

Top Stress Related Reasons for Removal by Species

Scientific Name	Frequency	Trees Removed	Explanation
Cercis canadensis	15.83%	116	
Stress Age	54.31%	63	Redbud is not a long-lived species in DFW due to low rainfall, poor compacted soils, and urban stresses
Stress Heat	25.00%	29	
Stress Site	14.66%	17	
Stress Insect/Disease	3.45%	4	
Stress Other	2.59%	3	
Quercus shumardii	12.55%	92	
Stress Site	53.26%	49	Shumard oak has trouble in alkaline clay soils, exacerbated by planting stock genetics
Stress Heat	14.13%	13	
Stress Insect/Disease	14.13%	13	
Stress Age	9.78%	9	
Stress Other	8.70%	8	
Ulmus parvifolia	4.91%	36	
Stress Insect/Disease	50.00%	18	Lacebark elm is susceptible to cotton root rot which occurs in old ag fields
Stress Site	25.00%	9	
Stress Heat	13.89%	5	
Stress Other	11.11%	4	
Quercus macrocarpa	3.82%	28	
Stress Heat	85.71%	24	Bur oak is really more of a northern species and has trouble in dry areas
Stress Other	10.71%	3	
Stress Insect/Disease	3.57%	1	
Prunus mexicana	3.68%	27	
Stress Age	48.15%	13	Mexican plum is an ornamental species that also does not normally experience a long life
Stress Heat	33.33%	9	
Stress Other	11.11%	3	
Stress Site	7.41%	2	
Ginkgo biloba	3.68%	27	
Stress Site	85.19%	23	Ginkgo does not tolerate gumbo clay
Stress Heat	14.81%	4	
Ilex vomitoria	3.55%	26	
Stress Heat	34.62%	9	Yaupon is an eastern species that prefers low areas and suffers in drought
Stress Other	26.92%	7	
Stress Age	15.38%	4	
Stress Site	11.54%	3	
Stress Insect/Disease	11.54%	3	
Acer rubrum	3.14%	23	
Stress Site	86.96%	20	Red maple, as with most maples, is intolerant of alkaline soil and prefers high site quality
Stress Other	4.35%	1	
Stress Heat	4.35%	1	
Stress Insect/Disease	4.35%	1	
Ulmus crassifolia	2.86%	21	
Stress Other	38.10%	8	Cedar elm is tolerant of most everything and does not have pest/disease issues normally, drought and overcrowding often the only concerns
Stress Heat	28.57%	6	
Stress Site	23.81%	5	
Stress Age	9.52%	2	

<i>Pistacia chinensis</i>	2.73%	20
Stress Heat	60.00%	12 Chinese pistache has trouble with drought, evidenced by the number of trees removed in the heat of summer
Stress Other	25.00%	5
Stress Site	15.00%	3
<i>Pinus eldarica</i>	2.73%	20
Stress Age	50.00%	10 Afghan pine seems to have a hard limit at 30-40 years, trees often die rapidly when reaching this age. Could also be soil/site issue such as outgrowing
Stress Heat	35.00%	7 root space combined with drought
Stress Site	10.00%	2
Stress Other	5.00%	1
<i>Pinus elliottii</i>	2.73%	20
Stress Heat	100.00%	20 Both slash pine and loblolly pine are eastern species that can have problems getting enough water, especially when establishing
<i>Pyrus calleryana</i>	2.46%	18
Stress Age	50.00%	9 Falling apart is the biggest issue with Callery pear, but stress caused death is usually due to age. They begin to die off at age 15 and rarely live more
Stress Other	16.67%	3 than 30 years
Stress Site	16.67%	3
Stress Heat	16.67%	3
<i>Chitalpa tashkentensis</i>	2.46%	18
Stress Site	55.56%	10 Chitalpa is sensitive to flooding or overwatering and can die rapidly from lack of oxygen to the roots
Stress Other	38.89%	7
Stress Heat	5.56%	1
<i>Pinus taeda</i>	2.46%	18
Stress Heat	83.33%	15 Loblolly pine needs lots of water to get established and does not tolerate alkaline soils at all
Stress Site	16.67%	3
<i>Juniperus virginiana</i>	2.32%	17
Stress Other	52.94%	9 Eastern redcedar is tolerant of nearly everything. In Arlington, trees have died more from leaving the stakes on the tree than any other reason due to
Stress Heat	29.41%	5 low limbs concealing the stakes left on the tree
Stress Age	11.76%	2
Stress Insect/Disease	5.88%	1
<i>Quercus virginiana</i>	2.05%	15
Stress Heat	53.33%	8 Live oak is tolerant of North Texas weather, but still dies more in summer than other times. Although not an issue in Arlington, oak wilt is probably
Stress Other	26.67%	4 the biggest killer of live oaks
Stress Site	13.33%	2
Stress Age	6.67%	1
<i>Ilex attenuata</i>	1.64%	12
Stress Insect/Disease	66.67%	8 Hollies are also susceptible to cotton root rot and sunscald damage, many were planted in a very tough environment along Interstate 30.
Stress Other	33.33%	4
<i>Morella cerifera</i>	1.64%	12
Stress Age	33.33%	4 Mulberry is native and hardy, although not particularly beautiful or strong. Age seems to be the reason most die
Stress Heat	33.33%	4
Stress Other	16.67%	2
Stress Site	8.33%	1
Stress Insect/Disease	8.33%	1
<i>Quercus stellata</i>	1.50%	11
Stress Age	45.45%	5 Post oak is sensitive to construction and more die from placement and damages than from stress, but even long-lived species have a natural lifespan
Stress Heat	27.27%	3 that is often reached
Stress Other	18.18%	2
Stress Site	9.09%	1

Quercus muehlenbergii	1.50%	11
Stress Heat	81.82%	9 Chinkapin oak is native here, but really grows best natively in seeps on hillsides or other productive areas. In drought, chinkapin can become stressed
Stress Site	9.09%	1 if not irrigated or located on a dry site
Stress Other	9.09%	1
(blank)	1.50%	11
Stress Other	45.45%	5 These unknown trees were not well documented
Stress Age	36.36%	4
Stress Site	18.18%	2
Carya illinoensis	1.50%	11
Stress Age	45.45%	5 Pecan often dies from old age and/or pests riddling the upper branches. Often they will fall apart and slowly die back to a single branch before finally
Stress Insect/Disease	18.18%	2 dying
Stress Other	18.18%	2
Stress Heat	18.18%	2
Ulmus pumila	1.36%	10
Stress Age	50.00%	5 Siberian elm is not native and does not like our heat and drought, but the most common reason for their demise seems to be a hard age limit around
Stress Heat	30.00%	3 28-35 years
Stress Site	10.00%	1
Stress Other	10.00%	1
Ilex decidua	1.36%	10
Stress Heat	40.00%	4 Deciduous holly often dies from drought and overexposure, planting trees in a little shade helps them live longer
Stress Age	30.00%	3
Stress Other	20.00%	2
Stress Site	10.00%	1
Liquidambar styraciflua	1.36%	10
Stress Other	30.00%	3 Sweetgum has trouble with clay alkaline soils and drought, and planting stock genetics are often not the best for our area
Stress Site	20.00%	2
Stress Heat	20.00%	2
Stress Insect/Disease	20.00%	2
Stress Age	10.00%	1
Styphnolobium affine	1.23%	9
Stress Other	44.44%	4 Eve's necklace can be killed by mowers or weedeaters easily due to thin bark
Stress Heat	33.33%	3
Stress Age	22.22%	2
Lagerstroemia indica	1.09%	8
Stress Other	62.50%	5 Crapeyrtle rarely dies of stress, thanks to its popularity there is a large sample that shows its more likely to be run over or removed for construction
Stress Heat	25.00%	2 than die from stress
Stress Insect/Disease	12.50%	1
Viburnum nudum	0.95%	7
Stress Site	42.86%	3 Possumhaw viburnum prefers sandy and acidic soils and can die from drought as these preferred sites often lack sufficient water. Its native range is
Stress Heat	28.57%	2 mostly to the east
Stress Age	14.29%	1
Stress Other	14.29%	1
Pinus thunbergii	0.95%	7
Stress Site	42.86%	3 Black pine does not do well in heavy clay soil and may have other issues as well
Stress Other	42.86%	3
Stress Heat	14.29%	1
Chilopsis linearis	0.82%	6

Stress Heat	33.33%	2	Desert willow is drought hardy and tolerates a lot of conditions, so there is not a number one killer for this tree
Stress Site	33.33%	2	
Stress Other	33.33%	2	
Taxodium distichum	0.82%	6	
Stress Other	66.67%	4	Baldcypress is very tolerant of all conditions once established. Drought and flooding are both survivable for this tree. Girdling roots and planting stock
Stress Site	16.67%	1	issues early on can also kill tree
Stress Heat	16.67%	1	
Koelreuteria paniculata	0.68%	5	
Stress Site	60.00%	3	Golden rain tree is not common in Arlington, but it prefers moist well-drained soils
Stress Heat	40.00%	2	
Pinus sp.	0.68%	5	
Stress Other	60.00%	3	Pines generally prefer sandy and acidic soils
Stress Site	40.00%	2	
Acer saccharinum	0.41%	3	
Stress Age	33.33%	1	Silver maple suffers in the summer droughts, doesn't particularly tolerate heavy clay soil, and often has a short life
Stress Site	33.33%	1	
Stress Heat	33.33%	1	
Fraxinus pennsylvanica	0.41%	3	
Stress Age	66.67%	2	Green ash is usually found growing natively in bottomlands and is tolerate of most everything
Stress Other	33.33%	1	
Platanus occidentalis	0.41%	3	
Stress Heat	66.67%	2	Sycamore grows best alongside creeks and low areas for enough water, but not flooded areas
Stress Site	33.33%	1	
Cornus florida	0.27%	2	
Stress Other	50.00%	1	Dogwood is somewhat long-lived for an ornamental tree, but can have trouble in too much sun
Stress Insect/Disease	50.00%	1	
Grand Total	100.00%	733	