

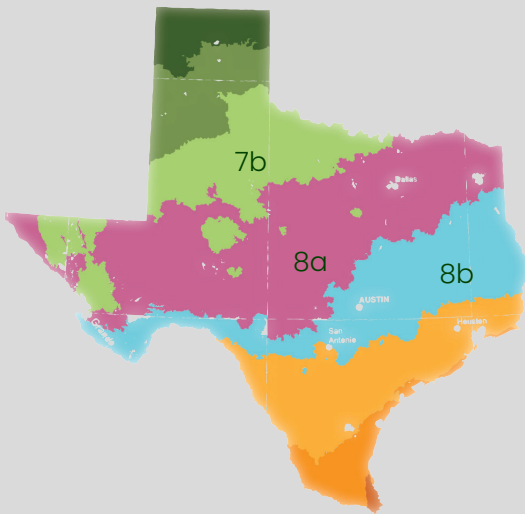
Like any region, North Central Texas has its own set of unique challenges – which limit the plants that will thrive in our area. Whether you're new to gardening in general, or just new to gardening in the Lone Star State, understanding the nuances of the climate and soils (as well as how seasoned gardeners overcome these limitations), are the first steps in planning and planting your outdoor space. With a little help from this guide, and a bit of determination, you too can create a lush lawn, vibrant landscape or productive vegetable garden you can enjoy for seasons to come.



PLANTS

Regionally native or adapted plants are the ideal choice for an aesthetically pleasing lawn, landscape or vegetable garden. These plants offer a limitless variation of color and texture to choose from. You can use them in highly manicured modern designs and more naturalistic landscapes alike! Choosing a plant palette that incorporates Texas tough plants is one of the easiest avenues to a healthy vibrant landscape.

For a searchable database of plants adapted to North Texas, visit txsmartscape.com



UNDERSTANDING THE NORTH TEXAS CLIMATE

Hardiness Zone

The USDA hardiness zone map highlights growing zones by their 30-year average lowest temperatures. North Texas is in zone 8a which means during an average winter, we will see low temperatures ranging from 10–15 degrees Fahrenheit. It's important to note that it can get colder. (The record low is -8 F set in 1899!) But generally speaking, if you focus on planting perennial flowers, shrubs and trees that are at least cold hardy to zone 8a, then they will come back season to season.

** When buying plants at a local nursery, reference the plant tag for a hardiness zone number 8a or below. Higher numbered hardiness zones are warmer in the winter, which means those plants are NOT cold hardy to our area.*

Rainfall

Another important consideration is that plants can grow well in the regional rainfall regime. On average North Central Texas receives around 36" of rainfall a year, with the spring and fall being the wettest seasons for effective precipitation. This can vary quite a bit as well, with a record low annual rainfall of 19.91" (1921) and a record high of 62.61" (2015). Generally, most of the plants you use in your landscape should be able to grow within this range, with limited supplemental irrigation coming from your sprinklers. In addition, special care should be given to desert-loving plants such as agave, cacti, yucca, and others to make sure they have adequate drainage. This will allow them to survive in our wetter years.

Heat

Extreme heat, especially during the summer months is also an important factor to consider. Plantings should be able to withstand (and thrive in) extreme heat with an average of 20 days a year exceeding 100 degrees Fahrenheit temperatures. (DFW's record high is 113 degrees Fahrenheit, set in 1980) Some plants listed as full sun in other regions might struggle in the full sun during a Texas summer.



Although soil types and conditions can vary throughout one region, North Central Texas is dominated with higher pH, poor-draining clay soils. Some clay soils extend throughout the whole profile, while other clays may lie deeper beneath shallow silty or sandy layers. These heavy, black clays shrink and crack during dry periods and swell with large amounts of rainfall or irrigation; leading to poor water infiltration rates. Higher pH clays, also referred to as alkaline (the opposite of acidic), also can limit which plants can be grown in our region. Acid loving plants like azaleas, camelias, hydrangeas, and blueberries often struggle, even with attempts to acidify planting beds.

Soil Amendments

Poor soils can lead to issues with nutrient uptake, infiltration of water, and a soil's ability to hold onto water during drought periods. Soil amendments such as expanded shale, compost, mulch and others can help correct these issues and allow your plantings to thrive.

Expanded Shale

This highly porous, lightweight aggregate can improve drainage in clay soils and can hold moisture at the same time. Expanded shale is most effective when incorporated into the soil when establishing a new planting bed. Add up to 3" then till or mix in thoroughly to a depth of 6".

Compost

Whether you have clay or sandy soils (or somewhere in between) compost aids in improving soil health, nutrient availability and can make your soil more resilient to extreme weather patterns. Compost can be made at home with food scraps or yard waste you normally throw away, but if you don't have enough on hand, buying compost in bags or bulk is a great idea. For new landscape areas incorporate up to 3" of compost into the top 6" of soil. Topdressing up to ½" on top of landscape beds, or ¼" of sifted compost (mixed with sand) spread evenly over turfgrass, can help your landscape take advantage of the many benefits compost has-- like helping hold moisture in the soil during hot, dry Texas summers. While compost does a good job adding small amounts of macro and micronutrients to the soil as it breaks down, it should not be considered a fertilizer.

Mulch

In addition to reducing weeds, mulch also helps retain water and reduce stress in between the often sparse rain events that are typical of Texas summers. When it does rain, mulch helps more water infiltrate the soil and reduces landscape flooding. Maintain 2" to 4" of cedar or hardwood mulch, spreading around trees, shrubs and perennials. But, pay special attention to avoid excessively mounding mulch at the base of the plant. Properly mulched beds have a thicker layer moving away from the plant, tapering to a thinner layer closer to the plant. This preserves air movement and deters potential pest and disease issues. In the vegetable garden, try straw or pine straw mulches, which are fluffier and break down more easily. As mulch breaks down it adds organic matter to the soil, along with nutrients, and will need to be reapplied periodically to preserve a 2" to 4" thickness.



SUNLIGHT

If a plant is native or adapted to the soil in our region, and to the extreme temperatures and varying rainfall patterns, the next step is choosing the right plant for the right sunlight conditions on your property. Existing trees, shrubs and buildings affect how much sunlight an area receives. Here in the northern hemisphere, the southside of most properties have the best unobstructed sunlight. This is due to the sun's angle and the Earth's orbit, and shadows cast by homes, fences and other plantings. The northern side of the same areas

tend to be blocked from sunlight. As the sun rises in the morning on the eastern exposure of our gardens, it tends to be cooler and less harsh. Alternatively, in the afternoon, the western sun tends to be more intense and harsher to certain plants. While a new plant's tag typically shows which conditions are best, the full Texas sun tends to be more unforgiving than other areas with cooler climates. Planting the right plant in the right spot will reduce stress and can create favorable conditions that reduce maintenance needs for the life of the plant.

Summer



Spring & Fall



Winter



Categories of Plant Lighting:

Full Sun	Direct sunlight on plant all day
Part Sun	"Filtered Light", 2-3hrs without direct sun
Part Shade	"Dappled Light", 4-5hrs without direct sun
Full Shade	No direct sunlight on plant all day but may be bright due to reflective light
Dense Shade	"Deep shade", no direct sunlight all day

Shedding Some Light on Turf's Sun Requirements

While our best-adapted warm season turfgrasses (Bermuda, Zoysia, St. Augustine and Buffalo) will thrive in full and part sun conditions, they all do poorly in areas that receive less than 5 hours of sunlight a day. In areas categorized as full shade and dense shade, turfgrass alternatives like shade tolerant groundcovers, shrubs, perennials and ferns make more aesthetic plantings and will reduce muddy, bare soil areas. Pervious patio areas using pavers, natural stones or gravels also work well in shadier spots, providing gardeners a respite from the sun.

WATERING



A critical factor to beautiful, healthy plants is applying the right amount of water, at the right times. Watering too much can encourage pests and disease, and even kill your plantings. Many North Texans use in-ground, automatic sprinkler systems. These sprinkler systems are very convenient but are notorious for overwatering. Switching off these systems at times of sufficient or excessive rainfall is the best way to avoid many disease issues, but this can also help to manage your water bill. Simply turn the controller to OFF when you don't need water, then back ON when you do. It's that easy, and all your zones and settings will still be the same the next time you need to water! Any time your plants do need a little extra water, your sprinkler system should precisely deliver the water to the plant's root zone where it can be effectively used.

Turfgrass areas require water more frequently than beds with native and adapted perennials or shrubs. Landscape planning that groups plants by their water needs (also known as hydro-zoning) will allow you to water areas separately by their water need and avoid over-watering and under-watering your plantings. Watering deeply, but infrequently develops a strong and healthy root system. Please remember to limit watering to NO MORE than twice per week – any more than that is not needed, even during the heat of summer.

When you do water, try using 3 to 4 shorter intervals (opposed to one long runtime) with the “cycle and soak” method of irrigation. Allowing for 30-45-minute pauses in-between each cycle ensures the water slowly enters the root zone and reduces run-off down sidewalks and driveways. Once programed into your sprinkler controller, this technique reliably reduces waste, is healthier for plants and has the potential to lower water bills when used correctly.

With the “cycle and soak” method, the first cycle breaks the surface tension. In the second cycle, more of the water will enter the soil because it has been dampened. The third cycle allows for even more of the water to be absorbed deeper into the soil, resulting in a deeper root system over the length of the growing season. In areas with severe slopes and compacted soil, additional cycles might be needed. ***For more information on the “cycle and soak” method and more tips on the best watering methods for North Texas, visit WaterIsAwesome.com and click on the “Thirsty Lawns and Smart Irrigation” section.***

For custom-tailored watering advice based on local weather conditions, sign up for free weekly watering notifications at WaterIsAwesome.com and click on the “Weekly Watering Advice” section.

FERTILIZING



A wide selection of organic and synthetic fertilizer options can make choosing the right fertilizer for the right application seem daunting. The best choice will depend on the soil conditions on your property and what you intend to grow in that space. Whether you intend to plant a lawn, flowers, vegetables, or trees, a soil sample test is the most accurate approach to figuring out the composition of your soil, the amendments you need, and which are already present in your landscape. Testing your soil every 1 to 3 years will help you avoid using excess fertilizer while saving money and controlling pollution from excess fertilizer in stormwater runoff. Always apply fertilizers per label instructions. Contrary to popular belief, over-application can result in weaker, pest prone or generally unhealthy plant material.

DIY soil tests are available at many local nurseries or consider sending your sample to a regional soil testing lab for a more in-depth analysis.