

Southeast Trees:

A Multi-Site Tree Planting and Evaluation Project in Southeast Los Angeles County

Part 1. Introduction and El Dorado East Regional Park

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Introduction

In 2015, nearing the end of my 36-year career as landscape horticulturist for the University of California, Cooperative Extension in Los Angeles, I was overcome with a strange, nearly impulsive desire to propagate and grow trees, mostly unusual trees that one cannot find in retail nurseries. Perhaps one could liken this impulsive desire to some plants that are injured or stressed or that once they reach maturity and flower, they die, but before attaining their final fate, they “go out with a bang,” flowering and fruiting profusely. This model seemed to fit me, and I grew a lot of trees, 100s of them, including many different species, from seeds, cuttings, air layers, and donations and purchases from plant enthusiasts and botanical gardens.

Nearly all these trees held some keen significance for me. Some, like *Olmediella betschleriana*, were sentimental favorites that I had first learned about from my late college professor Jim Degen at California State Polytechnic University in Pomona. Others, like *Brahea aculeata* and *B. decumbens*, were palms, a nearly life-long favorite group of plants. *Metrosideros polymorpha* and *Polyscias (Munroidendron) racemosa*, Hawaiian natives, were links to my time going to graduate school and working in the landscape and nursery industries in Hawaii. Some, like *Bombax ceiba*, are, to put it simply, just special, special trees. Still others, like many species of *Ficus*, are a group of spectacularly fantastic and fascinating trees and shrubs of which I have become recently enamored.

Much to the chagrin of my lovely wife Marianne, I quickly filled the backyard and driveway of our home with 1-, 5-, and even a few 7- and 15-gallon-sized trees. I needed to find permanent homes for these trees. I needed to plant them in the ground. But where? I donated to and planted many at The Los Angeles County Arboretum and Botanical Garden in Arcadia, but it seemed hardly to make a dent in the quantity of plants on our driveway nursery and my wife’s increasing skepticism.



1. Kelly Parkins (left) and planting crew have just planted the *Bombax ceiba* (2015-12-ED27), December 1, 2015.



2. Kelly Parkins and planting crew are staging the trees for planting, December 1, 2015.

In 2015, my wife, son Robert, and I were at El Dorado East Regional Park in Long Beach flying a drone that I had recently purchased to surveil trees. As my son flew the drone, I sat in the shade of a large and unusually handsome *Ficus* tree to which I had paid little attention and initially simply had assumed to be the common *F. rubiginosa*. However, a few fruits on the ground caught my eye and I noticed that they were significantly larger than those of *F. rubiginosa* and had a prominent and conspicuous protuberance at the ostiole at the distal end, which readily identified them as *F. watkinsiana*. The tree was one of the largest and easily the most handsome and splendid specimen of its kind that I had seen in California. Immediately I realized that this was the location where I should start planting my trees.

I approached Kelly Parkins, Superintendent of Parks for the City of Long Beach and whom I had known for many years, about planting trees in this section of El Dorado East Regional Park. Kelly was immediately on board with this idea, and we used the tree planting and maintenance not only as park enhancement and species evaluation projects but also as a training opportunity in planting, staking, mulching, and structural pruning for her workers.

Thus, on December 1, 2015, we made our first planting at El Dorado East Regional Park (**Figs. 1–2**). The planting was in Area III in the northern part of the park just south of the model airplane and glider field in a location that, serendipitously, was already known as The World of Trees!

In subsequent years I continued to make plantings at El Dorado East Regional Park and I also expanded into parks in adjacent cities, including Liberty Park in Cerritos, Arbor Road Park in Lakewood, and Zoeter Park and the Greenbelt Park in Seal Beach just across the Orange County line from Long Beach (See Part 2 of this article for an account of planting in these other cities).

Here I provide an annotated list of trees I planted at each park including information on their source, planting date, growth and performance, and other descriptive information. I also provide a brief description of each site. Cris Falco and Maria Muñoz of West Coast Arborists, Inc. mapped all trees at all sites using GPS.

El Dorado East Regional Park—Long Beach

Area III, The World of Trees

Kelly and her crew and I made plantings in December 2015, June 2016, October 2016, February 2018, December 2018, and November 2019.

The World of Trees is in the northeastern part of Area III, which itself is in the northeastern part of El Dorado East Regional Park. The San Gabriel River concrete channel is about 175 m to the



3. The planting site at El Dorado East Regional Park is generally flat but has some gentle and deceptive unevenness. The swale can be seen going to the right.

west and additional park land, including a lake, is to the east, with the I-605 Freeway bordering the park on the east. The site is about seven km from the Pacific Ocean.

The turfgrass-covered site is generally flat but has some gentle and deceptive unevenness, with a low, barely discernable ridge running from west to east where it dissolves into a more noticeable swale at the eastern end, which drains into the lake (**Fig. 3**). This swale played a significant role in winter cold damage, a situation that I probably should have anticipated and adjusted the placement of more cold-sensitive species to higher sites along the low ridge, leaving the swale for the more cold-tolerant species.

The site is in Sunset Zone 22, which was based on University of California geographical and climatological studies, and is too far from the coast (Sunset Zone 24) to access the moderating influence of the ocean and yet is not far enough inland where hilly terrain (Sunset Zone 23) would provide better air drainage on cold winter nights. Indeed, for a few nights nearly every winter freezing or near freezing temperatures occur at the site, and cold air drains into and collects in the swale and has severely damaged and/or killed several trees, mostly *Ficus*, including *F. craterostoma*, *F. lutea*, *F. natalensis* (**Figs. 4–5**), *F. obtusifolia*, *F. petiolaris* (*F.*



4. *Ficus natalensis* (2016-06-ED38) shows cold damage, January 2019.



5. Cold damage on *Ficus natalensis* (2016-06-ED38) , January 2019.



6. Every tree was planted within a gopher basket barrier, which, when correctly installed, was effective in keeping gophers away from the newly planted tree root zones.

palmeri), *F. pleurocarpa*, *F. racemosa*, *F. sycomorus*, *F. tettensis*, *F. virgata*, and *Harpullia pendula*.

Despite its proximity to the San Gabriel River, soil at the site is not the deep sandy alluvium one would expect, likely because of extensive grading for the lake when the park was built in 1960 deposited heavier soils throughout the site. Nonetheless, the soil is still a good quality sandy loam but on the heavier side.

An antiquated, rotary-sprinkler irrigation system provides reclaimed water to the site. Distribution uniformity is so poor that circles of green grass surrounded by halos of dead tan grass are clearly visible from Google Earth images of the site. Indeed, we typically planted trees only where the grass was green to ensure that they would receive water, which created its own problem of not planting too close to a sprinkler head to avoid physical damage from the strong water stream. Nevertheless, strategic spotting of the trees and ample irrigation tended to overcome the system's poor uniformity. However, during the drought years of 2016 and 2017, the City of Long Beach severely reduced water to the site, even though the water is reclaimed and not subject to conservation restrictions. Kelly and her crew expertly managed the water



7. We made a planting in February 2018 of larger trees in 24-inch boxes and 30-gallon tubs, as here with *Agathis robusta*, which West Coast Arborists, Inc. donated and planted.

during this crisis, even employing water trucks supplementally to hand-water the trees at times during the summer, so that, while some trees sustained light and recoverable damage, none was damaged severely or killed from lack of water.

In addition to the yearly winter bout of cold and irrigation issues, gophers were the most pressing problem at the site. I recognized this from the beginning and every tree was planted within a gopher basket barrier, which, when correctly installed, was effective in keeping gophers away from the newly planted tree root zones (**Fig. 6**). Another problem is errant turfgrass mowers and string trippers operated by contractors, which occasionally scar or bruise trunks and roots or completely or partially girdle trunks, despite having strict orders not to operate within three feet of a tree.

We planted trees mostly out of 5-gallon-sized containers although in November 2019 we made a major planting of 50 trees, most of them dryland Australian species and many out of 1-gallon containers. We also made a planting in February 2018 of larger trees in 24-inch boxes and 30-gallon tubs; these were donated by West Coast Arborists, Inc. and were left over from new landscape work at the Los Angeles County Museum of Art (**Fig. 7**). We always used unamended site soil that came out of the hole as the backfill. We carefully inspected root systems before planting and if necessary corrected circling or kinked roots (**Figs. 8–9**).

Occasionally we applied mulch around the trees but we applied no fertilizer. Most trees were not staked for support after planting because they were structurally pruned judiciously and grown with ample space in my nursery, but stakes were inserted in case they were needed in the future and to help keep errant turfgrass mowers and string trimmers away from the tree trunks (**Fig. 10**). I structurally pruned trees as needed (**Figs. 11–12**). In January 2020 many of the trees were unexpectedly “lifted” or had their canopies pruned up to expose trunk. We attained weed control through mulching and use of glyphosate herbicide until 2019, when this herbicide was banned in City of Long Beach parks.

The trees are listed alphabetically and followed on the same line by the latitude and longitude coordinates and an accession number that gives the year and month planted, and a two-letter code for location and a number that corresponds to that tree in a spreadsheet database. For example, *2018-02-ED42* signifies that the tree was planted in 2018, February, at ED (El Dorado East Regional Park in Long Beach) and is entry 42 in the spreadsheet database for that park. The common name(s) of the tree (in UPPERCASE), if any, mostly taken from the internet, follow(s) on the next line. The source of the tree or propagative material and planting month and year are on the lines below the common name. Growth data by date, trunk diameter (at 30 cm above ground), and overall height is provided in table format. Because many of the trees were



8–9. We carefully inspected root systems before planting and if necessary corrected circling or kinked roots.

less than 4.5 feet tall (the standard height for measuring trunk diameter) when planted, we measured trunk diameter at 30 cm above the soil so all trees could be uniformly assessed. As the trees grow we will transition to the standard trunk diameter at 4.5 feet (DBH). For some trees, especially palms, a volumetric measure ($H \times L \times W$) rather than an overall height is provided, especially if no trunk was visible. A performance rating follows the growth table and considers several factors, including growth rate, pruning and training needs, pest and disease activity, and abiotic disorders like cold or heat damage, nutritional status, and perceived moisture effects. The rating is: 1 = dead or nearly so; 2 = poor; 3 = average; 5 = good; 5 = excellent. Completing the treatment is a section titled Notes, a narrative providing a general summary of the tree's history, appearance, performance, nomenclature, and/or miscellaneous information.



10. Stakes were inserted in case they were needed in the future and to help keep errant turfgrass mowers and string trimmers away from tree trunks. *Ficus sycomorus*.



11–12. Structural pruning of *Erythrina sandwicensis* showing before (left) and after (right) pruning.

THE TREES

Agathis robusta 33.8228324N, 118.086686W 2018-02-ED42 Fig. 7

QUEENSLAND KAURI

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 5/2018 | 13.5 | 6.00 |
| 4/2020 | 17.0 | 7.25 |

Rating: 5.

Notes: This plant, donated as a 30-inch box size, has been a steady but slow grower with few problems. It had a meter-long trunk wound on the northwest side that has covered over nicely. Some leaves are showing minor yellowing, perhaps because it settled after planting and became covered with excess soil although the offending soil has now been removed.

Alectryon excelsus 33.8225498N, 118.0875880W 2015-12-ED66 Figs. 13–14

TITOKI

Source: Seed, tree in Balboa Park, San Diego, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.0 | 1.35 |
| 5/2018 | 4.5 | 3.10 |
| 4/2020 | 7.0 | 3.50 |

Rating: 3.

Notes: This plant with attractive glossy green leaves and curious fruits looking like a black gum drop nestled in a red raspberry, has been a steady, moderate grower with some problems. It frequently produces chlorotic foliage and typically has an abundance of epicormic growth.



13–14. *Alectryon excelsus* 2015 and 2020.

Allocasuarina torulosa 33.8218822N, 118.087512W 2019-11-ED95

FOREST OAK

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.4 | 0.63 |

Rating: 5.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Angophora costata 33.8221747N, 118.088783W 2018-02-ED2

GUM MYRTLE

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 5/2018 | 2.8 | 3.10 |
| 4/2020 | 6.5 | 4.25 |

Rating: 3.

Notes: This plant, donated as a 15-gallon size, has been a steady, moderate grower with few problems. Leaves are chronically chlorotic, perhaps from the relatively cool conditions.

Arenga micrantha 33.8220036N, 118.08771W 2016-06-ED61

Source: Plant, origin unknown.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m, overall) |
|--------|------------|------------------|
| 8/2016 | 14.0 | 1.90 |
| 5/2018 | 13.0 | 1.80 |
| 4/2020 | 13.0 | 0.75 |

Rating: 1.

Notes: This has performed poorly, perhaps from insufficient water.

Banksia integrifolia 33.8222505N, 118.086320W 2019-11-ED104

COAST BANKSIA

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.5 | 0.75 |

Rating: 3.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Banksia seminuda 33.8224904N, 118.086108W 2019-11-ED105

RIVER BANKSIA

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.0 | 0.95 |

Rating: 5.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.



15–16. *Bombax ceiba* 2015 and 2017.

Bombax ceiba 33.8224767N, 118.087944W 2015-12-ED27 Figs. 15–16

COTTON TREE, RED SILK COTTON TREE

Source: Seed, tree in parking lot, Foster Botanical Garden, Honolulu, HI, originally from Manila Bay, Philippines.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 4.0 | 1.85 |
| 4/2020 | 18.0 | 5.30 |

Rating: 5.

Notes: This plant has grown moderately fast, especially considering its tropical origin, and has no problems. Its excellent natural growth habit has precluded any structural pruning.

Brachychiton acerifolius 33.8223143N, 118.088656W 2018-02-ED12

AUSTRALIAN FLANE TREE

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 5/2018 | 5.8 | 2.60 |
| 4/2020 | 15.0 | 4.25 |

Rating: 5.

Notes: This plant, donated as a 15-gallon size, has been a steady, moderately fast grower with few problems. The Invasive Shot-Hole Borer has attacked this tree, leaving the trunk with many oozing entry/exit holes but the overall health of the trees appears little affected.

Brahea aculeata 33.8221077N, 118.088203W 2018-02-ED6

SINALOA HESPER PALM

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | H × L × W (m) |
|--------|------------|--------------------|
| 5/2018 | 5.0 | 0.66 × 0.60 × 0.65 |
| 4/2020 | 12.0 | 0.80 × 1.05 × 1.00 |

Rating: 5.

Notes: This plant, donated as a 5-gallon size, has been a steady, moderate grower with no problems.

Brahea aculeata 33.8220824N, 118.088222W 2018-02-ED7

SINALOA HESPER PALM

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | H × L × W (m) |
|--------|------------|--------------------|
| 5/2018 | 5.5 | 0.70 × 0.55 × 0.55 |
| 4/2020 | 14.0 | 0.90 × 1.50 × 1.25 |

Rating: 5.

Notes: This plant, donated as a 5-gallon size, has been a steady, moderate grower with no problems.

Brahea aculeata 33.8220985N, 118.088252W 2018-02-ED8

SINALOA HESPER PALM

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | H × L × W (m) |
|--------|------------|--------------------|
| 5/2018 | 6.5 | 0.67 × 0.63 × 0.70 |
| 4/2020 | 11.0 | 0.75 × 0.85 × 0.75 |

Rating: 5.

Notes: This plant, donated as a 5-gallon size, has been a steady, moderate grower with no problems.

Brahea decumbens 33.8223585N, 118.0881190W 2015-12-ED71

DWARF MEXICAN BLUE FAN PALM

Source: Plant, Yucca Do Nursery, Hempstead, TX, ex northeastern Mexico.

Planted: December 2015.

| Growth | Diam. (cm) | H × L × W (m) |
|--------|------------|--------------------|
| 8/2016 | --- | 0.80 × 1.00 × 0.55 |
| 5/2018 | --- | 0.27 × 0.95 × 0.50 |
| 4/2020 | --- | 0.65 × 0.80 × 0.95 |

Rating: 3.

Notes: This palm, a slow grower under the best of circumstances, initially struggled and was a poor grower; however, it began to improve in 2019 and is growing better now.

Brugmansia ‘Charles Grimaldi’ 33.8220973N, 118.0877650W 2016-08-ED60

ANGEL’S TRUMPET

Source: Cutting, tree in yard of the late William Drysdale, Riverside, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 1.8 | 1.30 |
| 5/2018 | 5.0 | 1.65 |
| 4/2020 | 6.0 | 2.50 |

Rating: 4.

Notes: This plant has been a steady but moderate grower but needed judicious structural pruning to attain an adequate tree form. It flowers profusely.

Caesalpinia ferrea 33.8226585N, 118.087915W 2015-12-ED25

PAU FERRO

Source: Seed, Gary Levine garden, Escondido, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 1.5 | 1.90 |
| 4/2020 | 4.5 | 3.00 |

Rating: 4.

Notes: This plant has grown slowly and has few problems. A moderate amount of structural pruning was necessary to attain and maintain a strong central leader. It attained maturity and flowered in 2018.

Caesalpinia ferrea 33.8225751N, 118.08802W 2015-12-ED26 **Figs. 17–18**

PAU FERRO

Source: Seed, Gary Levine garden, Escondido, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 1.7 | 1.40 |
| 4/2020 | 6.0 | 3.00 |

Rating: 4.



17–18. *Caesalpinia ferrea* 2015 and 2020.

Notes: This plant has grown slowly and has few problems. A moderate amount of structural pruning was necessary to attain and maintain a strong central leader. It attained maturity and flowered in 2018.

Callistemon 'Cane's Hybrid' 33.8228738N, 118.086142W 2019-11-ED114

CANE'S HYBRID BOTTLEBRUSH

Source: San Marcos Growers, Santa Barbara, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 2.9 | 1.30 |

Rating: 5.

Notes: Although only in the ground for a few months, this purchased plant performed well through the winter with no serious problems.

Cassia brewsteri 33.822838N, 118.088185W 2016-10-ED46

BREWSTER'S CASSIA

Source: Plant, Huntington Library, Art Collections and Botanical Gardens, San Marino, CA.

Planted: October 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 1.7 | 1.30 |
| 5/2018 | 4.0 | 2.20 |
| 4/2020 | 7.0 | 2.70 |

Rating: 5.

Notes: This handsome plant has been a moderate grower. It has needed judicious structural pruning to attain a strong central leader. Gophers breached the gopher basket and piled soil high against the trunk. It attained maturity and flowered in 2019.

Castanospermum australe 33.8228465N, 118.087110W 2019-11-ED123

MORETON BAY CHESTNUT

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.3 | 0.60 |

Rating: 2.

Notes: In the ground for a few months, this purchased plant made it through the winter but seems to be struggling.

Ceiba sp. 33.8220082N, 118.087958W 2019-11-ED90

Source: Plant, Leon Massoth, Xotx Tropico nursery, Los Angeles, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.9 | 1.50 |

Rating: 4.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Ceratopetalum gummiferum 33.8219274N, 118.088139W 2019-11-ED88

CHRISTMAS BUSH

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.6 | 0.85 |

Rating: 5.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Chamaerops humilis 'Vulcano' 33.8226517N, 118.086680W 2019-11-ED108

VULCANO EUROPEAN FAN PALM

Source: Plant, a donation from Mark Reidler, Encinitas, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 8.0 | 0.70 |

Rating: 5.

Notes: Although only in the ground for a few months, this donated plant performed well through the winter with no serious problems.

Cordia boissieri 33.8221856N, 118.086784W 2019-11-ED101

MEXICAN OLIVE, TEXAS WILD OLIVE

Source: San Marcos Growers, Santa Barbara, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 2.0 | 0.65 |

Rating: 3.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Corymbia bella 33.821857N, 118.087787W 2019-11-ED93

WEeping GHOST GUM

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.5 | 0.33 |

Rating: 3.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Corymbia papuana 33.8221003N, 118.0878688W 2018-02-ED3

GHOST GUM

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.0 | 2.20 |

Rating: 4.

Notes: This plant, donated as a 15-gallon size, has been a steady but slow grower with no problems. It is likely growing slowly because of relatively cool conditions.

Corymbia ptychocarpa 33.8221396N, 118.087141W 2019-11-ED98

SWAMP BLOODWOOD, SPRING BLOODWOOD

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.4 | 0.45 |

Rating: 3.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Corymbia ptychocarpa 33.8230162N, 118.086207W 2019-11-ED117

SWAMP BLOODWOOD, SPRING BLOODWOOD

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.6 | 0.65 |

Rating: 3.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Cycas revoluta 33.8222973N, 118.0876410W 2015-12-ED63

SAGO PALM

Source: Plant (pistillate), Hodel residence, Lakewood, CA, originally an offshoot from a large plant from Richard W. Palmer, Whittier, CA.

Planted: December 2015.

| Growth | Diam. (cm) caudex | Ht. (m) caudex |
|--------|-------------------|----------------|
| 8/2016 | 20.0 | 0.22 |
| 4/2020 | 29.0 | 0.40 |

Rating: 4.

Notes: This plant, donated as a 15-gallon size, has been a steady but slow grower with no problems. It is likely growing slowly because of relatively cool conditions.

Cycas revoluta 33.8223297N, 118.0876480W 2019-11-ED124

SAGO PALM

Source: Plant, Hodel residence, Lakewood, CA, originally an offshoot from a large plant from Richard W. Palmer, Whittier, CA.

Planted: November 2019.

| Growth | Diam. (cm) caudex | Ht. (m) caudex |
|---------|-------------------|----------------|
| 11/2019 | 12.0 | 0.13 |

Rating: 4.

Notes: This plant, donated as a 3-gallon size, performed well through the winter.

Cycas revoluta 33.8223072N, 118.0876760W 2019-11-ED125

SAGO PALM

Source: Plant, Hodel residence, Lakewood, CA, originally an offshoot from a large plant from Richard W. Palmer, Whittier, CA.

Planted: November 2019.

| Growth | Diam. (cm) caudex | Ht. (m) caudex |
|---------|-------------------|----------------|
| 11/2019 | 16.0 | 0.20 |

Rating: 4.

Notes: This plant, donated as a 3-gallon size, performed well through the winter.

Cycas revoluta 33.8223197N, 118.0876740W 2019-11-ED126

SAGO PALM

Source: Plant, Hodel residence, Lakewood, CA, originally an offshoot from a large plant from Richard W. Palmer, Whittier, CA.

Planted: November 2019.

| Growth | Diam. (cm) caudex | Ht. (m) caudex |
|---------|-------------------|----------------|
| 11/2019 | 19.0 | 0.42 |

Rating: 4.

Notes: This plant, donated as a 5-gallon size, performed well through the winter.

Cycas revoluta 33.8223041N, 118.0876910W 2019-11-ED127

SAGO PALM

Source: Plant, Hodel residence, Lakewood, CA, originally an offshoot from a large plant from Richard W. Palmer, Whittier, CA.

Planted: November 2019.

| Growth | Diam. (cm) caudex | Ht. (m) caudex |
|---------|-------------------|----------------|
| 11/2019 | 12.0 | 0.10 |

Rating: 4.

Notes: This plant, donated as a 3-gallon size, performed well through the winter.

Cycas revoluta 33.8222919N, 118.0876770W 2019-11-ED128

SAGO PALM

Source: Plant, Hodel residence, Lakewood, CA, originally an offshoot from a large plant from Richard W. Palmer, Whittier, CA.

Planted: November 2019.

| Growth | Diam. (cm) caudex | Ht. (m) caudex |
|---------|-------------------|----------------|
| 11/2019 | 13.0 | 0.15 |

Rating: 4.

Notes: This plant, donated as a 3-gallon size, performed well through the winter.

Cycas revoluta 33.8222805N, 118.0876700W 2019-11-ED129

SAGO PALM

Source: Plant, Hodel residence, Lakewood, CA, originally an offshoot from a large plant from Richard W. Palmer, Whittier, CA.

Planted: November 2019.

| Growth | Diam. (cm) caudex | Ht. (m) caudex |
|---------|-------------------|----------------|
| 11/2019 | 20.0 | 0.30 |

Rating: 4.

Notes: This plant, donated as a 5-gallon size, performed well through the winter.

Davidsonia pruriens 33.8222768N, 118.0884440W 2018-12-ED76

DAVIDSON'S PLUM

Source: Seed, San Diego Botanical Garden (formerly Quail Botanical Gardens), Encinitas, CA.

Planted: December 2018.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 12/2018 | 1.4 | 0.85 |
| 4/2020 | 1.8 | 0.85 |

Rating: 2.

Notes: This plant has struggled and grown slowly.



19–20. *Erythrina sandwicensis* 2015 and 2020.

Erythrina sandwicensis 33.8224084N, 118.0878950W 2015-12-ED69 **Figs. 19–20**

WILIWILI

Source: Plant, Leon Massoth, Xotx Tropico nursery, Los Angeles, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 5.2 | 2.00 |
| 5/2018 | 11.0 | 3.00 |
| 4/2020 | 20.0 | 3.60 |

Rating: 4.

Notes: This Hawaiian endemic, a purchased plant, has been a steady, strong, moderate-to-fast grower with few problems. The Erythrina stem borer has attacked this plant since 2017, killing all the tips and preventing flowering. No effective control for this pest exists.

Eucalyptus albopurpura 33.8229525N, 118.087046W 2019-11-ED122

PURPLED-FLOWERED MALLEE BOX, PORT LINCOLN MALLEE

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.5 | 0.50 |

Rating: 5.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Eucalyptus erythronema 33.8218175N, 118.087450W 2019-11-ED100

SMOOTH BARK COOLIBAH

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.2 | 0.55 |

Rating: 4.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Eucalyptus forrestiana 33.8230041N, 118.086115W 2019-11-ED116

FUCHSIA GUM, FUSCHIA MALLEE

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.5 | 0.63 |

Rating: 1.

Notes: Only in the ground for a few months, this purchased plant has not performed well through the winter and is struggling.

Eucalyptus kingsmillii 33.8229865N, 118.086485W 2019-11-ED118

KINGSMILL'S MALLEE

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.3 | 0.57 |

Rating: 5.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Eucalyptus kruseana 33.8227438N, 118.086558W 2019-11-ED110

BOOK-LEAF MALLEE, KRUSE'S BOOK-LEAF MALLEE

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.8 | 0.80 |

Rating: 4.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Eucalyptus 'Moon Lagoon' 33.8219221N, 118.087949W 2019-11-ED91

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.6 | 0.75 |

Rating: 5.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems. This plant is perhaps a naturally occurring hybrid of *E. latens* or related species in the Proantherae series and has perhaps been offered in the trade as *Eucalyptus* sp. Sullivan Soak.

Eucalyptus phoenicea 33.8228742N, 118.086281W 2019-11-ED113

SCARLET GUM

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.5 | 2.30 |

Rating: 5.

Notes: Although only in the ground for a few months, this purchased plant performed well through the winter with no serious problems.

Eucalyptus salubris 33.8229414N, 118.086041W 2019-11-ED115

GIMLET, GIMLET GUM, FLUTED GUM

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.4 | 0.70 |

Rating: 5.

Notes: Although only in the ground for a few months, this purchased plant performed well through the winter with no serious problems.

Eucalyptus torquata 33.8227839N, 118.086679W 2019-11-ED107

CORAL GUM

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.6 | 1.00 |

Rating: 5.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Eucalyptus torquata 33.8225048N, 118.088042W 2019-11-ED130

CORAL GUM

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.5 | 0.30 |

Rating: 4.

Notes: Although only in the ground for a few months, this purchased plant performed well through the winter with no serious problems.

Eucalyptus victrix 33.8218451N, 118.087751W 2019-11-ED94

SMOOTH BARK COOLIBAH

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 0.5 | 0.65 |

Rating: 4.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Eugenia sp. 33.820982N, 118.0883250W 2018-12-ED79

Source: Plant, Ed Green, San Juan Capistrano, CA.

Planted: December 2018.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 12/2018 | 1.5 | 1.25 |
| 4/2020 | 1.5 | 1.30 |

Rating: 3.

Notes: This purchased plant, perhaps *Eugenia pyriformis*, has grown slowly.

Ficus abutilifolia 33.8219885N, 118.088064W 2019-11-ED89

LARGE-LEAVED ROCK FIG

Source: Plant, Sherman Nursery, San Marcos, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 2.8 | 1.60 |

Rating: 3.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Ficus aurea 33.8229678N, 118.086765W 2019-11-ED120

FLORIDA STRANGLER FIG

Source: Plant, Tim Hoehn (now of San Diego Zoo), San Diego, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.8 | 1.55 |

Rating: 2.

Notes: Although only in the ground for a few months, it made it through the winter but seems to be struggling.

Ficus benghalensis 33.8225596N, 118.086550W 2016-10-ED50

BANYAN

Source: Cutting, grown by Linda Ohara from a large tree, perhaps the State Champion, at the Ron Light residence, 5854 Painter Ave., Whittier, CA.

Planted: October 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 2.0 | 1.30 |
| 5/2018 | 3.5 | 1.45 |
| 4/2020 | 1.2 | 0.90 |

Rating: 1.

Notes: This plant grew moderately well but in the winter of 2017–2018 cold killed it to the ground. It survived and regrew from a basal sprout and by late 2019 was about one meter tall, when cold defoliated it. If it survives I am considering moving it to a warmer part of the site.

Ficus bubu 33.8228305N, 118.08746W 2016-06-ED33

ZIMBABWE FIG

Source: Plant, purchased from Jeff Rood, originally from Peter Griffith, Woodland Hills, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.0 | 1.60 |
| 4/2020 | 9.5 | 3.10 |

Rating: 3.

Notes: This handsome plant with typically large, attractive, round, glossy green leaves has been a steady but moderate grower with few problems. It sometimes suffers slight leaf damage from the cold and leaf size and growth tend to be noticeably reduced and leaves yellowish if water is insufficient.

Ficus carica × Ficus pumila 33.8222737N 118.0865870W 2016-10-ED55 **Fig. 21**

CLIMBING HYBRID FIG

Source: Plant, Sherman Nursery, San Marcos, CA.

Planted: October 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 1.0 | 0.95 |
| 5/2018 | 3.0 | 1.70 |
| 4/2020 | 6.5 | 2.10 |

Rating: 5.

Notes: A purchased plant, this hybrid, rare in the genus, between the edible fig *Ficus carica* and the climbing vine *F. pumila*, has been a steady if not slow grower with no problems. It was recently pruned up into a small tree.



21. *Ficus carica* × *Ficus pumila*, normally a trailing to sprawling plant, is trained into a small tree.



22



23

22–23. *Ficus caulocarpa* 2015 and 2020, the latter just coming out of dormancy.

Ficus caulocarpa 33.822725N, 118.087779W 2015-12-ED30 **Figs. 22–23**

Source: Cutting, UC Riverside Botanical Garden, Riverside, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.6 | 1.45 |
| 4/2020 | 12.0 | 4.00 |

Rating: 4.

Notes: This handsome plant has been a steady grower with few problems. It typically suffers slight leaf damage from the cold but recovers quickly in the spring and summer. Judicious structural pruning has been needed to attain and maintain a suitable central leader. It was erroneously planted as *F. superba* but the petiole epidermis flaking off proximally and distally confirms *F. caulocarpa*. It attained maturity and produced figs in 2019.

Ficus concinna 33.8220415N, 118.088731W 2019-11-ED85

Source: Plant, Tim Hoehn (now of San Diego Zoo), San Diego, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.7 | 1.50 |

Rating: 3.

Notes: Although only in the ground for a few months, it made it through the winter with no serious problems.

Ficus concinna 33.8219622N, 118.088366W 2019-11-ED86

Source: Plant, Tim Hoehn (now of San Diego Zoo), San Diego, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 2.1 | 1.60 |

Rating: 3.

Notes: Although only in the ground for a few months, it made it through the winter with no serious problems.



24–25. *Ficus cordata* 2016 and 2020.

Ficus cordata 33.8223032N 118.088578W 2016-06-ED13 **Figs. 24–25**

NAMAQUA FIG

Source: Plant, Sherman Nursery, San Marcos, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.0 | 1.75 |
| 4/2020 | 11.5 | 3.20 |

Rating: 5.

Notes: This handsome plant has been a steady grower with no problems. A purchased plant, its attractive, large leaves with prominent white nerves and reddish coppery new growth make for an unusually attractive tree. It attained maturity and produced figs in 2019.

Ficus erecta 33.8223255N, 118.0885310W 2018-12-ED75

Source: Plant, Los Angeles County Arboretum and Botanic Garden, Arcadia, CA.

Planted: December 2018.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 12/2018 | 1.7 | 1.70 |
| 4/2020 | 2.5 | 1.50 |

Rating: 1.

Notes: This plant initially was a steady, moderate grower with no problems; however, in late 2019 it had extensive defoliation and associated shoot tip death, similar to symptoms of the fungal disease that was diagnosed for *Ficus racemosa* and *F. subpisocarpa* in the collection, which see. It had attained maturity when planted.

Ficus glumosa 33.8220261N, 118.087353W 2019-11-ED96

MOUNTAIN ROCK FIG

Source: Plant, Sherman Nursery, San Marcos, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 2.2 | 0.75 |

Rating: 4.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Ficus ingens 33.8224977N, 118.086753W 2016-10-ED54

RED-LEAVED FIG

Source: Plant, Tim Hoehn (now of San Diego Zoo), San Diego, CA.

Planted: October 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 1.5 | 0.80 |
| 5/2018 | 2.5 | 0.80 |
| 4/2020 | 3.5 | 0.90 |

Rating: 2.

Notes: This plant has struggled, perhaps from its location in the swale although it has suffered no obvious cold damage, or the site is insufficiently warm for it.

Ficus insipida 33.8222447N, 118.086977W 2019-11-ED102

Source: Plant, Sherman Nursery, San Marcos, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 2.0 | 1.20 |

Rating: 4.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.



26–27. *Ficus lutea* 2015 and 2020.

Ficus lutea 33.8227262N, 118.088518W 2015-12-ED16 **Figs. 26–27**

LAGOS RUBBER TREE

Source: Cutting, grown by Linda Ohara from an old, large tree at La Sumida Nursery, Goleta, CA.
Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 4.7 | 2.65 |
| 4/2020 | 11.5 | 3.30 |

Rating: 5.

Notes: This plant, a steady grower with no problems, has unusually large, thick, handsome leaves with prominent, cream-colored nerves. Growth seems to slow when water is insufficient.



28–31. *Ficus macrophylla* 2015, 2016, 2017, and 2020.

Ficus macrophylla 33.8226741N, 118.088335W 2015-12-ED19 Figs. 28–31

MORETON BAY FIG

Source: Seedling, South Coast Botanic Garden, Palos Verdes Peninsula, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 4.0 | 1.90 |
| 4/2020 | 21 | 7.50 |

Rating: 5.

Notes: This handsome plant, grown from a seedling extracted from the base of a large but low-spreading tree, has been a strong, vigorous grower with no problems. Surprisingly, it has shown a proclivity for upright growth, as opposed to its presumed parent.

Ficus macrophylla 33.822838N, 118.088185W 2015-12-ED20

MORETON BAY FIG

Source: Seedling, Huntington Library, Art Collections and Botanical Gardens, San Marino, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 3.3 | 1.65 |
| 4/2020 | 14.0 | 3.30 |

Rating: 5.

Notes: This handsome plant, grown from a seedling extracted from the base of a large, upright-growing tree, has been a strong, vigorous, upright grower with few problems. A minor leaf bud blight was observed in December 2019.

Ficus macrophylla 33.8229422N, 118.087337W 2016-06-ED34

MORETON BAY FIG

Source: Cutting, unknown origin.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.5 | 1.40 |
| 5/2018 | 6.5 | 2.80 |
| 4/2020 | 14.5 | 5.50 |

Rating: 5.

Notes: This handsome plant has been a moderately strong, upright grower with no problems.

Ficus macrophylla 33.8230215N, 118.0863210W 2016-06-ED45

MORETON BAY FIG

Source: Cutting, unknown origin.

Planted: October 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 2.0 | 1.10 |
| 5/2018 | 4.5 | 2.80 |
| 4/2020 | 8.0 | 2.90 |

Rating: 5.

Notes: This handsome plant has been a moderately strong, upright grower with no problems. It attained maturity and produced figs in early 2020. Its identity is uncertain.

Ficus microcarpa 'Green Island' 33.8225141N, 118.0873290W 2016-06-ED58

GREEN ISLAND FIG

Source: Plant, Los Angeles County Arboretum and Botanic Garden, Arcadia, CA, incorrectly as *F. buxifolia* (20160221).

Planted: June 2016.

| Growth | Diam. (cm) | Ht. / H × L × W (m) |
|--------|------------|---------------------|
| 8/2016 | 3.5 | 0.60 |
| 5/2018 | 6.0 | 0.65 × 1.65 × 1.15 |
| 4/2020 | 10.0 | 1.00 × 2.00 × 1.50 |

Rating: 5.

Notes: This low, spreading, sprawling, even mounding form of the tree species has unusually handsome, round, close-set, nearly sessile, glossy green leaves. It has been a steady but slow grower that defies pruning and training into an upright tree but otherwise has no problems. We recently pruned it up into a short-trunked spreading tree. It attained maturity and produced figs in 2017.

Ficus natalensis 33.8226834N, 118.087030W 2016-06-ED37 **Figs. 32–33**

NATAL FIG

Source: Plant, Tim Hoehn (now of San Diego Zoo), San Diego, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.1 | 1.65 |
| 5/2018 | 8.0 | 4.50 |
| 4/2020 | 19.0 | 5.00 |

Rating: 4

Notes: This handsome plant has been a fast grower with few problems. Minor cold damage to the lower leaves has been noted some winters. Even with judicious structural pruning it has been nearly impossible to develop a strong central leader.

Ficus natalensis 33.8226834N, 118.08703W 2016-06-ED38

NATAL FIG

Source: Plant, Tim Hoehn (now of San Diego Zoo), San Diego, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.8 | 2.10 |
| 5/2018 | 2.0 | 1.50 |
| 4/2020 | 6.0 | 2.50 |

Rating: 2.

Notes: Despite being a “litter mate” and only about 10 m distant, albeit slight slower in the swale, from the preceding plant, this specimen has grown only moderately and suffered severe damage in the winter of 2016–2017 when cold killed it to the ground. The existing plant is a basal resprout selected from several that appeared in the summer of 2017. Even with judicious structural pruning it has been nearly impossible to develop a strong central leader.



32–33. *Ficus natalensis* 2016 and 2020.



Ficus obliqua 33.8227459N, 118.087273W 2016-06-ED35 Figs. 34–35

SMALL-LEAVED FIG

Source: Plant, Sherman Nursery, San Marcos, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.2 | 2.40 |
| 5/2018 | 6.5 | 2.80 |
| 4/2020 | 16.0 | 4.00 |

Rating 5.

Notes: A purchased plant, this handsome species has been a fast, strong grower with no problems.



34–35. *Ficus obliqua* 2016 and 2020.

Ficus pleurocarpa 33.8222000N, 118.088845W 2019-11-ED83

BANANA FIG

Source: Plant, Tim Hoehn (now of San Diego Zoo), San Diego, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.8 | 1.00 |

Rating: 4.

Notes: Although only in the ground for a few months, it made it through the winter with no problems. It is a replacement for a plant of the same species that was planted in the swale and died, likely from cold.

Ficus polita 33.8219625N 118.086894W 2016-06-ED99

HEART-LEAVED FIG

Source: Plant, Sherman Nursery, San Marcos, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.5 | 1.50 |

Rating: 4.

Notes: Although only in the ground for a few months, this purchased made it through the winter with no problems.

Ficus pseudopalma 33.8223689N, 118.0878210W 2018-02-ED68

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 6.5 | 2.70 |
| 4/2020 | 8.0 | 2.40 |

Rating: 1.

Notes: This plant, donated as a 30-gallon size, has struggled and performed poorly, likely because of our long, cool winters.

Ficus racemosa 33.8224977N, 118.086391W 2016-10-ED49 **Fig . 36**

CLUSTER FIG

Source: Plant, Tim Hoehn (now of San Diego Zoo), San Diego, CA.

Planted: October 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 1.5 | 1.45 |
| 5/2018 | 4.5 | 2.10 |
| 4/2020 | 9.0 | 3.75 |

Rating: 2.

Notes: This handsome plant grew extremely fast initially, despite having been killed to the ground by cold its first two winters (2016–2017 and 2017–2018), each time recovering during the following growing season from basal sprouting and growing to two m tall by August. In 2017 I selected one of the basal sprouts as the new leader, removing the rest, but in the winter of 2017–2018 cold again killed it to the ground. It resprouted from the base in 2018 and no further serious cold damage occurred. In late 2019, though, it had extensive defoliation and associated shoot tip death and was diagnosed with a pathogenic fungal complex causing branch dieback. I will try to propagate it from cuttings and plant in a warmer location at the site.



36. *Ficus racemosa* in 2020, showing growth of basal sprouts after being killed to the ground from cold in the winter of 2017/2018. I will select one for the new trunk. Note the dieback from a foliar fungal disease.



37–38. *Ficus religiosa* 2015 and 2020.

Ficus religiosa 33.8228208N, 118.088722W 2015-12-ED17 **Figs. 37–38**

BO TREE

Source: Plant, Walter Andersen Nursery, San Diego, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 3.5 | 2.50 |
| 4/2020 | 15.0 | 5.00 |

Rating 5.

Notes: This handsome plant, purchased and planted as a 5-gallon plant, has been a strong, vigorous, grower with no problems.

Ficus religiosa 33.8228496N, 118.088597W 2016-06-ED18

BO TREE

Source: Cutting, Fullerton Arboretum, California State University, Fullerton, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 1.8 | 1.60 |
| 4/2020 | 6.5 | 3.00 |

Rating: 4.

Notes: This cutting-grown plant has been a moderate grower with no problems. Its slower growth compared to its companion species might be due to less water.



39



40

39–40. *Ficus rubiginosa* 2016 and 2020.

Ficus rubiginosa 33.8227727N, 118.087153W 2016-06-ED36 **Figs. 39–40**

RUSTY LEAF FIG

Source: Plant, Sherman Nursery, San Marcos, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.1 | 1.25 |
| 5/2018 | 9.0 | 6.90 |
| 4/2020 | 18.0 | 8.50 |

Rating 5.

Notes: This handsome plant has been an exceptionally fast, strong, upright grower with no problems. It was originally identified as *F. obliqua*.

Ficus rubiginosa 33.8225054N, 118.0871180W 2016-06-ED55

RUSTY LEAF FIG

Source: Cutting, unknown origin.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.0 | 2.00 |
| 5/2018 | 6.5 | 4.00 |
| 4/2020 | 17.0 | 3.50 |

Rating: 4.

Notes: This handsome plant has been a fast, strong grower with few problems. It required some structural pruning to help maintain a strong central leader. The invasive red squirrel stripped extensive areas of bark from the main trunk and branches in late 2018, causing about 1.5 m of the top to die back and eventually fall out. The tree reached maturity in late 2018 and has produced figs profusely.

***Ficus rubiginosa* 'Variegata'** 33.8225548N, 118.0868240W 2016-10-ED53 **Figs. 41–42**
VARIEGATED RUSTY LEAF FIG

Source: Cutting, Los Angeles County Arboretum and Botanic Garden, Arcadia, CA.

Planted: October 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 1.5 | 1.10 |
| 5/2018 | 3.0 | 1.60 |
| 4/2020 | 8.0 | 3.00 |

Rating 5.

Notes: This handsome plant has been a moderate grower with no problems.



41–42. *Ficus rubiginosa* 'Variegata' 2016 and 2020.

Ficus subpisocarpa 33.8224383N, 118.086211W 2016-10-ED48
TAIWAN FIG

Source: Cutting, UC Riverside Botanical Garden, Riverside, CA.

Planted: October 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 1.8 | 1.10 |
| 4/2020 | 8.0 | 2.00 |

Rating 2.

Notes: This plant has been a steady, moderate grower, initially with no problems. In late 2019, though, it had extensive defoliation and associated shoot tip death and was diagnosed with a pathogenic fungal complex causing branch dieback. It was erroneously planted as *F. virens* var. *wrightii* but the petiole epidermis flaking off proximally confirms *F. subpisocarpa*.



43



44

43–44. *Ficus sur* 2015 and 2020.

Ficus sur 33.822525N, 118.088392W 2015-12-ED15 Figs. 43–45

CAPE FIG

Source: Cutting, Los Angeles County Arboretum and Botanic Garden, Arcadia, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 4.5 | 2.20 |
| 4/2020 | 23.0 | 4.75 |

Rating 5.

Notes: This handsome, cutting-grown plant has been a moderate grower with few problems. As a nursery plant, it tended to grow as a shrub; thus, it needed intense and regular structural pruning to attain and maintain a strong central leader and grow as a tree. The invasive red squirrel stripped extensive areas of bark from the main trunk and branches in late 2018; no subsequent attacks have occurred, and the wounds are about half covered over. The tree reached maturity in late 2018 and has produced figs profusely.



45. *Ficus sur* showing profuse production of figs on specialized leafless branchlets hanging from main branches and the trunk. Note old damaged bark from squirrels in lower right.

Ficus sycomorus 33.8228713N, 118.087953W 2015-12-ED21 Figs. 46–47

SYCAMORE FIG

Source: Cutting, UC Riverside Botanical Garden, Riverside, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.7 | 2.05 |
| 4/2020 | 14.5 | 2.60 |

Rating 3.

Notes: This handsome, cutting-grown plant grew extremely fast initially, despite having been killed to the ground by cold its first two winters (2015–2016 and 2016–2017), each time recovering during the following growing season from basal sprouting and growing to two m tall by August. Each time I had to select one of the basal sprouts as the new leader, removing the rest, and after doing so in late 2017, no further serious cold damage occurred but the plant



46–47. *Ficus sycomorus* 2015 and 2020.

slowed remarkably over the last two years, perhaps from gophers that breached the gopher basket and tunneled around the base of the tree. This plant is the *Ficus cocculifolia* form, considered a synonym of the highly variable *F. sycomorus* and characterized by a strong central leader and upright growth, whitish bark with an attractive greenish tinge, and leaves uncannily like those of the alder, *Alnus rhombifolia*.

Ficus sycomorus 33.8229374N, 118.087858W 2015-12-ED22 Figs. 48–49

SYCAMORE FIG

Source: Cutting, UC Riverside Botanical Garden, Riverside, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.5 | 1.50 |
| 4/2020 | 20.0 | 3.80 |

Rating: 3.

Notes: This handsome, cutting-grown plant grew extremely fast initially, despite having been killed to the ground by cold its first two winters (2015–2016 and 2016–2017), each time recovering during the following growing season from basal sprouting and growing to two m tall by August. Each time I had to select one of the basal sprouts as the new leader, removing the rest, and after doing so in late 2017, no further serious cold damage occurred but the plant slowed remarkably over the last two years, perhaps from gophers that breached the gopher basket and tunneled around the base of the tree. This plant is the *Ficus cocculifolia* form,



48–49. *Ficus sycomorus* 2017 and 2020.

considered a synonym of the highly variable *F. sycomorus* and characterized by a strong central leader and upright growth, whitish bark with an attractive greenish tinge, and leaves uncannily like those of the alder, *Alnus rhombifolia*. It attained maturity in late 2019 and produced a few, large, oblate figs directly from proximal parts of major branches near the central leader.

Ficus sycomorus 33.8228517N, 118.087781W 2016-06-ED23 Figs. 50–51

SYCAMORE FIG

Source: Cutting, Los Angeles County Arboretum and Botanic Garden, Arcadia, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 3.0 | 2.05 |
| 4/2020 | 17.0 | 3.30 |

Rating 4.

Notes: This handsome, cutting-grown plant was initially fast growing but has slowed somewhat over the last two years. It suffered moderate leaf burn and slight shoot tip dieback from cold during the first winter (2016–2017). This plant is the *Ficus cocculifolia* form, considered a synonym of the highly variable *F. sycomorus* and characterized by a strong central leader and upright growth, whitish bark with an attractive greenish tinge, and leaves uncannily like those of the alder, *Alnus rhombifolia*.



50–51. *Ficus sycomorus* 2015 and 2020.

Ficus sycomorus 33.8219932N, 118.087216W 2019-11-ED97

SYCOMORE FIG

Source: Plant, Sherman Nursery, San Marcos, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.6 | 1.25 |

Rating: 4.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Ficus tettensis 33.8218724N, 118.087888W 2019-11-ED92

Source: Plant, Sherman Nursery, San Marcos, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.4 | 1.40 |

Rating: 3.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Ficus trichopoda 33.8223681N, 118.088439W 2015-12-ED14 **Figs. 52–53**

SWAMP FIG

Source: Plant, Rancho Soledad Nursery, Rancho Santa Fe, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.4 | 1.30 |
| 4/2020 | 6.5 | 1.90 |

Rating: 4.

Notes: This extremely handsome plant has grown moderately for four years, making a mound-shaped, multi-trunked shrub, which was recently pruned up to make a tree. It suffered only slight cold damage during some winters but defoliated and had reduced growth during the summer of 2018 when irrigation was interrupted. This plant has large, nearly leathery, wide, heart-shaped leaves with prominent white nerves adaxially and striking pinkish nerves abaxially. It attained maturity in late 2019 and carries red figs. This species occurs naturally in wet, swampy areas in Africa and tends to produce abundant aerial roots. Indeed, a spectacular specimen at Legoland in Carlsbad, California, heavily festooned with an abundance of aerial roots, appears much like a miniaturized tropical banyan (*Ficus benghalensis*). Hopefully this spectacular appearance can be attained with this specimen.



52. *Ficus trichopoda* 2015.



53. *Ficus trichopoda* 2020.

Ficus urceolaris 33.8223423N, 118.0886480W 2018-12-ED74

Source: Plant, Los Angeles County Arboretum and Botanic Garden, Arcadia, CA.

Planted: December 2018.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 12/2018 | 1.5 | 1.90 |
| 4/2020 | 2.3 | 2.10 |

Rating 4.

Notes: This low, spreading, sprawling, even mounding fig has been a steady, moderate grower with no problems other than it needed repeated, judicious structural pruning to train into a tree. It attained maturity in the nursery and has been producing attractive, yellow-orange, urn-shape figs since 2018.

Ficus virens 33.8220501N, 118.088840W 2019-11-ED84

WHITE FIG

Source: Plant, Tim Hoehn (now of San Diego Zoo), San Diego, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.8 | 1.40 |

Rating: 3.

Notes: Although only in the ground for a few months, it made it through the winter with no serious problems.

Ficus virens 33.8219976N, 118.088261W 2019-11-ED87

WHITE FIG

Source: Plant, Tim Hoehn (now of San Diego Zoo), San Diego, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 2.1 | 1.60 |

Rating: 3.

Notes: Although only in the ground for a few months, it made it through the winter with no serious problems.



54–55. *Ficus watkinsiana* 2016 and 2020.

Ficus watkinsiana 33.8224566N 118.0869590W 2016-06-ED56 **Figs. 54–55**

WATKIN'S FIG

Source: Plant, Sherman Nursery, San Marcos, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.3 | 1.85 |
| 5/2018 | 10.5 | 3.30 |
| 4/2020 | 22.0 | 4.00 |

Rating 5.

Notes: A purchased plant, this unusually handsome species has grown quickly and vigorously with no problems. It attained maturity in late 2018 and carries yellow figs.

Fraxinus malacophylla 33.8227538N, 118.08766W 2016-06-ED31

JAPANESE ASH

Source: Seed, street tree, 2035 Castillo St., Santa Barbara, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 1.5 | 1.90 |
| 4/2020 | 8.0 | 3.40 |

Rating: 4.

Notes: This handsome plant has grown moderately for four years and has had no problems although gophers have breached the gopher basket and piled up soil around the trunk. It attained maturity and had staminate flowers in late 2019.



56–57. *Fraxinus malacophylla* 2016 and 2020.

Fraxinus malacophylla 33.8227163N, 118.08758W 2016-06-ED32 Figs. 56–57

JAPANESE ASH

Source: Seed, street tree, 2035 Castillo St., Santa Barbara, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 1.7 | 1.90 |
| 4/2020 | 10.0 | 4.50 |

Rating: 5.

Notes: This handsome plant has grown moderately fast for four years and has had no problems. It attained maturity and had staminate flowers in late 2019.

Gardenia thunbergia 33.8221405N, 118.0887210W 2018-12-ED78

FOREST GARDENIA, TREE GARDENIA

Source: Plant, Henry Cespedes nursery, Los Angeles, CA.

Planted: December 2018.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 12/2018 | 2.2 | 1.70 |
| 4/2020 | 3.0 | 1.85 |

Rating: 2.

Notes: This plant has struggled and grown slowly.

Hakea archaeoides 33.8227547N, 118.086775W 2019-11-ED106

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.3 | 2.05 |

Rating: 5.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Handroanthus chrysotrichus 33.822950N, 118.087116W 2018-02-ED40

GOLDEN TRUMPET TREE, YELLOW TAB

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 5/2018 | 2.0 | 2.45 |
| 4/2020 | 4.5 | 2.70 |

Growth: DIAM. 2.0 cm May 2018; HT. 2.45 m May 2018.

Notes: This plant, donated as a 15-gallon size, has been a steady but slow grower. It flowered in early 2020.

Howea forsteriana 33.8223186N, 118.0872120W 2016-10-ED59

KENTIA PALM

Source: Seed, tree in yard of Hodel residence, Lakewood, CA.

Planted: October 2016.

| Growth | Diam. (cm) | H × L × W (m) |
|---------|------------|--------------------|
| 10/2016 | 11.0 | 1.80 × 1.80 × 1.95 |
| 5/2018 | 13.0 | 1.80 × 2.40 × 2.30 |
| 4/2020 | 15.0 | 1.25 × 1.55 × 1.55 |

Rating: 2.

Notes: Situated in the shade of large existing *Fraxinus uhdei*, this palm has grown slowly and weakly, perhaps because of insufficient water and vandalism.**Jubaea chilensis** 33.8226751N, 118.086583W 2019-11-ED109

CHILEAN WINE PALM

Source: Grown from seed collected at the Chavez Ravine Arboretum in Elysian Park, Los Angeles, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 6.5 | 0.70 |

Rating: 1.

Notes: In March 2020 the center spear leaf had rotted, perhaps from overhead irrigation; I pulled out the rotted leaf and am unsure if the plant will recover.

Jubaea chilensis 33.8226313N, 118.086389W 2019-11-ED111

CHILEAN WINE PALM

Source: Grown from seed collected at the Chavez Ravine Arboretum in Elysian Park, Los Angeles, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 7.5 | 0.85 |

Rating: 4.

Notes: Although only in the ground for a few months, this plant performed well through the winter with no serious problems.

Lyonothamnus floribundus subsp. asplenifolius 33.8222373N, 118.088427W

2018-02-ED10

SANTA CRUZ ISLAND IRONWOOD

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 5/2018 | 4.5 | 3.00 |
| 4/2020 | 9.0 | 3.60 |

Rating: 4.

Notes: This California native, donated as a 30-gallon size, has been a steady, moderate grower with few problems. Leaves are occasionally chlorotic, perhaps from gopher activity pushing up soil around the trunk.

Lysiloma candida 33.8221747N, 118.088783W 2018-02-ED5

PALO BLANCO

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 5/2018 | 2.1 | 3.60 |
| 4/2020 | 3.5 | 3.50 |

Rating: 4.

Notes: This plant, donated as a 15-gallon size, has been a steady but slow grower with few problems. It is likely growing slowly because of relatively cool conditions. Nonetheless, it has attained maturity and is carrying flower buds in early 2020.

Mayodendron igneum 33.8223264N, 118.086954W 2019-11-ED103

Source: Grown from seed obtained from Rancho Soledad Nursery, Rancho Santa Fe, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 2.9 | 1.00 |

Rating: 3.

Notes: Although only in the ground for a few months, this plant made it through the winter with no serious problems. Sometimes it is found under the name *Radermachera ignea*.

Metrosideros polymorpha 33.822047N, 118.088308W 2016-10-ED4 Figs. 58–59.

Source: Plant, Leon Massoth, Xotx Tropico nursery, Los Angeles, CA.

Planted: October 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 1.6 | 0.95 |
| 5/2018 | 3.6 | 1.70 |
| 4/2020 | 7.5 | 2.90 |

Rating: 4.

Notes: This Hawaiian endemic, a purchased plant, has been a steady, moderate grower with no problems. It attained maturity and flowered in 2019.



58–59. *Metrosideros polymorpha* 2016 and 2020.



60–61. *Olmediella betschleriana* 2016 and 2020.

Olmediella betschleriana 33.8230314N, 118.0866020W 2016-06-ED44 Figs. 60–61

GUATEMALAN HOLLY

Source: Seed, from street trees, 11840 W. Stanwood Dr., Los Angeles, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 8//2016 | 1.3 | 1.10 |
| 5/2018 | 5.0 | 2.70 |
| 4/2020 | 12.0 | 4.75 |

Rating: 5.

Notes: This Handsome, well shaped plant with attractive glossy green leaves has been a steady, moderate grower with no problems.

62–63. *Polyscias racemosa* 2016 and 2020.**Polyscias racemosa** 33.8221618N, 118.088342W 2016-10-ED9 Figs. 62–63

FALSE 'OHE

Source: Plant, Leon Massoth, Xotx Tropic nursery, Los Angeles, CA.

Planted: October 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 2.8 | 1.30 |
| 5/2018 | 5.8 | 1.80 |
| 4/2020 | 8.0 | 2.00 |

Rating: 2.

Notes: This Hawaiian endemic, a purchased plant and formerly known as *Munroidendron racemosa*, has been a steady, moderate grower. New growth is often stunted and distorted, likely from eriophyid mites in the vegetative buds.



64



65

64–65. *Pseudobombax grandiflorum* 2016 and 2018, the latter with buds ready to break.

Pseudobombax grandiflorum 33.8226429N, 118.087638W 2015-12-ED67 Figs. 64–65
BRAZILIAN SHAVING-BRUSH TREE

Source: Plant, South Coast Botanic Garden, Palos Verdes Peninsula, CA.

Planted: December 2015.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 3.5 | 1.45 |
| 4/2020 | 13.0 | 2.30 |

Rating: 4.

Notes: This unusual plant, a gift-shop purchase, has been a steady but slow grower with no problems. It attained maturity and flowered in early 2019.

Quercus sartorii 33.8228275N, 118.0865330W 2018-02-ED43

Source: Seed, from tree at the Los Angeles County Arboretum and Botanic Garden, Arcadia, CA., which I originally collected as seed in northwestern Mexico in 2001.

Planted: February 2018.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 5/2018 | 0.9 | 0.95 |
| 4/2020 | 4.0 | 1.90 |

Rating: 3.

Notes: Although this plant has struggled early with leaf margin burn, suggesting it was intolerant of the reclaimed water, it has performed better over the last year; a "litter mate" at Liberty Park in Cerritos, which is also irrigated with reclaimed water, shows similar symptoms.

Quercus sartorii 33.8228275N, 118.0865330W 2019-11-ED112

Source: Seed, from tree at the Los Angeles County Arboretum and Botanic Garden, Arcadia, CA., which I originally collected as seed in northwestern Mexico in 2001.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.5 | 2.25 |

Rating: 3.

Notes: Although only in the ground for a few months, this plant made it through the winter with no serious problems. I will assess it carefully for leaf margin burn because its two "litter mates," one several feet away and another at Liberty Park in Cerritos, have struggled with this symptom, which is likely due to the use of reclaimed water. This plant was unexpectedly "topped" after planting.

Quercus tomentella 33.8222462N, 118.088531W 2018-02-ED11

ISLAND OAK

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 5/2018 | 2.5 | 3.00 |
| 4/2020 | 5.8 | 3.10 |

Rating: 4.

Notes: This plant, donated as a 15-gallon size, has been a steady, moderate grower with few problems. Planted as a somewhat scraggly and lanky specimen, it is finally responding to structural pruning.

Rauvolfia samarensis 33.8224787N, 118.087783W 2018-02-ED28

INDIAN DEVIL TREE

Source: Plant, West Coast Arborists, Inc., Anaheim, CA.

Planted: February 2018.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 5/2018 | 8.0 | 4.20 |
| 4/2020 | 11.5 | 4.50 |

Rating: 5.

Notes: This plant, donated as a 24-inch box size, has been a steady, moderate grower with no problems.

Sabal × brazoriensis 33.8223363N, 118.0880350W 2015-12-ED70

TEXAS PALMETTO PALM, BRAZORIA SABAL PALMETTO

Source: Seed, The John Fairy Garden (formerly Peckerwood Gardens), Hempstead, TX.

Planted: December 2015.

| Growth | Diam. (cm) | H × L × W (m) |
|--------|------------|--------------------|
| 8/2016 | --- | 1.05 × 1.30 × 0.90 |
| 5/2018 | --- | 1.05 × 1.60 × 1.55 |
| 4/2020 | --- | 1.40 × 1.80 × 1.60 |

Rating: 5.

Notes: This palm has been a steady but slow grower with no problems.

Schrebera alata 33.8227763N, 118.087906W 2016-06-ED24

WILD JASMINE TREE

Source: Seed, Mildred E. Mathias Botanical Garden, U. C. L. A., Los Angeles, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 1.0 | 1.10 |
| 4/2020 | 7.0 | 2.10 |

Rating: 3.

Notes: This plant has grown slowly and has few problems, in contrast to its “litter mate” at Liberty Park in Cerritos, which has grown much larger and with better structure. Despite structural pruning it has shown a stubborn tendency to remain shrubby. Growth is likely reduced from insufficient water. It attained maturity and had wonderfully fragrant flowers in early 2020.

Senna mexicana 33.822894N, 118.086598W 2019-11-ED119

MEXICAN SENNA

Source: Grown from seed collected at the Los Angeles County Arboretum and Botanic Garden, Arcadia, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 1.4 | 1.55 |

Rating: 3.

Notes: Although only in the ground for a few months, this plant made it through the winter with no serious problems. The source tree is labeled *Senna mexicana* var. *liebmannii* but I was unable to find this variety on any of the on-line databases.

Sterculia quadrifida 33.822907N, 118.086952W 2019-11-ED121

PEANUT TREE

Source: Australian Native Plants Nursery, Ventura, CA.

Planted: November 2019.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 11/2019 | 2.5 | 1.05 |

Rating: 3.

Notes: Although only in the ground for a few months, this purchased plant made it through the winter with no serious problems.

Tecoma stans 33.8225112N, 118.087691W 2016-06-ED29 Figs. 66–69

YELLOW ELDER

Source: Cutting, from a nearly seedless plant, 6002 Hayter Ave., Lakewood, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 1.5 | 1.70 |
| 5/2018 | 5.0 | 2.90 |
| 4/2020 | 13.0 | 4.00 |

Rating: 5.

Notes: This floriferous, cutting-grown plant has been a fast grower with few problems. It needed extensive structural pruning when young to attain and maintain a strong central leader but has been flowering since 2018.

Thevetia thevetioides 33.822542N, 118.0887610W 2018-12-ED77

GIANT THEVETIA

Source: Seed, street tree, Bellflower, CA.

Planted: December 2018.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 12/2018 | 1.7 | 1.65 |
| 4/2020 | 3.5 | 2.15 |

Rating: 2.

Notes: This plant has struggled and grown slowly.



66–69. *Tecoma stans* 2016, 2017, 2019, and 2020, the latter after it was pruned up.

Trachycarpus wagnerianus 33.8221704N, 118.0880730W 2016-06-ED72

CHUSAN WINDMILL PALM; WAGNER'S WINDMILL PALM

Source: Plant, Terra Sol Garden Center, Santa Barbara, CA.

Planted: June 2016.

| Growth | Diam. (cm) | H × L × W / Ht. (m) |
|--------|------------|---------------------|
| 8/2016 | --- | 0.90 × 1.00 × 0.90 |
| 5/2018 | --- | 1.10 × 1.30 × 1.30 |
| 4/2020 | 17.0 | 1.25 |

Rating: 4.

Notes: This palm has been a slow but steady grower with few problems. It might be suffering slightly from insufficient water.

Trachycarpus wagnerianus 33.8221676N, 118.0881030W 2018-12-ED80

CHUSAN WINDMILL PALM; WAGNER'S WINDMILL PALM

Source: Plant, Terra Sol Garden Center, Santa Barbara, CA.

Planted: December 2018.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 12/2018 | 8.0 | 1.10 |
| 4/2020 | 13.0 | 0.75 |

Rating: 4.

Notes: This palm has been a slow but steady grower with few problems. It might be suffering slightly from insufficient water.

Trevesia palmata 33.8221608N, 118.087637W 2016-10-ED62

SNOWFLAKE ARALIA

Source: Plant, Walter Andersen Nursery, San Diego, CA.

Planted: October 2016.

| Growth | Diam. (cm) | Ht. (m) |
|---------|------------|---------|
| 10/2016 | 4.5 | 1.45 |
| 5/2018 | 4.5 | 1.40 |
| 4/2020 | 6.5 | 1.80 |

Rating: 2.

Notes: Situated in the shade of large existing *Fraxinus uhdei*, this handsome plant with unusually dissected, palmately lobed leaves has been a slow if not weak grower, perhaps from insufficient water and/or light. Nonetheless, it attained maturity and put forth spectacular inflorescences with yellow flowers in early 2020.

Vitex lucens 33.8223798N, 118.0876080W 2016-06-ED64 **Figs. 70-71**

NEW ZEALAND CHASTE TREE

Source: Seed, tree in yard, 1832 Corralitos, San Luis Obispo, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 1.7 | 1.20 |
| 5/2018 | 6.5 | 2.70 |
| 4/2020 | 11.0 | 4.00 |

Rating: 4.

Notes: This plant has been a steady, moderate-to-fast grower with no problems. It attained maturity and had flowers in early 2020.



70–71. *Vitex lucens* 2015 and 2020.

Vitex lucens 33.8224486N, 118.0875420W 2016-06-ED65

NEW ZEALAND CHASTE TREE

Source: Seed, tree in yard, 1832 Corralitos, San Luis Obispo, CA.

Planted: June 2016.

| Growth | Diam. (cm) | Ht. (m) |
|--------|------------|---------|
| 8/2016 | 2.7 | 1.60 |
| 5/2018 | 5.0 | 1.90 |
| 4/2020 | 8.5 | 2.70 |

Rating: 3.

Notes: This plant has been a steady but slow grower with no problems. It attained maturity and had flowers in early 2020.

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