

## **Mission To Grow: Best Practices for Native Plant Landscaping**

Using native plants in your garden provides a multitude of benefits for people and wildlife, including water conservation, supporting birds and pollinators, cooling the environment, and aesthetic beauty.

There are many ways you can maximize those benefits in your space, and this document aims to equip you with the knowledge of best practices to maintain your garden.

### **Water Conservation Best Practices**

- Follow the City of Mission [Water Restrictions](#)
  - Violations may result in a \$50.00 to \$200.00 fine
- Water your plants as needed, rather than following a rigid irrigation schedule
  - If your plants are wilted in cooler morning hours, they may need supplemental irrigation
  - Use a soil moisture sensor to check water levels in your garden soil
- Irrigate in the evening or at night to avoid evaporative water loss
  - Watering on hot, windy days limits how well water infiltrates your garden soil and is water inefficient
- Use drip irrigation or sprinklers that form large water droplets, or hand water with a hose
  - Misting sprinklers tend to lose water to the wind more easily
- Use an organic mulch for your garden beds
  - Wood chip, bark, or other organic mulch not only helps trap moisture in the soil, but also eventually breaks down and increases your soil organic matter and provides compost for your plants.

### **Cues for Care (based on [Wild Ones guidelines](#))**

- Mown or trimmed edges
  - Maintaining mown groundcover or grass strips along pathways, driveways, or sidewalks helps indicate that your yard is a cared-for and purposeful space.
  - Using edgers – whether stone, plastic, or wood – helps visually delineate garden beds.

- Maintain open areas of groundcover plants, subshrubs, mulch, or other landscaping materials (rocks, pavers, etc.) that amount to around 30% of your front yard area.
  - Avoid obstruction of views or lines of sight
- Trimmed shrubs and trees (see [Texas A&M Agrilife Extension](#) and [Forest Service](#) recommendations)
  - Keep your garden beds trimmed to prevent shrubs or tree branches from sprawling over garden boundaries.
- Design your garden with discernable patterns and garden structure
  - Plant shrubs, wildflowers, groundcovers, or cacti along the foundation of your home.
  - Avoid blocking your windows, doors, or obstructing key lines of vision for you, your neighbors, and vehicles.
  - Plant clusters of plants in a balanced pattern over your yard. For example:
    - Islands: A larger shrub or tree in the center, surrounded by smaller plants.
    - Hedges: A series of plants of similar size and shape planted in a row.
    - Groundcovers: Low-growing plants forming a mat over the ground
  - Include plant species that have bright flowers and bloom often.
    - See recommended plant list for ideas.
- Include bird feeders, bird baths, or other designed wildlife homes in your garden.
  - See [Cornell Lab of Ornithology website](#) for bird feeding recommendations.

### **Wildlife-friendly Practices**

- Avoid using pesticides and herbicides in your garden
  - Pesticides are often non-specific, meaning that they can spread to beneficial animals as well.
- Don't heavily prune your plants while they are flowering or fruiting
  - Leave the birds and butterflies food resources

| Type   | Common Name                            | Botanical Name                  | Flower Color       | Comments                                                      |
|--------|----------------------------------------|---------------------------------|--------------------|---------------------------------------------------------------|
| TREES  |                                        |                                 |                    |                                                               |
|        | Anacua; Sandpaper Tree                 | <i>Ehretia anacua</i>           | White              | Shade tree; fruit edible                                      |
|        | Brasil                                 | <i>Condalia hookeri</i>         | Green              | Shrubby; edible fruit                                         |
|        | Cedar Elm                              | <i>Ulmus crassiflora</i>        | White              | Requires moist area                                           |
|        | Coma                                   | <i>Sideroxylon celastrinum</i>  | White              | Shrubby; edible fruit                                         |
|        | Guajillo                               | <i>Senegalia berlandieri</i>    | White              | Small tree; stays a dark shade of green all year              |
|        | Honey Mesquite                         | <i>Prosopis glandulosa</i>      | White/light yellow | Shade tree; fruit edible                                      |
|        | Lead Tree; Tepeguaje                   | <i>Leucaena pulverulenta</i>    | White              | Fast-growing and tall                                         |
|        | Limoncillo                             | <i>Esenbeckia berlandieri</i>   | White              |                                                               |
|        | Mexican Caesalpinia                    | <i>Caesalpinia mexicana</i>     | Yellow             | Host for Curve-Wing Metalmark butterfly                       |
|        | Montezuma bald cypress                 | <i>Taxodium mucronatum</i>      | None               | Requires moist area                                           |
|        | Persimmon; Chapote                     | <i>Diospyros texana</i>         | White              | Edible fruit in female trees                                  |
|        | Retama; Lluvia de Oro                  | <i>Parkinsonia aculeata</i>     | Yellow             | Long leaf stem with tiny leaflets                             |
|        | Rio Grande Ash                         | <i>Fraxinus berlandieriana</i>  | White              | Shade tree                                                    |
|        | Sabal Palm                             | <i>Sabal mexicana</i>           | White              | If left untrimmed, provides shelter for bats and other life   |
|        | Spanish Dagger; Palma Pita             | <i>Yucca treculeana</i>         | White              | Flowers edible; pollinated by small moth                      |
|        | Spiny Hackberry; Granjeno              | <i>Celtis pallida</i>           | Yellow/white       | Fruit edible                                                  |
|        | Tenaza                                 | <i>Pithecellobium pallens</i>   | White              | Fragrant blooms; butterfly nectar source                      |
|        | Texas Ebony; Ebano                     | <i>Ebenopsis ebano</i>          | White              | Sulfur                                                        |
|        | Texas Huisache                         | <i>Vachella farnesiana</i>      | Yellow             | Fragrant blooms                                               |
|        | Texas Palo Verde                       | <i>Cercidium texanum</i>        | Yellow             | Similar flower to Retama; prominent green bark                |
|        | Vasey's Adelia                         | <i>Adelia vaseyi</i>            | White              | Shrubby tree; host for Mexican Bluewing butterfly             |
|        | West soapberry; Jaboncillo             | <i>Sapindus drummondii</i>      | White              | Leaves change color in the fall                               |
|        | Wild Olive; Anacahuita                 | <i>Cordia boissieri</i>         | White              | Big white flowers, small tree                                 |
| SHRUBS |                                        |                                 |                    |                                                               |
|        | Berlandier's Fiddlewood                | <i>Citharexylum berlandieri</i> | White              | Leaves turn orange when water-stressed                        |
|        | Berlandier's Wolfberry                 | <i>Lycium berlandieri</i>       | White              | Edible berries                                                |
|        | Black Brush                            | <i>Acacia rigidula</i>          | White              |                                                               |
|        | Brush Holly; Coronillo                 | <i>Xylosma flexuosa</i>         | White              | Fruits good source for birds                                  |
|        | Brushland Lantana                      | <i>Lantana achyranthifolia</i>  | White              |                                                               |
|        | Common Sunflower; Mirasol              | <i>Helianthus annuus</i>        | Yellow             | Seeds eaten by goldfinches                                    |
|        | Cow Pen Daisy                          | <i>Verbesina enceloides</i>     | Yellow             | Host for Bordered Patch butterfly                             |
|        | Crucita                                | <i>Chromolaena odorata</i>      | Purple             | Host for Rounded Metalmark and other butterflies              |
|        | Desert Yaupon; Capul                   | <i>Schaefferia cuneifolia</i>   | White              |                                                               |
|        | Elbow Bush                             | <i>Forestiera angustifolia</i>  | White              | Thornless; food for wildlife                                  |
|        | Flor De San Juan; Woolly Rocktrumpet   | <i>Telosiphonia lanuginosa</i>  | White              | Fragrant flowers; pollinated by hawk moths                    |
|        | Hairy Wedelia                          | <i>Wedelia acapulcensis</i>     | Yellow             | Host for Bordered Patch butterfly                             |
|        | Heart Leaf Hibiscus; Tulipán Del Monte | <i>Hibiscus martianus</i>       | Red                | Likes shade; requires little water; red flower                |
|        | Hogplum                                | <i>Colubrina texensis</i>       | White              |                                                               |
|        | Low Croton                             | <i>Croton humilis</i>           | White              | Crotons attract butterflies                                   |
|        | Manzanita; Barbados Cherry             | <i>Malpighia glabra</i>         | Red                | Edible berries, attracts specialist bees                      |
|        | Mexican Oregano                        | <i>Lippia graveolens</i>        | White              | Leaves used in cooking like oregano                           |
|        | Mission Fiddlewood                     | <i>Citharexylum spathulatum</i> | White              |                                                               |
|        | Oreja de Ratón                         | <i>Bernardia myricifolia</i>    | White              | Host for Lacy's Scrub-hairstreak butterfly                    |
|        | Palafoxia                              | <i>Palafoxia texana</i>         | Pink               | Annual; attracts butterflies; seeds eaten by lesser goldfinch |
|        | Pigeon Berry                           | <i>Rivina humilis</i>           | White              | Shade tolerant                                                |
|        | Prairie Milkweed                       | <i>Asclepias oenotheroides</i>  | White              | Monarch butterfly larvae                                      |
|        | Purple Sage; Cenizo                    | <i>Leucophyllum frutescens</i>  | Pink/Purple        | Blooms with the rains; host for Theona Checkerspot butterfly  |
|        | Pyramid Bush                           | <i>Melochia tomentosa</i>       | Pink               | Excellent butterfly nectar plant; pink flowers                |
|        | Red Sage; Scarlet Sage                 | <i>Salvia coccinea</i>          | Red                | Butterflies, hummingbird nectar; full sun to partial shade    |
|        | Ruellia; Wild Petunia                  | <i>Ruellia nudiflora</i>        | Purple             |                                                               |
|        | Shrubby Blue Sage; Mejorana            | <i>Salvia ballotiflora</i>      | Blue               | Aromatic leaves                                               |
|        | Skeleton Leaf Golden Eye               | <i>Viguiera stenoloba</i>       | Yellow             | Bloom spring, summer and fall                                 |
|        | Slim Milkweed                          | <i>Asclepias linearis</i>       | White              | Monarch butterfly larvae                                      |
|        | Soapbush; Guayacán                     | <i>Guaiacum angustifolium</i>   | Purple             | Host for Lycide Sulfur butterfly                              |
|        | Spray Mistflower                       | <i>Tamauilpa azurea</i>         | Purple             |                                                               |
|        | Texas Baby Bonnets                     | <i>Coursetia axillaris</i>      | Light Pink         | Host for Southern Dogface butterfly                           |
|        | Texas Kidneywood                       | <i>Eysenhardtia texana</i>      | White              | Host for Southern Dogface butterfly                           |

|                                                                                                                                                    |                                |                                  |                        |                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------|------------------------|-----------------------------------------------------------------|
|                                                                                                                                                    | Texas Lantana                  | <i>Lantana urticoides</i>        | Yellow/Red             |                                                                 |
|                                                                                                                                                    | Texas Mountain Laurel          | <i>Sophora secundiflora</i>      | Purple                 | Fragrant blooms                                                 |
|                                                                                                                                                    | Torchwood                      | <i>Amyris texana</i>             | White                  | Flowers attract evening pollinators, like Hawk moths            |
|                                                                                                                                                    | Trixis                         | <i>Trixis inula</i>              | Yellow                 | Can be hedged                                                   |
|                                                                                                                                                    | Turk's Cap                     | <i>Malvaviscus drummondii</i>    | Red                    | Host Mallow Scrub-hairstreak, Turk's Cap White-Skipper          |
|                                                                                                                                                    | White Brush                    | <i>Aloysia gratissima</i>        | White                  | Small fragrant white flowers                                    |
| GROUND COVER                                                                                                                                       |                                |                                  |                        |                                                                 |
|                                                                                                                                                    | Chisme                         | <i>Portulaca pilosa</i>          | Red                    | Related to moss rose                                            |
|                                                                                                                                                    | Common Purslane                | <i>Portulaca oleracea</i>        | Yellow                 | Shade tolerant                                                  |
|                                                                                                                                                    | Nama                           | <i>Nama parvifolium</i>          | Purple                 | Leaves fragrant when rubbed                                     |
|                                                                                                                                                    | Scorpion's Tail Heliotrope     | <i>Heliotropium angiospermum</i> | White                  | Butterfly nectar plant                                          |
|                                                                                                                                                    | Texas Frog Fruit               | <i>Phyla nodiflora</i>           | White                  |                                                                 |
|                                                                                                                                                    | Tiny Tim; Dogweed              | <i>Thymophylla tenuiloba</i>     | Yellow                 | Leaves aromatic                                                 |
|                                                                                                                                                    | Tube Tongue                    | <i>Justicia pilosella</i>        | Purple                 | Host Tiny & Elida Checkerspot, TX Crescent, Vesta Crescent      |
| VINES                                                                                                                                              |                                |                                  |                        |                                                                 |
|                                                                                                                                                    | Corky Stemmed Passion Flower   | <i>Passiflora suberosa</i>       | White                  | Host Heliconia; Gulf Fritillary, Mexican Silverspot butterflies |
|                                                                                                                                                    | Corona De Cristo               | <i>Passiflora foetida</i>        | Blue                   | Host Heliconia, Gulf Fritillary, Mexican Silverspot butterflies |
| CACTI                                                                                                                                              |                                |                                  |                        |                                                                 |
|                                                                                                                                                    | Horse Crippler                 | <i>Echinocactus texensis</i>     | Pink                   | Shade to full sun                                               |
|                                                                                                                                                    | Lower Rio Grande Valley Barrel | <i>Ferocactus hamatacanthus</i>  | Yellow                 | Likes shade                                                     |
|                                                                                                                                                    | Strawberry Cactus              | <i>Echinocereus enneacanthus</i> | Pink                   | Partial shade; Edible fruit                                     |
|                                                                                                                                                    | Texas Prickly Pear             | <i>Opuntia engelmannii</i>       | Yellow/Orange/Pink/Red | Edible pads and fruit                                           |
|                                                                                                                                                    | Yellow Mammillaria             | <i>Mammillaria sphaerica</i>     | Yellow                 | Shade                                                           |
| GRASSES                                                                                                                                            |                                |                                  |                        |                                                                 |
|                                                                                                                                                    | Arizona Cottontop              | <i>Digitaria californica</i>     |                        |                                                                 |
|                                                                                                                                                    | Big Zacatón                    | <i>Sporobolus wrightii</i>       |                        |                                                                 |
|                                                                                                                                                    | Bristlegrass                   | <i>Setaria macrostachya</i>      |                        |                                                                 |
|                                                                                                                                                    | Buffalograss                   | <i>Buchloe dactyloides</i>       |                        |                                                                 |
|                                                                                                                                                    | Hairy Grama                    | <i>Bouteloua hirsuta</i>         |                        |                                                                 |
|                                                                                                                                                    | Hooded Windmillgrass           | <i>Chloris cucullata</i>         |                        |                                                                 |
|                                                                                                                                                    | Pink Pappusgrass               | <i>Pappophorum bicolor</i>       |                        |                                                                 |
|                                                                                                                                                    | Plains Bristlegrass            | <i>Setaria leucopila</i>         |                        |                                                                 |
|                                                                                                                                                    | Rio Grande Threawn             | <i>Aristida sp.</i>              |                        |                                                                 |
| <b>References and Resources:</b>                                                                                                                   |                                |                                  |                        |                                                                 |
| Plants of Deep South Texas by Alfred Richardson and Ken King                                                                                       |                                |                                  |                        |                                                                 |
| The Grasses of Texas by Frank W. Gould                                                                                                             |                                |                                  |                        |                                                                 |
| Native Plant Project at <a href="http://nativeplantproject.com">nativeplantproject.com</a>                                                         |                                |                                  |                        |                                                                 |
| Bentsen State Park, World Birding Center, Mission, Texas                                                                                           |                                |                                  |                        |                                                                 |
| Quinta Mazatlán, World Birding Center, McAllen, Texas                                                                                              |                                |                                  |                        |                                                                 |
| Native Plant Society of Texas at <a href="https://www.npsot.org/chapters/rio-grande-valley/">https://www.npsot.org/chapters/rio-grande-valley/</a> |                                |                                  |                        |                                                                 |
| Lady Bird Johnson Wildflower Center at <a href="https://www.wildflower.org/plants/">https://www.wildflower.org/plants/</a>                         |                                |                                  |                        |                                                                 |
| <b>Nurseries that Carry Native Plants:</b>                                                                                                         |                                |                                  |                        |                                                                 |
| <b>Mission:</b>                                                                                                                                    |                                |                                  |                        |                                                                 |
| Oleander Nursery                                                                                                                                   |                                |                                  |                        |                                                                 |
| National Butterfly Center                                                                                                                          |                                |                                  |                        |                                                                 |
| <b>Edinburg:</b>                                                                                                                                   |                                |                                  |                        |                                                                 |
| Hui-xochitl Nursery                                                                                                                                |                                |                                  |                        |                                                                 |
| <b>Harlingen:</b>                                                                                                                                  |                                |                                  |                        |                                                                 |
| Heep's LRGV Native Plant Nursery                                                                                                                   |                                |                                  |                        |                                                                 |