

2011-2012 Denton County Master Gardener Association

Plant Survey Results Summary

By Janie Farler, Denton County Master Gardener

Rip out all your plants and plant rosemary and basil. That in a nutshell is the result of the Denton County Master Gardener plant survey. We all could have saved lots of money if we had only known that rosemary is our go-to plant to survive drought, hail, grasshoppers, and unremitting heat. And it is even evergreen. What more could a gardener want?

If you bemoaned losing your favorite plants last summer, you are in good company. Master gardeners and landscapers also lost plants, lots of them. There are also many contributing reasons. The winter of 2010 was one of the harshest ever in North Texas, with extreme cold and extreme drought. That alone stressed plants, but that winter was followed by the highest temperatures (particularly nighttime) in our memories, the worst hail storm in many years in areas surrounding Denton, and finally, a huge invasion of hungry grasshoppers in rural areas, just in case any plant still had surviving leaves. And of course sprinkler failures, microclimate, and other individual factors may have affected individual plants' survival. The DCMGA surveyed its members as well as other area master gardeners and landscapers to find out what survived, what died, and what they would never plant again. The sample size is not large, but these are supposedly people who know how to keep plants alive.

To the question "What was your top performing annual/perennial/herb," 65 mentioned basil and 59 mentioned rosemary. Those are, of course, widely available and frequently planted, which skews the results somewhat, but it is nevertheless a stunning number considering the sample size of 129. Other great annual performers were sweet potato vine, zinnias, periwinkle, peppers, and gomphrena.

For perennials, the natives have it: lantana (some are annuals) was the clear winner, followed by turk's cap, chives, several varieties of salvia, Mexican petunia (*Ruellia*), red yucca, flame acanthus, and coneflower (*Echinacea*).

Live oak, red oak, bur oak, yaupon holly, desert willow, and vitex were tops in trees. Crape myrtle was mixed, with 16 listing it as a top performer and 10 reporting stressed or dead.

As for shrubs, autumn sage was a star, as were roses of all kinds but particularly knockout roses. In addition, nandina and hollies, especially burford and yaupon, weathered the summer well in most cases.

What suffered or died? Vegetables suffered. According to Dr. Doug Welsh in his *Texas Garden Almanac*, production is affected if vegetables undergo water stress. Unfortunately, with heat, drought, and high winds, it was almost impossible to retain sufficient moisture to keep them happy. In addition, when nighttime temperatures stay above 70 degrees, tomatoes struggle to produce fruit, so many tomato plants bloomed but did not set fruit due to the early onset of heat. As a result, tomato production failed in record numbers. Nevertheless, some had good production of tomatoes in the spring, and a few again in the fall. Several mentioned that they did not even try a fall garden. There were reports of good crops of cucumbers, but some said they had a sour taste. The only vegetables that several people reported as doing well were peppers of all kinds.

Begonias, impatiens, petunias (although some people had no trouble), dill, some mint (others had good luck, possible varietal differences), thyme (although several had no problem) also were stressed or died. Shrubs particularly seemed

to be problematic. Frequent “stressed” or “dead” shrubs were azaleas, hydrangeas, Indian hawthorn, and Chinese Fringe Flower.

The extent of tree death will not be known for another year or two as they may succumb to cumulative stressors. However, some reported stress or death already among dogwoods, magnolias, redbuds, and Japanese maples.

We asked if turf grass was doing *great*, *alive but not thriving*, *dormant*, or *dead*. These numbers do not total 100% because many people have two or more types of lawn grass. Twenty-five percent reported their grass looked *great*, 55% said it was *alive but not thriving*, 33% stated the grass went *dormant*, and 8% reported *dead* grass. It is expected that more dead grass will be realized this spring. Surprisingly, there did not seem to be any relationship between how much they irrigated and whether the grass was great or simply alive. One person who reported her grass looked great did not water at all.

Beyond asking what plants lived or died, we also asked about irrigation practices. We broke it down into *minimal*, one inch or less per week, *moderate*, twice a week or up to 2” per week, and *high*, more than twice a week or more than 2”. Interestingly, there did not seem to be much relationship between water usage and plant death, lending credence to the theory that heat, in addition to drought, contributed to plant death. Several said they gave up and let the lawn go, or the vegetables. Some mentioned the high cost of water, or water restrictions, as limiting their irrigation. Several said they are trying to reduce turf areas to save water.

We also asked, “In hindsight, what do you wish you had done differently this year?” One master gardener summed it up beautifully: “More mulch, more drought tolerant plants, more natives, more rain barrels, less lawn, less veggies, less planting overall in the spring.” Several mentioned wishing they had planted less in spring and instead planted in fall to give roots time to establish better before the onslaught of heat. One said she had put newspapers around plants in sandy soil to slow down moisture loss and that seemed to help. Several mentioned how hard it was to keep container plants alive. Surprisingly, many respondents said they would do nothing differently. Either they had few plant failures or thought that nothing would have helped.

To the question, “What would you never plant again,” there were few responses, proving once again the eternal optimism of the utterly devoted gardener.

No one knows whether last year’s weather will be repeated this summer, but we do know it is always hot and dry June through August, so here are some recommendations:

- Plant early. Our average last freeze is March 16. Better yet, plant in the fall. Plant trees in the winter while they are dormant.
- Mulch helps conserve moisture and moderate soil temperature. Use lots of it, but do not let it smother the plant. Pull it away and allow the plant to breathe.
- Even if you can’t afford to water your lawn, water the trees every couple of weeks, deeply (6-8” into the soil under the foliage). See tips from the Texas Forest Service: <http://texasforestservicetamu.edu/main/article.aspx?id=14196>
- Buy native and well-adapted plants for best chance of success. If you are unfamiliar with Texas natives, look it up here: <http://www.wildflower.org/plants/>
- Soaker hoses and drip irrigation save a lot of water and are much more efficient ways to irrigate.
- If you want to look at all the numbers for yourself or view a list of the top plant survivors, go to dcmga.com/north-texas-gardening/plant-survey-results.