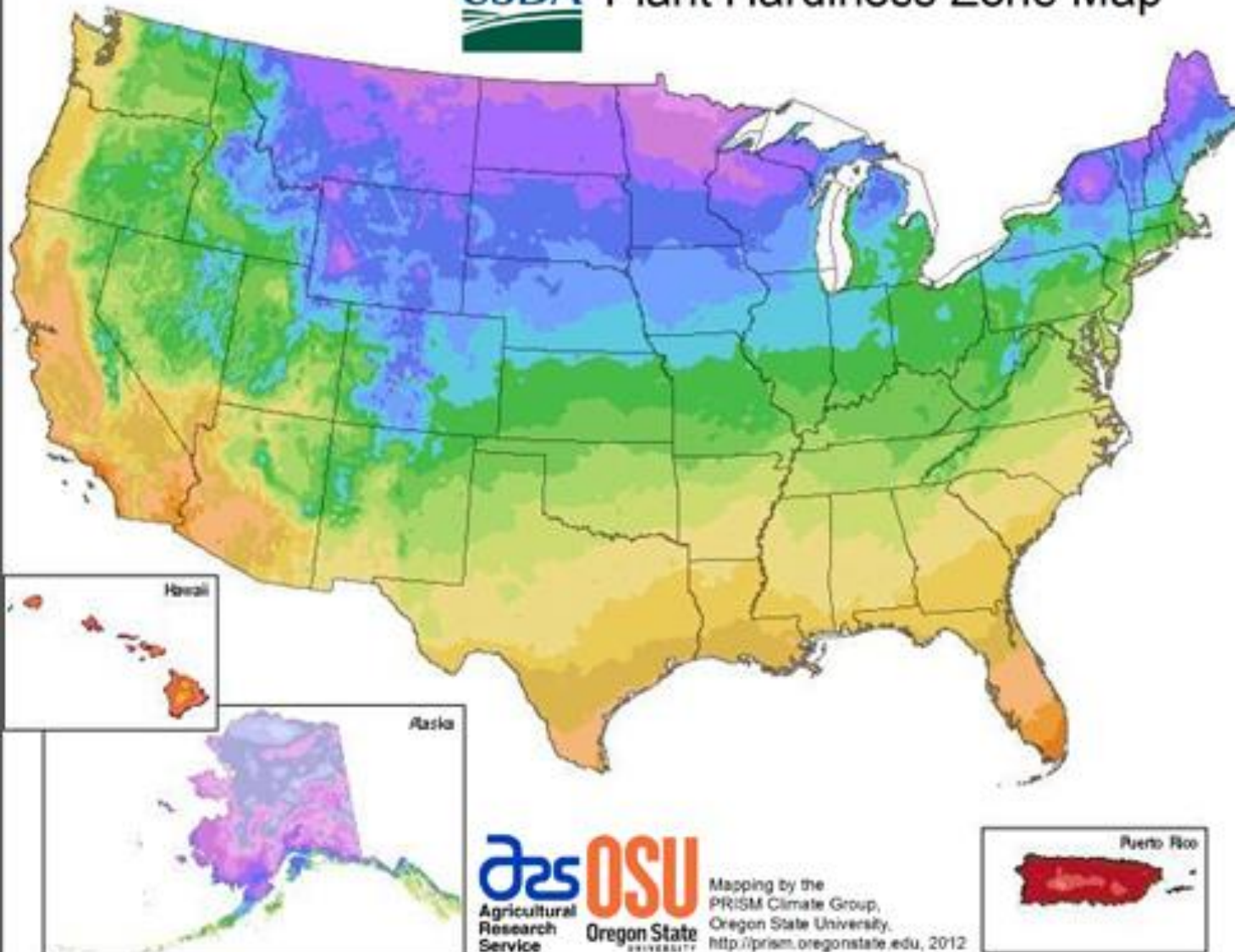
▲ Zone 1 — Below -50°F
 ▲ Zone 2 — -50° to -40°
 ▲ Zone 3 — -40° to -30°

▲ Zone 4 — -30° to -20°
 ▲ Zone 5 — -20° to -10°
 ▲ Zone 6 — -10° to 0°

▲ Zone 7 — 0° to 10°
 ▲ Zone 8 — 10° to 20°
 ▲ Zone 9 — 20° to 30°

▲ Zone 10 — 30° to 40°
 ▲ Zone 11 — Above 40°

USDA Plant Hardiness Zone Map



Average Annual Extreme Minimum Temperature 1976-2005

Temp (F)	Zone	Temp (C)
-60 to -55	1a	-51.1 to -48.3
-55 to -50	1b	-48.3 to -45.6
-50 to -45	2a	-45.6 to -42.8
-45 to -40	2b	-42.8 to -40
-40 to -35	3a	-40 to -37.2
-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
-10 to -5	6a	-23.3 to -20.6
-5 to 0	6b	-20.6 to -17.8
0 to 5	7a	-17.8 to -15
5 to 10	7b	-15 to -12.2
10 to 15	8a	-12.2 to -9.4
15 to 20	8b	-9.4 to -6.7
20 to 25	9a	-6.7 to -3.9
25 to 30	9b	-3.9 to -1.1
30 to 35	10a	-1.1 to 1.7
35 to 40	10b	1.7 to 4.4
40 to 45	11a	4.4 to 7.2
45 to 50	11b	7.2 to 10
50 to 55	12a	10 to 12.8
55 to 60	12b	12.8 to 15.6
60 to 65	13a	15.6 to 18.3
65 to 70	13b	18.3 to 21.1


OSU
 Agricultural Research Service
 Oregon State University
 Mapping by the PRISM Climate Group, Oregon State University, <http://prism.oregonstate.edu>, 2012

Annuals

Annuals are plants that complete their life cycle in one season.

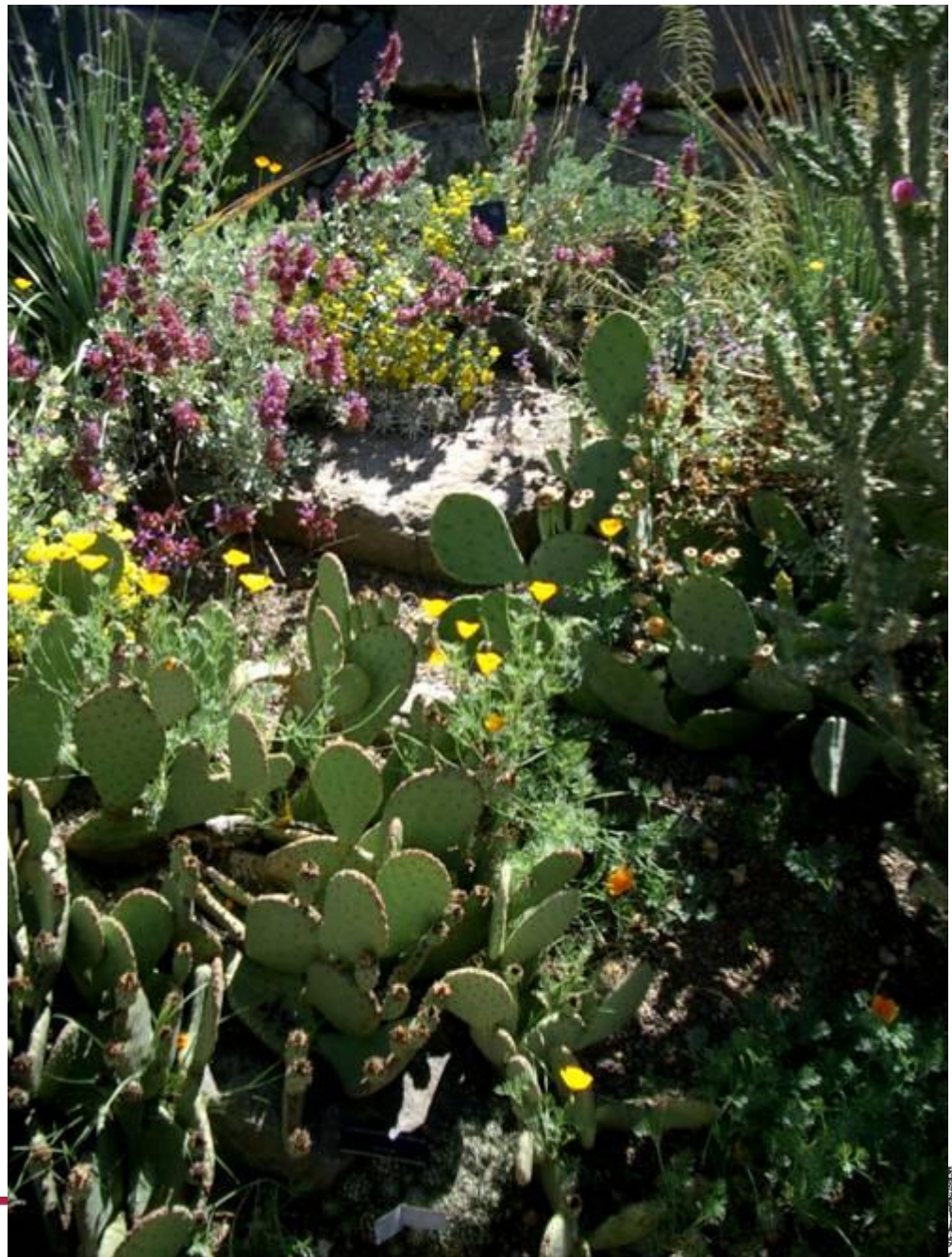
There are cool season annuals planted Sept – December

Warm season annuals planted April - June





- Match conditions
 - Wet/dry
 - Sun/shade



Think seasonality



Landscape fabric



Weed Barrier
Fabric

Mulch



Weed early and often



Warm Season Annuals

- Plant after the danger of frost is past – in south Arkansas after **April 1**, in central Arkansas after **April 10** and **April 20** in north Arkansas
- Space plants 12 to 18 inches apart
- Fertilize at planting, and periodically throughout season.
- Water as needed.

*Annuals for the
summer sun –
6 hours or more*



Angelonia – Summer Snapdragon



Calibrachoa – Million Bells

- Similar to petunia
 - Smaller blooms
- In protected spots it may overwinter.





Periwinkle or Annual Vinca

Catharanthus

- Loves the heat
- Glossy green foliage
- self-cleaning flowers.
- Stem canker problems more common with overhead watering.





'Cooler Series' Periwinkle

Celosia

Plumed Cockscomb



Crested

Cockscomb



Cuphea

BAT FACED CUPHEA



FLAMENCO





geranium



Ipomea batas 'Marguerite' and 'Blackie'
Sweet Potato Vine

Lantana

- Loves the heat of summer; tolerates drought
- Used as an annual
- May overwinter
- ‘New Gold’ self cleaning





Melampodium

- 1999 Arkansas Select winner
- Loves heat – a Texas native wildflower
- Self cleaning
- Depending on variety grows 8 to 18 inches tall



Penta



Petunias





Wave petunias are heavy feeders, so fertilize at least monthly to keep them blooming



Garden Zinnia

- Full sun plant that is mainly grown from seeds planted directly in the garden
- Can bloom in 5 weeks from seed
- Powdery mildew is a major disease problem.





Z. elegans x *Z. angustifolia*
(Profusion series)

Zahara Zinnias

Starlight Rose



Fire





*Flowers for the
Shade Garden*

- Grows best in shade but will take full sun
- Slow from seed so must be grown as a transplant
- Flowers in pink, red or white
- Pest free

Wax Begonia







Dragonwing
Begonia

Caladiums



Coleus

Henna



Versa Lime







Impatiens

New Guinea



celebrette

Fanfare Impatien



Impatiens Fusion Series



Torenia – Wishbone Plant





*Cool Season
Annuals*

Dianthus



Ornamental Kale/Cabbage plant in September for best show, or buy large plants



Peacock Flowering Kale



Mustard Giant Red



- Pansy



Violas

- Tend to take heat better than pansies.
- Can be planted earlier in the season and last longer.





Snapdragon

(*Antirrhinum majus*)

- Winter annual in zone 7 and south
- Used as a cut flower
- Usually will not make it through our hot summers and remain in bloom



Swiss Chard

'Bright Lights'



Herbaceous Perennials

- Most perennials are non-woody.
- Perennials have a season of dormancy.
- They have a season of blooms.
 - Bloom length can vary from 2 weeks to 4 months



Correct Perennial Planting is Critical for Success

- Plant in well drained soil
- Soil pH of 6 – 6.5 best
- Space most plants on 2' centers
- Avoid planting too deep
- Divide when plants become crowded -- usually every 3 to 5 years



Dividing Perennials

- Divide spring bloomers in the fall
- Divide fall bloomers in the spring
- Summer bloomers can be divided spring or fall.



Maintenance of perennials

- Water
- Fertilization needs vary
- Staking
- Deadheading



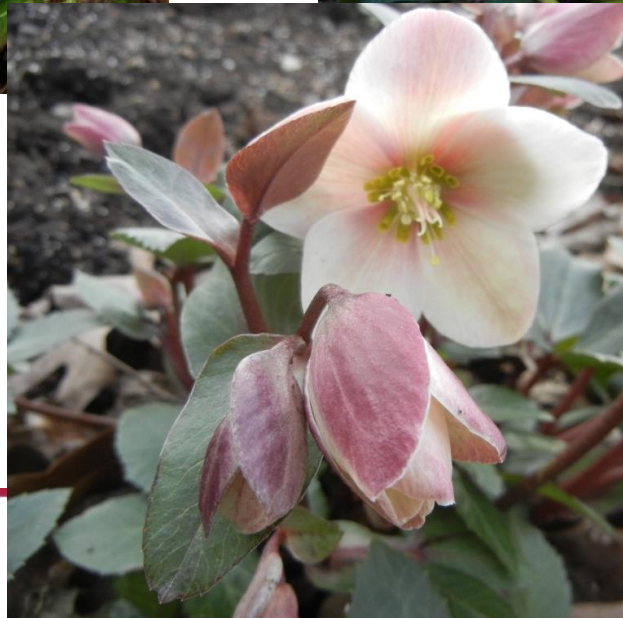
Perennial staking



Shade Perennials



Lenten Rose (*Helleborus orientalis*)



Bleeding Heart (*Dicentra spectabilis*)



Foxglove

Digitalis purpurea



Ferns



Holly Fern



Japanese Painted
Fern



Heuchera

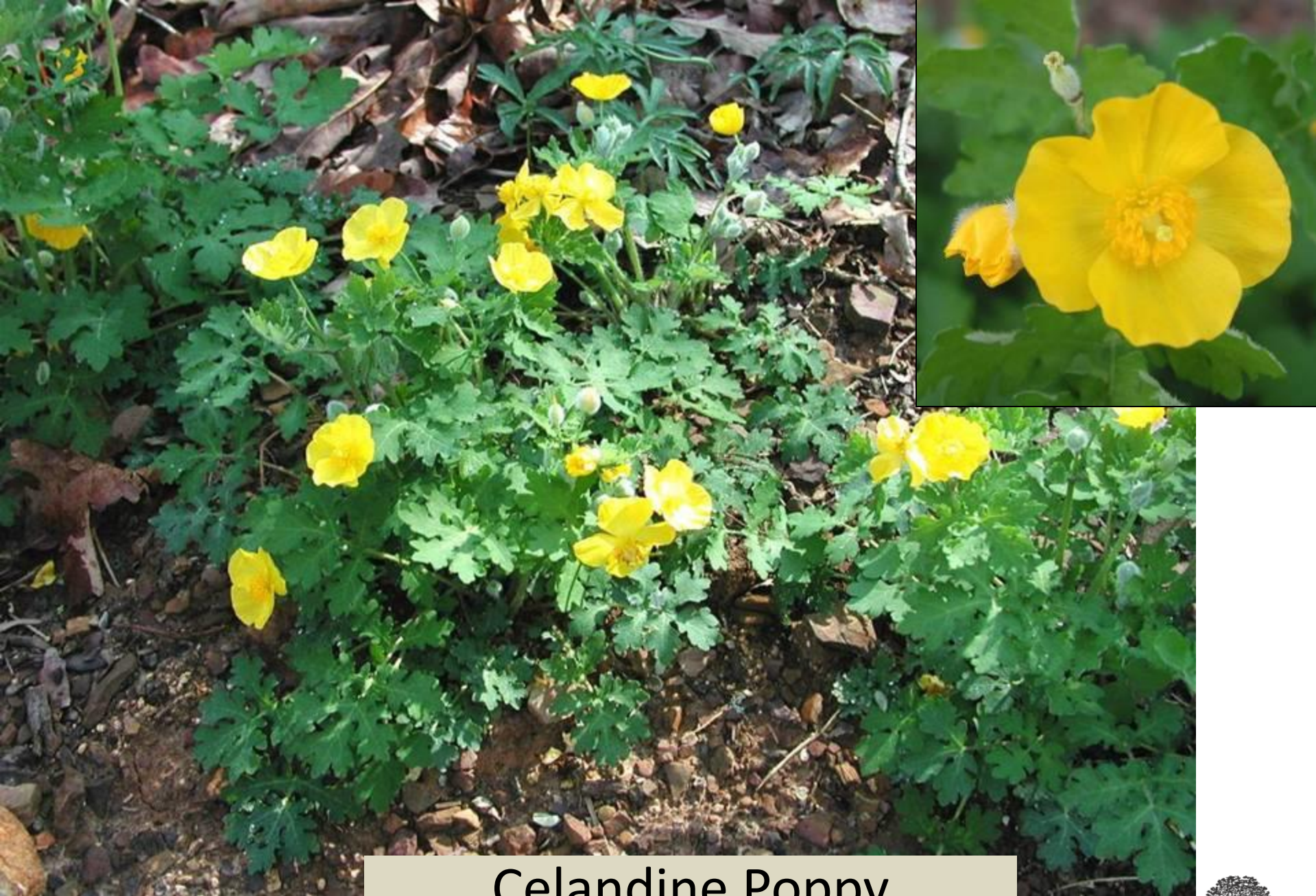
Need *H. villosa* in the parentage



'Peach Flambe'



'Citronelle'



Celandine Poppy
(*Stylophorum diphyllum*)

Hosta – Great Expectations





Solomon's Seal

Polygonatum odoratum

'Variegatum'



Perennial Begonias-

Begonia grandis





Toadlily (*Tricyrtis hirta*) blooms in October

Sun Perennials



Peony (Paeonia)



- Hundreds of selections
- Colors of red, white and pink
- Often live for 100 plus years
- Good soil preparation allows for earlier blooming
- Good cut flower



Candytuft (*Iberis sempervirens*)



Homestead Purple
Verbena



Hardy Hibiscus



Hibiscus coccineus
'Eruption'



Hibiscus moscheutos

Echinacea – Purple Coneflower



Sunrise



Magnus

'Summer Sky'



'Sundown'

Daylily

Hemerocallis sp.



Aesclepias tuberosa – Butterfly Weed



Black Eyed Susan (*Rudbeckia sp.*)

Goldsturm



'Prairie Sun'

Gaillardia – Blanket Flower

Arizona Sun



Sundance Bicolor



Gaillardia



'Fanfare'



'Oranges and Lemons'

Joe Pye Weed – ‘Little Joe’ *Eupatorium fistulosum*



Salvia

Salvia guaranitica

'Black and Blue'



Salvia greggii





Salvia leucantha
Mexican bush sage

Ornamental Grasses

Miscanthus



Pennisetum



Hakonechloa

Japanese Forest Grass

Feather Reed Grass

Calamagrostis x acutiflora



Mixed Border

