

NINE NATIVES

Creating Simple Gardens With Native Prairie Plants

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COASTAL PRAIRIE PARTNERSHIP

NATIVE PRAIRIES ASSOCIATION OF TEXAS

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INTRODUCTION

The purpose of this “Nine Natives” guide is to introduce a simple palette of native plants for the Houston area that is commercially available for the community to use in their garden landscapes and on neighborhood street medians. This booklet outlines the selected Nine Natives, their growth habits, wildlife value, ethnobotanical value, and the reasons for selection. It includes example plans for formal and informal home gardens and for formal and informal street median plantings. This booklet also includes a description and photographs of a significant median planting to demonstrate the establishment of a multi-species planting including both plants and seeds to create a native prairie planting.

While many ‘native’ species may be found in local nurseries, the genotype may or may not be native to the Houston area, or even to Texas. Many commercial cultivars have deviated from the true native. Whenever possible, the groups that have collaborated on this booklet recommend the use of local genotypes. For that purpose, some Houston and Texas sources are referenced for native plant materials and seeds.

Creating a new garden using native plants or adding natives to a local garden can be simple and rewarding. The Nine Natives (and a few alternates) were selected to work together to give a beautiful show in the garden throughout the year. Some species were selected for their extended or repeat blooms and others for their interesting foliage and contrasting colors and textures. All were chosen for the benefit to butterflies, hummingbirds, birds, beneficial insects and other wildlife in the garden.

While some species are strong enough to be used in monoculture, others may be more effective in mixed groupings due to their annual or perennial habits. These nine species were judged to be a collection that would be appealing to local gardeners - easy to grow and with a height and habit acceptable to the residential garden or street median. Most of the plants are available through local specialty growers, if not every local nursery. Seeds may be available through local native plant and prairie organizations, through commercial native seed suppliers, or perhaps through your own collection. (Check websites of the sponsoring prairie organizations for seed collecting days). The collection is a mix of grasses and forbs, perennials, or re-seeding annuals. Some flowers may give a quick show of brilliant color and others may carry the show throughout spring into the summer and fall long enough to contrast with the soft bloom and foliage of the native grasses in the palette.

These Nine Native species may be used to incorporate natives in lieu of, or in addition to, horticultural (non-native) species. Use them individually, plant them in the landscape beds in groups as shown, or mix them all up together and make a prairie. No matter how you use them these Nine Natives - or other natives you may find - will add to the beauty and enjoyment of your garden and neighborhood.

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1 BLACK-EYED SUSAN *Rudbeckia hirta*



Sally + Andy Wasowski, Lady Bird Johnson Wildflower Center



WD + Dophia Bransford, Lady Bird Johnson Wildflower Center

GROWTH HABITS

Height: 24-36 inches, spread: 12-24 inches. Bright, daisy-like 2”-3” yellow flowers with dark centers bloom on 1’-2’ stems extending from a base of bristly, green leaves. The species is considered an annual or short-lived perennial that blooms late spring to fall. It likes full sun but may bloom longer with some shade in the afternoon. It is adaptable to soil (dry to moist) but likes well-drained beds.

WILDLIFE VALUE

Black-eyed Susan serves as a larva host for the Gogone Checkerspot and Bordered Patch butterflies; it provides nectar for bees and butterflies and seed for birds.

ETHNOBOTANICAL VALUE

Native Americans used Black-eyed Susan roots for tea to treat worms and colds. As an external wash, it was used for sores, snakebites, swelling, and ear aches.

Why Was This Plant Selected?

Black-eyed Susan was selected for its showy, bright yellow color and coarse-textured foliage. It is native throughout much of the U.S. and widely naturalized elsewhere.

ALTERNATE

Texas Coneflower - *Rudbeckia texana*



Bush Katydid, Andrew Cannizzaro



Yellow Crab Spider, Adobe Stock



Gulf Coast Toad, Jaime Gonzalez



Lady Bird Beetle, Adobe Stock

2 GULF COAST MUHLY *Mulenbergia capillaris*



Sally + Andy Wasowski, Lady Bird Johnson Wildflower Center



Damon Waitt, Lady Bird Johnson Wildflower Center

GROWTH HABITS

Height: 24-36 inches, spread: 24-36 inches. This ornamental, perennial, clumping grass has fine-textured leaves. The vibrant pink-violet flowers are atop a much-branched seed head half as tall as the entire plant. The spikelets mature to a feathery show of pink in the fall. The seed head and foliage turn a light brown for the winter. Cut the grass in the spring to make way for the new growth. The plant tolerates dry to moist conditions and is adaptable to soil types but needs full sun to light shade. Check native plant nurseries for the Texas genotype. *M. capillaris* is usually found in commercial nurseries and is a Florida genotype.

WILDLIFE VALUE

Gulf Coast Muhly attracts native insects and provides cover for other wildlife. The seeds are a food source for birds.

ETHNOBOTANICAL VALUE

Parts of the gulf coast muhly were used by the Seminoles in basket making.

Why Was This Plant Selected?

Gulf Coast Muhly was selected because of its soft grass structure that provides movement in the garden and its dramatic purplish-pink fall bloom. It is native throughout the southeast U.S. from the Texas coast to Florida and Maine.

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3 INDIAN BLANKET *Gaillardia pulchella*



James Rowland, Lady Bird Johnson Wildflower Center



Sally + Andy Wasowski, Lady Bird Johnson Wildflower Center

GROWTH HABITS

Height: 12-18 inches, spread: 6-12 inches. Low-leafed branches are topped with bright, showy flower heads that bloom spring through fall. The flower heads are 2 inches across, red at the base and tipped in yellow. Each ray has three teeth at the broad end. The disc flowers at the center are brownish-red. Colors may vary with environments or soil type and with commerical cultivars. The much-branched stems are usually hairy and become woody at the base late in the season. Indian Blanket is an annual or short lived perennial; wait for the seeds to drop before removing the spent foliage. It is easily grown in sun to part shade, but it must have good drainage and prefers sandy soils that are not too rich in organic matter. Overwatering may cause the foliage to flop.

WILDLIFE VALUE

Indian blanket acts as a pollen source for native bees and butterflies.

ETHNOBOTANICAL VALUE

Indian blanket was used by Native Americans to cure stomach pain, skin disorders, and sores. The root was used to make a tea for gastroenteritis and as a wash for sore eyes. Mothers used the tea to relieve soreness after nursing. The chewed powdered root was applied to skin disorders. Kiowa considered it good luck.

Why Was This Plant Selected?

Indian blanket was selected for its showy flower color and form and long bloom time, which can be extended with some supplemental summer watering. Gaillardia is native to much of the U.S.



Buckeye Butterfly, Adobe Stock



Leaf-cutter Bee, Adobe Stock



Eastern Carpenter Bee, Judy Gardner



American Painted Lady, Patrick Coin

4 LEMON BEEBALM OR HORSEMINT *Monarda citriodora*



Jaime Gonzalez, Katie Prairie Conservancy



Jaime Gonzalez, Katie Prairie Conservancy

GROWTH HABITS

Height: 12-30 inches, spread: 9-12 inches. Whorled, tuft-like, light, lavender-pink flower heads are subtended by whitish or lavender leaf-like bracts in an elongated spike atop stems covered with light green leaves. This aromatic winter annual has a distinctive citrus or lemony scent. It is easily grown and can spread. It flowers May through July but, with water, it may continue to flower into the fall. It is adaptive to soils from sandy and rocky to clay.

WILDLIFE VALUE

Horsemint acts as a food source for hummingbirds, butterflies, and bees. Aromatic foliage makes it deer resistant.

ETHNOBOTANICAL VALUE

Native Americans used the leaves for cooking and brewed tea for sore throats and colds and used leaves as a balm for bee stings. Leaves contain the oil Citriodora; rub your skin with leaves to keep bugs away.

Why Was This Plant Selected?

This plant was selected for its striking form and color. It is native throughout much of central and western US and introduced in the east.

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5 LITTLE BLUESTEM *Schizachyrium scoparium*



Sam C. Strickland, Lady Bird Johnson Wildflower Center



Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center

GROWTH HABITS

Height: 18-36 inches or taller. This ornamental Perennial bunch grass has fine-textured foliage that forms very dense mounds. New growth is attractive with slender blue-green stems appearing in August with tufts of soft white blooms in the fall. The dried stalks mature to a rich golden-reddish color and hold the color throughout the winter. Cut the clumps to remove old growth in the early spring. Little Bluestem likes full sun to part shade and well-drained soil. The plants reseed readily; remove the seedlings where not desired.

WILDLIFE VALUE

Little Bluestem acts as a larva host for butterflies and moths including a variety of skippers and the Cobweb butterfly. It provides cover and seed for small mammals and seed-eating (granivorous) birds.

ETHNOBOTANICAL VALUE

Little bluestem was used as sweat lodge switches by the Kiowa-Apaches in sweat lodges, believing switching with the stems would cure pain and drive away evil spirits.

Why Was This Plant Selected?

Little bluestem was selected to provide structure and form in the garden, fall and winter interest, and wildlife value. Little Bluestem is native throughout the US and Canada though there are variances within different regional genotypes.



Chipping Sparrow, Greg Lavaty



Green Anole, Clinton and Charles Robertson



Green Metallic Sweat Bee, Adobe Stock



Three-Toed Box Turtle, Adobe Stock

6 PRAIRIE SPIDERWORT *Tradescantia occidentalis*



Sally + Andy Wasowski, Lady Bird Johnson Wildflower Center



MW Carlton, Lady Bird Johnson Wildflower Center

GROWTH HABITS

Height: 18-36 inches, Spread: 12-18 inches. The blue-green foliage has long and narrow leaves similar to daylilies. Listed as a perennial, the foliage is generally evergreen in Houston and provides structure in the garden. In spring through summer, a cluster of several blue-violet flowers appear with three petals and six stamens with yellow anthers; the flowers are subtended by bracts similar to the leaves on erect branching stems. The flowers last a day and close by mid-day. This adaptable plant grows in sun to part shade and dry to wet soils.

WILDLIFE VALUE

Spiderwort acts as a nectar source for native bees and other wildlife.

ETHNOBOTANICAL VALUE

Native Americans consumed parts of the plant as a cooked vegetable.

Why Was This Plant Selected?

Spiderwort was selected for its evergreen, lily-like, textured foliage and the vibrant bloom color. It is native in Texas, except east Texas, and throughout central U.S. into Canada

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7 RATTLESNAKE MASTER *Eryngium yuccifolium*



Sally + Andy Wasowski, Lady Bird Johnson Wildflower Center



RW Smith, Lady Bird Johnson Wildflower Center

GROWTH HABITS

Height: foliage 12"-24" with blooms up to 3'-4' or taller. The evergreen, blue-green foliage is tough with spiny edges, resembling yucca. The striking greenish-white flower heads appear in branched clusters high above the leaves on stiff stalks in late spring to summer. The globular, 1" diameter heads resemble thistle and develop a bluish cast as they mature; they are subtended by whitish, pointed bracts. The plant grows well in full sun and will sprawl in shady conditions. It will self-seed; remove seedlings where not desired.

WILDLIFE VALUE

Rattlesnake master provides support for many insects including native bees, flies, beetles, butterflies and wasps. It acts as a biological control, attracting pest-consuming species.

ETHNOBOTANICAL VALUE

Rattlesnake Master was used as an analgesic, gastrointestinal aid, an anti-rheumatic internal treatment, and for other ailments by the Seminoles and Creeks. Its name came from its use as a snakebite remedy. A strong fiber was made from the leaves; its cordage is used to make shoes. Today, its fibers are still used in basketry.

Why Was This Plant Selected?

Rattlesnake master was selected for its evergreen and textured foliage and unusual bloom. Native throughout central and eastern US, from the gulf coast and east Texas extending east to Florida and north into Minnesota and Maine.

ALTERNATE

Partridge Pea - *Chamaecrista fasciculata*



Delta Scarab Beetle, Jacopo Werther



American Goldfinch, Greg Lavaty



Ruby-throated Hummingbird, Greg Lavaty



Pipevine Swallowtail, Gene Luhn

8 SCARLET SAGE *Salvia coccinea*



Ray Mathews, Lady Bird Johnson Wildflower Center



Stephanie Brundage, Lady Bird Johnson Wildflower Center

GROWTH HABITS

Height: 12-24 inches, spread: 12-24 inches. Bright, tubular, red flowers are loosely spaced along upright stems extending from green, ovate-triangular leaves. The leaves have a pungent odor that helps deter deer. Scarlet Sage is a perennial or an (easily) reseeding annual. Blooms start in May and continue into fall. In rich soils it may over-grow; cut back to remove leggy growth. It is adaptable to soil types from caliche, sandy, loam, and clay and dry to moist conditions. It grows in sun to part shade and shade. Other colors are available in cultivars.

WILDLIFE VALUE

Scarlet sage provides nectar to hummingbirds, butterflies, bees, and other nectar insects.

ETHNOBOTANICAL VALUE

Some websites recommend the red petals as edible and others warn against this species. Web research revealed only one source that listed Native American uses for teas and salves from this species. Many salvias were used for smudging along with cedar and sweetgrass; perhaps *S. coccinea* was one of them. Current medical researchers think its physochemicals may have the potential to fight illness caused by inflammation and oxidative stress from free radicals.

Why Was This Plant Selected?

Scarlet Sage was selected for its brilliant color, a long bloom time and wildlife value. It is native in the coastal area from South Carolina to Florida and west to Texas.

ALTERNATE

Pitcher Sage or Big Blue Sage - *Salvia azurea*

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9 TEXAS BLUEBONNET

Lupinus texensis



Norman Flaigg, Lady Bird Johnson Wildflower Center



Ray Mathews, Lady Bird Johnson Wildflower Center

GROWTH HABITS

Height: 12-24 inches. Spike-like stems are topped with numerous blue and white flowers above light-green compound palmate leaves with five leaflets. The bloom shoots are topped by clusters of up to 50 blue, pea-like flowers with the tip an accent of white above the blue, blooming March to May. Bluebonnets are a reseeding annual and a disturbance species; they like good drainage and flourish in poor soils. In richer soils they may play out after a couple years, giving way to other species. To ensure Bluebonnets in your garden, reseed every fall between September 15 and November 30. Plant 4" pots from fall through spring when available.

WILDLIFE VALUE

Acts as a larva host to Hairstreak butterfly and Elfin butterfly and supports native bees.

ETHNOBOTANICAL VALUE

Texas Bluebonnet is the state flower of Texas and acts as an important cultural icon. Bluebonnets were seeded on Texas roadsides as a part of Lady Bird Johnson's beautification program and thousands of people wander down Texas roadsides to see the annual spring bloom.

Why Was This Plant Selected?

Texas Bluebonnet was selected for its colorful bloom and cultural value. Groupings of bluebonnets create a dramatic show in the spring. Texas Bluebonnets are native in west and north Texas to the western edge of the Houston area.

ALTERNATE

Prairie Verbena *Glandularia bipinnatifida* or *Glandularia bipinnatifida* var. *bipinnatifida*



European Honey Bee, Alex Wild



Gray Hairstreak Butterfly, John Flannery



White-lined Sphinx Moth, Greg Linscott



Monarch Butterfly, Jaime Gonzalez

ALTERNATE SPECIES

Blue Sage
Salvia azurea



W.D. and Dolphia Bransford, Lady Bird Johnson Wildflower Center

Partridge Pea
Chamaecrista fasciculata



Partridge Pea, Adobe Stock

Prairie Verbena
Glandularia bipinnatifida



Melody Lytle, Lady Bird Johnson Wildflower Center

Texas Coneflower
Rudbeckia texana



Texas Coneflower, Adobe Stock

NATIVE PRAIRIE PLANTING PROGRESSION

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Ground Preparation



Planting 4" Pots and Seeding



1 Month after Planting



1 Month after Planting



8 Months after Planting



12 Months after Planting



18 Months after Planting



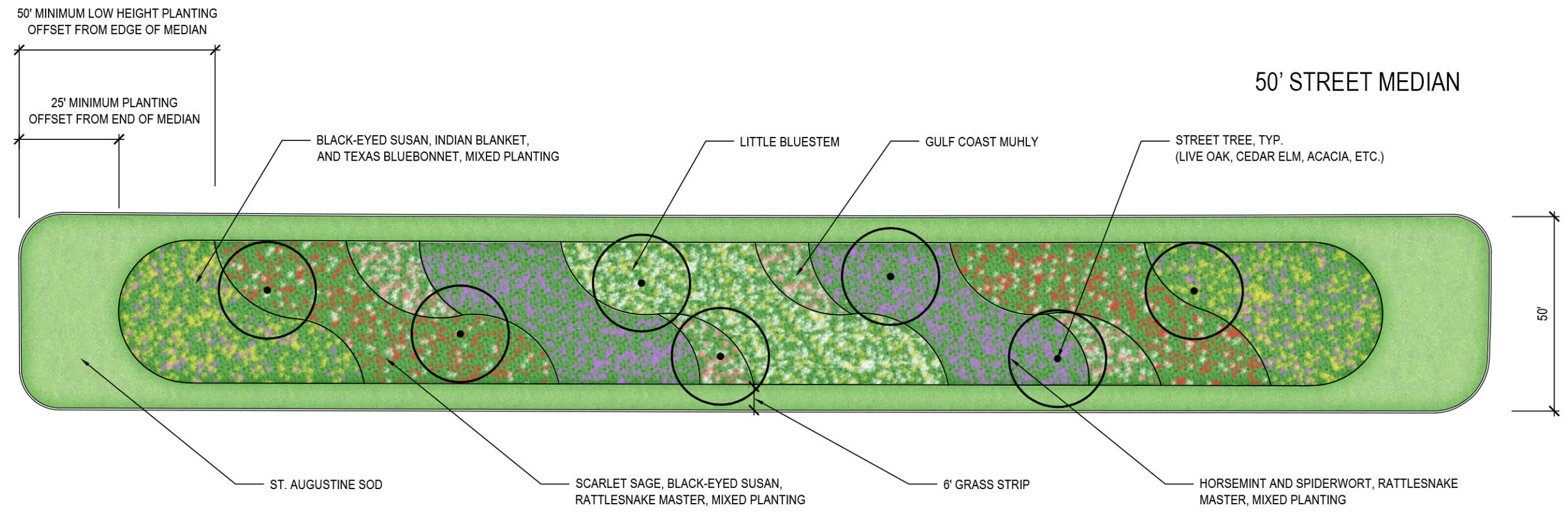
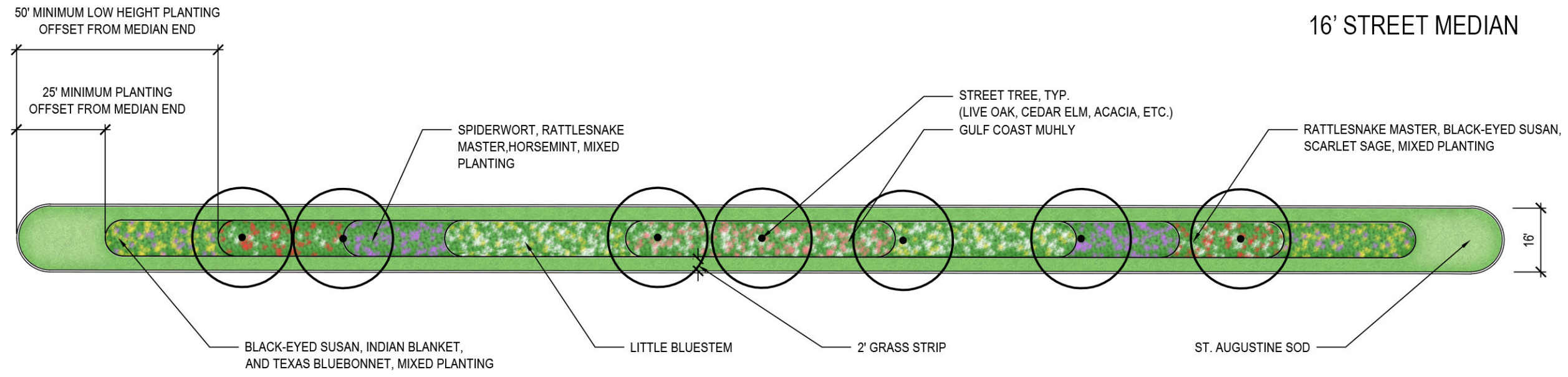
24 Months after Planting

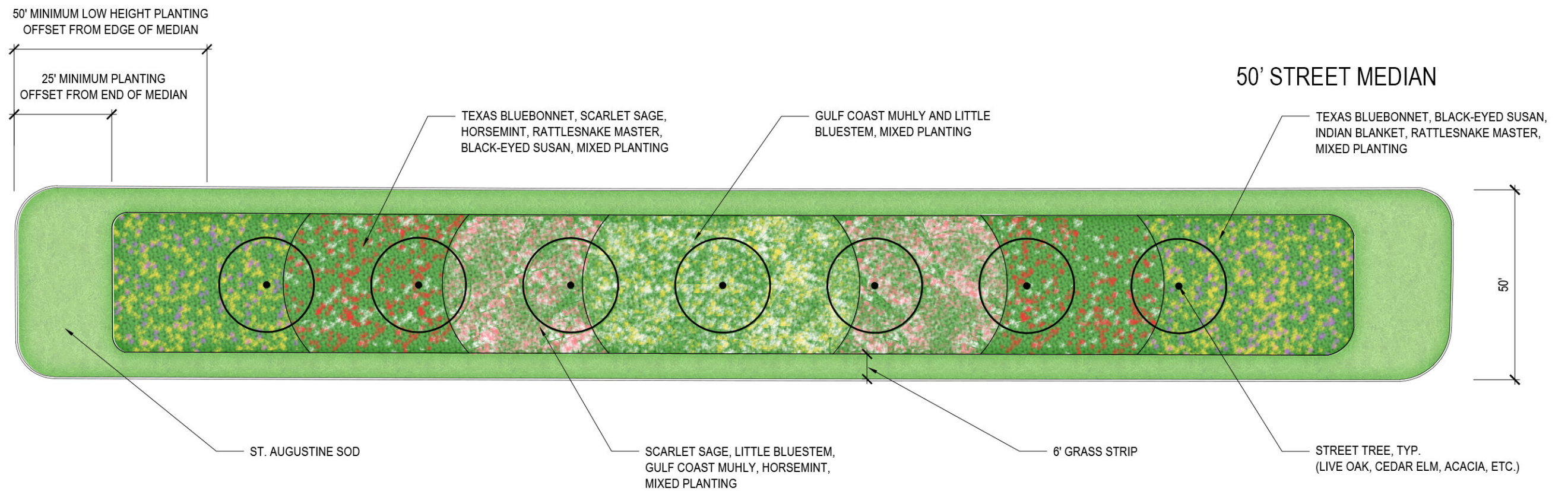
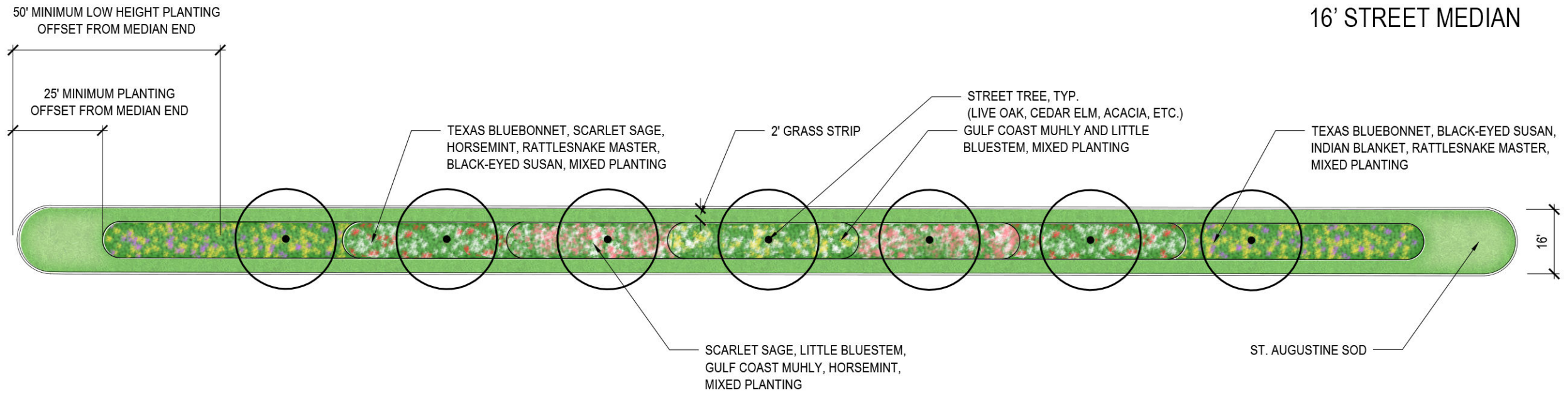
NATIVE PRAIRIE PLANTING

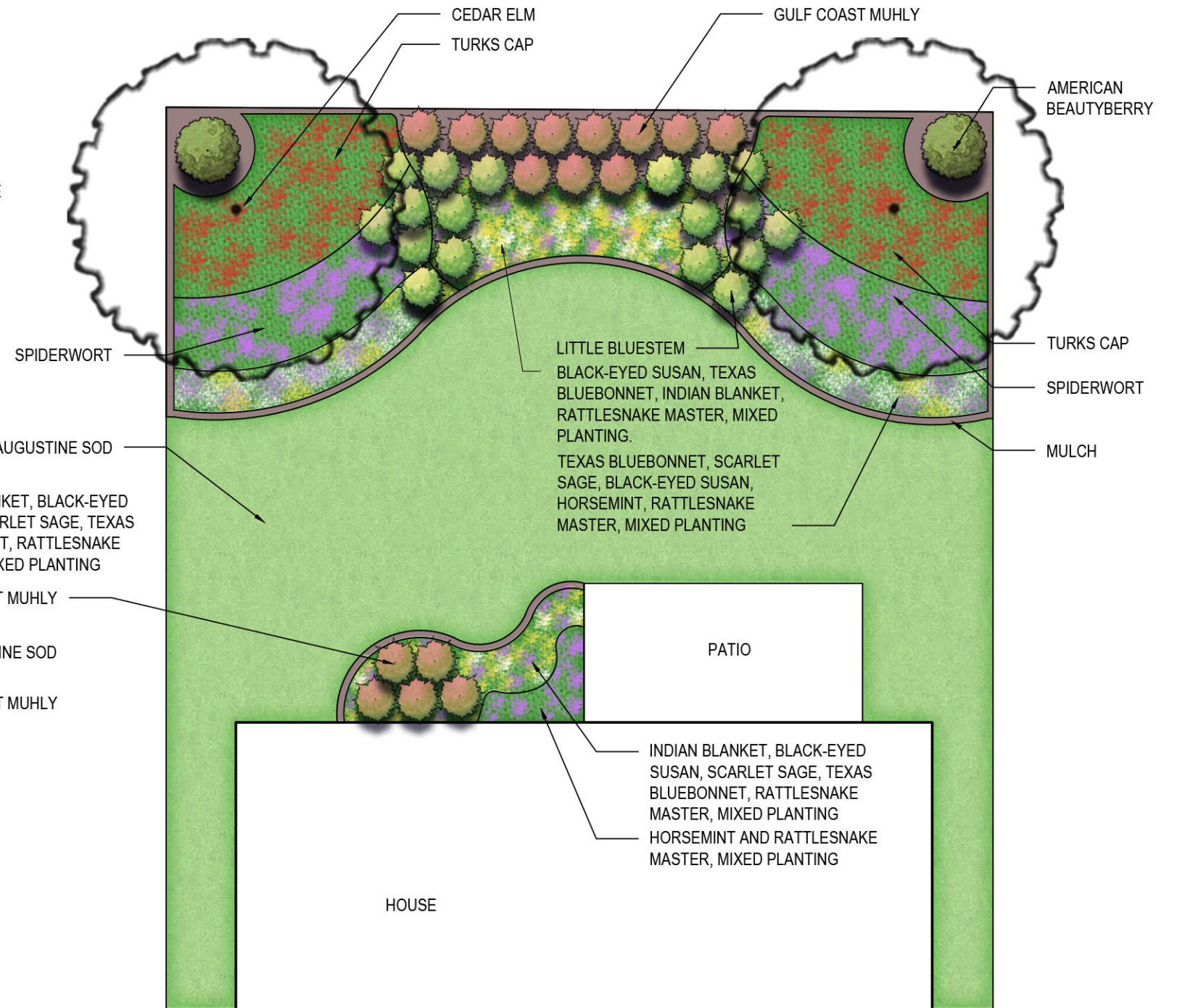
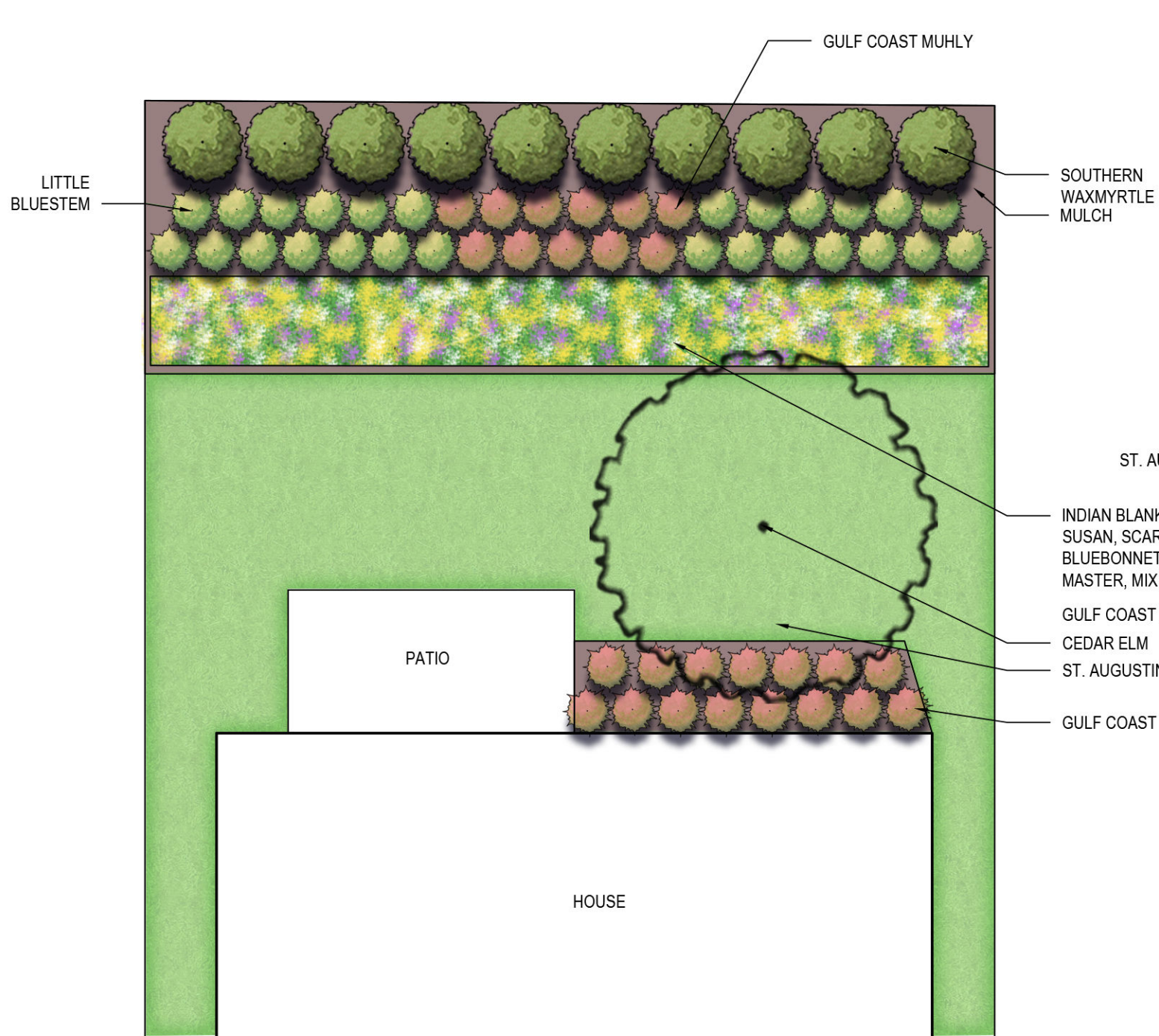
The establishment of a prairie begins with a biological soil test (soilfoodweb.com) to determine necessary amendments to existing soils. Additional topsoil, organic materials, and other amendments can be combined with the existing soils to create a soil composition that will support and encourage the establishment of native plants. Native planting can be accomplished through seeding or from planting of nursery grown materials. Supplemental water sufficient to aiding in seed germination and plant establishment is beneficial. Maintenance can include watering, mowing, removal of invasive or undesirable species, and replanting of any bare areas. For prairie planting a diversity of mixed species is desirable with the goal to allow the prairie to continue to diversify naturally over time.

PROJECT EXAMPLE

In this example of a mixed planting for a prairie, both seeding and planting of nursery grown materials were used to maximize the establishment period. After soil preparation and irrigation installation, seeds were broadcast and raked into the top layer of soil. A mix of plants in 4" pots were planted 3' to 4' on center. A permanent irrigation system was installed and used to help establish plants and encourage seed germination. After initial germination the goal for the irrigation system use was to mimic natural rainfall in a "good" year. Excess irrigation of native plantings in a prairie setting could encourage undesirable species or domination and inbalance of the species mix. Additional seeding of colonizing species was done to infill bare areas and help to reduce the encroachment of non-native species. Additional wildflowers were over-seeded in optimum seasonal windows to add to the spring/summer bloom show. Over the course of the two-year period demonstrated in this example, invasive species removal was the biggest challenge. Watering was monitored. The prairie was mowed two times in the two-year establishment period.







NATIVE PLANT SOURCES

TEXAS GULF COAST NURSERIES

SEEDS:

BAMERT SEED COMPANY

www.bamertseed.com
1-800-262-9892
Muleshoe, Texas

NATIVE AMERICAN SEED

www.seedsource.com
1-800-728-4043
Junction, Texas

TURNER SEED COMPANY

www.turnerseed.com
1-800-722-8616
Breckenridge, Texas

WILDSEED FARMS

www.wildseedfarms.com
1-800-848-0078
Fredericksburg, Texas

PLANTS:

AUDUBON SOCIETY NATIVES NURSERY

Edith L. Moore Sanctuary
www.birdfriendlyhouston.org
713-932-1639
Houston, Texas

BUCHANAN'S NATIVE PLANTS

www.buchananplants.com
713-861-5702
Houston, Texas

ENCHANTED GARDENS

www.myenchanted.com
281-341-1206
Richmond, Texas
Booth, Texas

JOSHUA'S NATIVE PLANTS

www.joshuasnativeplants.net
713-862-7444
Houston, Texas

MORNING STAR PRAIRIE PLANTS

www.morningstarprairieplants.com
morgy@consolidated.net
713-446-2509
Damon, Texas

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