



TECHNICAL NOTES

U S Department of Agriculture

Natural Resources Conservation Service

TN – Plant Materials – 12-1-Arizona

September 2012

Plants for Enhancing Pollinator Habitat in Arizona

Introduction

This plant list was developed by The Xerces Society and the Natural Resources Conservation Service (NRCS), Tucson, Arizona-Plant Materials Center. This information can be applied to conservation practices such as Herbaceous Wind Barrier (603), Field Borders (386), Hedgerow Planting (422), Range Planting (550), and Tree/Shrub Establishment (612).

The list is organized by native forbs, tree and shrub species, riparian plants and non-native plants that can provide beneficial pollinator habitat. Within each growth type, the list is further organized by approximate bloom times (early, mid, late season). If you need assistance in developing a seed mix, please contact your local NRCS office.

This list is not complete and does not constitute a guarantee of reliability or quality of product. Some species in this list may be considered invasive. This list should be used as a reference tool for developing conservation alternatives. The Natural Resources Conservation Service does not endorse any supplier and no discrimination is intended by omission.





Table 1. Native Forbs for Pollinators

Common Name	Scientific Name	Region/Elevation Range (feet)	Flower Color	Mature Height (feet)	Annual, Perennial, or Biennial	Notes (including bloom time) Unless otherwise noted, these species are commercially available.
		I	Early Blo	ooming P	lants	
Desert sand verbena	Abronia villosa	Mojave, Sonoran <1500	purple	1	A	February-May
California poppy	Eschscholzia californica	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands <4500	orange	1.5	A/P	February-May. Low cost, widely adaptable.
Arizona lupine	Lupinus arizonicus	Mojave, Sonoran, Arizona Mountains <3000	blue	2	A	January-May
Coulter's lupine	Lupinus sparsiflorus	Mojave, Sonoran, Arizona Mountains, Sky Islands <4500	blue	1.5	A	January-May
Hollowleaf annual lupine	Lupinus succulentus	Arizona Mountains 1500-4500	blue	3	A	March-April
Firecracker penstemon	Penstemon eatonii	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands 2000-7000	red	2	Р	February-June
Parry's beardtongue	Penstemon parryi	Sonoran, Arizona Mountains, Sky Islands 1500-5000	pink	4	P	March-April
Desertbells	Phacelia campanularia	Mojave, Sonoran <5200	blue	1.5	A	February-April
Distant phacelia	Phacelia distans	Mojave, Sonoran, Arizona Mountains, Sky Islands 1000-4000	purple	2.5	A	February-May





Common Name Lacy phacelia Chia	Scientific Name Phacelia tanacetifolia Salvia columbariae	Region/Elevation Range (feet) Sonoran, Sky Islands <6000 Mojave, Sonoran, Arizona Mountains, Sky Islands <3500	Flower Color purple blue	Mature Height (feet)	Annual, Perennial, or Biennial A	Notes (including bloom time) Unless otherwise noted, these species are commercially available. March-May. Few documented occurrences within the state, but is highly attractive to pollinators and easy to establish. March-May. Commercial availability is currently limited.
Globemallow	Sphaeralcea ambigua	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands <3500	orange	3	Р	Potentially flowers several times during the year; blooms most heavily in the spring.
		Mid	-Season	Bloomin	g Plants	
Spider milkweed	Asclepias asperula	Colorado Plateau, Arizona Mountains, Sky Islands 2500-8200	green and purple	4	Р	April-September. Commercial seed sources currently limited. Host plant for queen and monarch butterflies.
Showy milkweed	Asclepias speciosa	Arizona Mountains 5000-8500	pink and white	4	P	June-August. Host plant for queen and monarch butterflies.
Desert marigold	Baileya multiradiata	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands <5000	yellow	3	P	March-November
New Mexico thistle	Cirsium neomexicanum	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands 1000-6500	white, pink, or purple	10	В	March-September. Commercially available in small quantities.
Yellow bee plant	Cleome lutea	Colorado Plateau, Arizona Mountains, Sky Islands 2000-6000	yellow	4	A	May-June. Commercially available in small quantities.
White prairie clover	Dalea candida	Colorado Plateau, Arizona Mountains, Sky Islands 3000-7000	white	2	P	May-September
Spreading fleabane	Erigeron divergens	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands 1000-9000	white	2	Р	February-October. Greater availability of container stock than seed.





Common Name	Scientific Name	Region/Elevation Range (feet)	Flower Color	Mature Height (feet)	Annual, Perennial, or Biennial	Notes (including bloom time) Unless otherwise noted, these species are commercially available.
Indian blanket	Gaillardia pulchella	Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands 3500-5500	red/ yellow	2	A/P/B	April-September
American licorice	Glycyrrhiza lepidota	Colorado Plateau, Arizona Mountains 2000-7000	white	3	Р	May-July
Common sunflower	Helianthus annuus	Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands <7000	yellow	10	A	March-October
Salt heliotrope	Heliotropium curassavicum	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands <5000	white	2	Р	Flowers throughout the year. Commercial availability is limited.
Lewis flax	Linum lewisii	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands 3500-9500	blue	2.5	Р	March-September. Available at low cost, but is a less attractive pollen and nectar source than other native forbs.
Shortstem lupine	Lupinus brevicaulis	Mojave, Colorado Plateau, Arizona Mountains, Sky Islands 3000-7000	blue	0.5	A	April-July. Commercial availability is limited.
Bigelow's tansyaster	Machaeranthera bigelovii	Colorado Plateau, Arizona Mountains, Sky Islands 3000-7000	purple	4	В	March-November. Commercial availability may be limited.
Adonis blazingstar	Mentzelia multiflora	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands <2300	yellow	3	P/B	Potentially blooms from spring to fall. Commercial availability may be limited.
Wild bergamot	Monarda fistulosa	Colorado Plateau, Arizona Mountains, Sky Islands 5000-8000	purple	3	Р	May-September
Palmer's penstemon	Penstemon palmeri	Mojave, Colorado Plateau, Arizona Mountains, Sky Islands 3500-6500	pink	5	Р	March-September





Common Name	Scientific Name	Region/Elevation Range (feet)	Flower Color	Mature Height (feet)	Annual, Perennial, or Biennial	Notes (including bloom time) Unless otherwise noted, these species are commercially available.
Rocky Mountain penstemon	Penstemon strictus	Colorado Plateau, Arizona Mountains 7000-8000	purple	3	P	June-July
Hiddenflower phacelia	Phacelia cryptantha	All regions, but absent from the northeastern corner of the state. 2500-4500	purple	1.5	A	April-June. Commercial availability may be limited.
		Mid-L	ate Seas	on Bloom	ning Plants	
Common yarrow	Achillea millefolium	Colorado Plateau, Arizona Mountains, Sky Islands 5500-11,500	white	1	P	June-September. Less attractive to bees than to beneficial insects such as flies and wasps.
Broadleaf milkweed	Asclepias latifolia	Colorado Plateau, Arizona Mountains, Sky Islands 2500-7000	green and white	3	P	June-September. Commercial seed sources currently limited, host plant for queen and monarch butterflies.
Mojave milkweed	Asclepias nyctaginifolia	Mojave, Sonoran, Arizona Mountains, Sky Islands 1600-6500	green and white	2	P	April-October. Few commercial seed sources, host plant for queen and monarch butterflies.
Rush milkweed	Asclepias subulata	Mojave, Sonoran 200-2800	yellow and green	10	P	April-October. Potentially blooms several times per year. Host plant for queen and monarch butterflies. Greater availability of container stock than seed.
Fireweed	Chamerion angustifolium	Colorado Plateau, Arizona Mountains, Sky Islands 7000-11,500	pink	5	A	July-September. Commercially available in small quantities.
Rocky Mountain beeplant	Cleome serrulata	Colorado Plateau, Arizona Mountains, Sky Islands 4500-7000	pink	3	A/P	June-September
Blanketflower	Gaillardia aristata	Colorado Plateau <8200	red/yello w	3	P	June-November. Few documented occurrences within the state, but is highly attractive to pollinators, and easy to establish.





Common Name	Scientific Name	Region/Elevation Range (feet)	Flower Color	Mature Height (feet)	Annual, Perennial, or Biennial	Notes (including bloom time) Unless otherwise noted, these species are commercially available.
Curlycup gumweed	Grindelia squarrosa	Colorado Plateau, Arizona Mountains 4000-7500	yellow	3.5	P/B	July-September
Goldeneye	Heliomeris multiflora	Colorado Plateau, Arizona Mountains, Sky Islands 4500-9500	yellow	2	P	May-October. Few commercial seed sources.
Spanish clover	Lotus purshianus	Arizona Mountains, Sky Islands 5000-7500	white	2	P	July-October
Silvery lupine	Lupinus argenteus	Mojave, Colorado Plateau, Arizona Mountains, Sky Islands 7000-10,000	blue	3	P	June-October
Bluebonnet lupine	Lupinus palmeri	Mojave, Colorado Plateau, Arizona Mountains, Sky Islands 4000-8000	blue	2	Р	April-October. Commercial availability may be limited.
Lemon beebalm	Monarda citriodora	Arizona Mountains, Sky Islands 3000-9600	purple	3	A/P/B	July-October
Evening primrose	Oenothera elata	Colorado Plateau, Arizona Mountains, Sky Islands 3500-9500	yellow	3	Р	July-October
Upright coneflower	Ratibida columnifera	Colorado Plateau, Arizona Mountains 5000-7500	orange	1.5	Р	June-November. Commercially available, low cost, widely adaptable.
Desert senna	Senna covesii	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands 1000-3000	yellow	2	Р	April-October
Canada goldenrod	Solidago canadensis	Colorado Plateau, Arizona Mountains, Sky Islands 3000-8500	yellow	6	Р	July-August. Sources of regionally-produced seed may be limited.





Common Name Missouri goldenrod White prairie	Scientific Name Solidago missouriensis Symphyotrichum	Region/Elevation Range (feet) Colorado Plateau, Arizona Mountains, Sky Islands 5000-9000 Colorado Plateau, Arizona	Flower Color yellow white	Mature Height (feet) 2.5	Annual, Perennial, or Biennial P	Notes (including bloom time) Unless otherwise noted, these species are commercially available. June-August. Commercial availability may be limited. July-September. Commercial availability may be
Lanceleaf aster	Symphyotrichum lanceolatum	Mountains, Sky Islands 600-7900 Colorado Plateau, Arizona Mountains, Sky Islands <6560	white	5	P	July-August. Commercial availability may be limited.
Cow's clover	Trifolium wormskioldii	Sonoran, Colorado Plateau, Arizona Mountains <10,000	pink	3.5	A/P	May-October
Desert zinnia	Zinnia acerosa	Sonoran, Arizona Mountains, Sky Islands 2500-5000	white	1	P	April-October
Rocky Mountain zinnia	Zinnia grandiflora	Colorado Plateau, Arizona Mountains, Sky Islands 4000-6500	yellow	1	Р	May-October. Commercially available in small quantities.
		Late	e Season	Bloomin	g Plants	
Western goldentop	Euthamia occidentalis	Colorado Plateau, Arizona Mountains 4500-7000	yellow	6	Р	August-September. Prefers moist to wet soils.
Threenerve goldenrod	Solidago velutina	Colorado Plateau, Arizona Mountains, Sky Islands 2000-8500	yellow	2.5	P	June-October
Wright's goldenrod	Solidago wrightii	Arizona Mountains, Sky Islands 3500-9500	yellow	3.5	P	August-November. Commercial availability may be limited.
Leafy aster	Symphyotrichum foliaceum	Colorado Plateau, Arizona Mountains 7500-9500	purple	2	P	August-September. Commercial availability may be limited.





Table 2. Native Shrubs and Trees for Pollinators

Common Name	Scientific Name	Region/Elevation Range (feet)	Flower Color	Mature Height (feet)	Notes (including bloom time)
		Early	Bloomi	ng Plants	s
Utah serviceberry	Amelanchier utahensis	Colorado Plateau, Arizona Mountains 2000-7500	white	15	April-May
Desert honeysuckle	Anisacanthus thurberi	Sonoran, Arizona Mountains, Sky Islands 2500-5500	orange	8	Blooms throughout the year, but peak bloom is in the spring.
Pointleaf manzanita	Arctostaphylos pungens	Colorado Plateau, Arizona Mountains, Sky Islands 3500-8000	white/pin k	8	February-May
Mulefat	Baccharis salicifolia	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands <3000	white	13	March-October. Potentially blooms as early as January.
Rio Grande butterfly bush	Buddleja sessiliflora	Sonoran, Sky Islands <3000	yellow	6	February-April
Fairy duster	Calliandra eriophylla	Sonoran, Arizona Mountains, Sky Islands <5000	pink	3	February-May
Desert ceanothus	Ceanothus greggii	Colorado Plateau, Arizona Mountains, Sky Islands 3000-7000	white	7	March-May. Attractive to a wide diversity of beneficial insects (bees, predator and parasitoid wasps, flies, and butterflies).
Santa Catalina prairie clover	Dalea pulchra	Sonoran, Arizona Mountains, Sky Islands 2500-5000	purple	4	February-May
Eastern Mojave buckwheat	Eriogonum fasciculatum	Mojave, Sonoran, Arizona Mountains 1000-4500	white/pin k	3	March-June





Common Name	Scientific Name	Region/Elevation Range (feet)	Flower Color	Mature Height (feet)	Notes (including bloom time)
Creosote bush	Larrea tridentata	Mojave, Sonoran, Arizona Mountains, Sky Islands <5000	yellow	6	Potentially blooms several times per year; peak bloom is in spring.
Shrubby deervetch	Lotus rigidus	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands <5500	yellow	5	February-May
Wolfberry	Lycium exsertum	Mojave, Sonoran, Colorado Plateau, Arizona Mountains <4000	purple	13	January-February
Blue palo verde	Parkinsonia florida	Mojave, Sonoran, Arizona Mountains, Sky Islands <3500	yellow	30	March-May
Yellow palo verde	Parkinsonia microphylla	Mojave, Sonoran, Arizona Mountains, Sky Islands <4000	yellow	25	April-May
Velvet mesquite	Prosopis velutina	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands <5500	yellow	20	March-May
Chokecherry	Prunus virginiana	Colorado Plateau, Arizona Mountains, Sky Islands 4500-8000	white	20	April-June
Antelope bitterbrush	Purshia tridentata	Colorado Plateau, Arizona Mountains 4000-9000	white	10	April-June
Skunkbush sumac	Rhus trilobata	All regions, but not common in the Sonoran Desert 2500-7500	yellow	4	March-June.
Golden currant	Ribes aureum	Colorado Plateau, Arizona Mountains, Sky Islands 4000-6000	yellow	10	March-June. Primary alternate host of white pine blister rust (<i>Cronartium ribicola</i>), do not plant adjacent to susceptible trees: limber pine (<i>Pinus flexilis</i>) and bristlecone pine (<i>Pinus aristata</i>).





Common Name	Scientific Name	Region/Elevation Range (feet)	Flower Color	Mature Height (feet)	Notes (including bloom time)
Bebb willow	Salix bebbiana	Colorado Plateau, Arizona Mountains 8000-11,000	yellow	30	April-June. Prefers sites with adequate moisture. Male plants are an important pollen source for early emerging bees.
Narrowleaf willow	Salix exigua	All regions, but not common in the Sonoran Desert <9500	yellow	15	March-April. Is both drought resistant and tolerant of flooding. Male plants are an important pollen source for early emerging bees.
Goodding's willow	Salix gooddingii	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands <7000	yellow	40	March-April. Suitable for planting in riparian zones. Male plants are an important pollen source for early emerging bees.
		Mid Sea	son Bloo	ming Pla	ants
False indigo	Amorpha fruticosa	Colorado Plateau, Arizona Mountains, Sky Islands 2500-6500	purple	6	May-June. Prefers moist soils adjacent to riparian areas.
Fendler's ceanothus	Ceanothus fendleri	Colorado Plateau, Arizona Mountains, Sky Islands 5000-10,000	white	7	April-October
Desert willow	Chilopsis linearis	Mojave, Sonoran, Arizona Mountains, Sky Islands <4000	pink	40	April-August
Fishhook barrel cactus	Ferocactus wislizenii	Sonoran, Sky Islands 1500-4500	red, orange, yellow	10	June-August
Desert lavender	Hyptis emoryi	Mojave, Sonoran, Arizona Mountains, Sky Islands <5000	purple	10	Blooms throughout the year.
Chuparosa	Justicia californica	Sonoran 1000-4000	red	4	Blooms throughout most of the year.
Rough menodora	Menodora scabra	All regions, but uncommon in the northeastern corner of the state. 1500-7500	yellow	2	March-September





Common Name	Scientific Name	Region/Elevation Range (feet)	Flower Color	Mature Height (feet)	Notes (including bloom time)
Ironwood	Olneya tesota	Sonoran <2500	white/ pink	30	May-June
New Mexico locust	Robinia neomexicana	Colorado Plateau, Arizona Mountains, Sky Islands 4000-8500	pink	25	May-July
Woods' rose	Rosa woodsii	Colorado Plateau, Arizona Mountains, Sky Islands 1400-8000	pink	5	May-July
Fiveneedle pricklyleaf	Thymophylla pentachaeta	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands 1500-5600	yellow	1	March-October
		Late Sea	son Bloo	ming Pla	ants
Emory baccharis	Baccharis emoryi	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands 500-5000	white	10	September-November
Rubber rabbitbrush	Ericameria nauseosa	Colorado Plateau, Arizona Mountains, Sky Islands 450-8000	yellow	6	July-October
James' buckwheat	Eriogonum jamesii	Colorado Plateau, Arizona Mountains, Sky Islands 5000-9000	white or yellow	2	July-October
Wright's buckwheat	Eriogonum wrightii	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands 3000-7000	white/ pink	3	June-October
Yellow bells	Tecoma stans	Sonoran, Sky Islands 3000- 5500	yellow	5	May-October





Table 3. Native Riparian Plants for Pollinators

Common Name	Scientific Name	Region	Flower Color	Mature Height	Notes
				(feet)	
			Forbs	S	
Showy milkweed	Asclepias speciosa	Arizona Mountains	pink and white	4	Perennial; monarch and queen butterfly host plant
Fireweed	Chamerion angustifolium	Colorado Plateau, Arizona Mountains, Sky Islands	pink	5	Annual
Western goldentop	Euthamia occidentalis	Colorado Plateau, Arizona Mountains	yellow	6	Perennial
Evening primrose	Oenothera elata	Colorado Plateau, Arizona Mountains, Sky Islands	yellow	3	Perennial
			Shrub	S	
False indigo	Amorpha fruticosa	Colorado Plateau, Arizona Mountains, Sky Islands	purple	6	
Emory baccharis	Baccharis emoryi	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands	white	10	
Mulefat	Baccharis salicifolia	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands	white	13	
Chokecherry	Prunus virginiana	Colorado Plateau, Arizona Mountains, Sky Islands	white	20	
Woods' rose	Rosa woodsii	Colorado Plateau, Arizona Mountains, Sky Islands	pink	5	





Common Name	Scientific Name	Region	Flower Color	Mature Height (feet)	Notes
Willow	Salix spp.	Mojave, Sonoran, Colorado Plateau, Arizona Mountains, Sky Islands	yellow	35	Some species grow as trees rather than shrubs.





Table 4. Non-native Plants for Pollinators

Common Name	Scientific Name	Flower Color	Mature Height (feet)	Annual, Perennial, or Biennial	Notes
Early Bloom					
Farewell-to- spring	Clarkia amoena	pink	3	A	Low cost seed.
Baby blue eyes	Nemophila menziesii	blue	1	A	Low cost seed.
Mid-Season Bloom					
Lavender	Lavandula spp.	purple	3	P	Attracts primarily honey bees and short-tongued bumble bees.
Oregano	Origanum spp.	pink	1	Р	Attracts primarily honey bees and short-tongued bumble bees.
Rosemary	Rosmarinus officinalis	blue	3	P	Attracts primarily honey bees and short-tongued bumble bees.
Sweet clover	Melilotus officinalis	yellow	2	В	Considered weedy in some areas, consult regional plant materials specialists before planting.
Hyssop	Hyssopus officinalis	blue	2	Р	Attracts primarily honey bees and short-tongued bumble bees.
			Lat	e Season Bloom	
Cosmos	Cosmos bipinnatus	white, pink, red	5	A	Attracts primarily small generalist bee species, such as sweat bees; usually spring seeded.
Russian sage	Perovskia atriplicifolia	blue	5	P	Attracts primarily honey bees, and short-tongued bumble bees; salt and drought tolerant after establishment.
Mexican sunflower	Tithonia rotundifolia	orange	6	A	Usually spring seeded.





Seed Vendors

Granite Seed Company 1697 West 2100 North Lehi, UT 84043 801.768.4422 www.graniteseed.com

Desert Seed Source P.O. Box 1479 Oracle, AZ 85623 520.896.0671 desertseed@theriver.com

Native American Seed Mail Order Station 3791 N US Hwy 377 Junction, TX 76849 800.728.4043 www.seedsource.com Flagstaff Native Plant & Seed 400 E. Butler Avenue Flagstaff, AZ 86001 928.773.9406 http://www.nativeplantandseed.com/

Phoenix Desert Nursery/The Cactus Store 3525 E. Southern Ave Phoenix, AZ 85040 602.305.9275 www.phoenixdesertnursery.com P.O. Box 27751 Tempe, AZ 85285 602.276.3536

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Wildseed Farms
100 Legacy Drive
P.O. Box 3000
Fredericksburg, TX 78624
800.848.0078
www.wildseedfarms.com

For a listing of additional vendors please view the Tucson Plant Materials Center Seed Vendor List at www.plant-materials.nrcs.usda.gov/pubs/azpmctn8030.pdf.

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