

A History of Trees in Five of Santa Barbara's Oldest Parks
Prepared by Parks and Recreation Department
September 2015

Introduction

Although Santa Barbara was once a fairly treeless landscape, today's urban forest is a complex mix of street trees, trees within developed parks, native forests along creeks and within open spaces, and trees in landscaped areas of public facilities and on private property. The extent and diversity of the City's current urban forest is primarily the result of efforts of past horticulturists, including Dr. Doremus, Dr. Francesco Francheschi, and E.O. Orpet, among others. Many of their planting efforts are concentrated in some of the City's oldest parks and plazas. As such, histories of the trees in East and West Alameda Plazas, Upper and Lower Orpet Parks, Plaza del Mar, Plaza Vera Cruz, and Mission Historical Park were compiled to better understand the intent of tree planting and vision of the parks. The histories include a timeline of tree plantings and the identification of original plantings that still stand today. This information will inform the development of tree replacement plans and supports several key objectives in the Urban Forest Management Plan, including:

- Developing a Park Tree Master Plan;
- Assessing and developing age and species criteria for City parks;
- Maintaining existing species diversity and investigate methods for increasing desirable species that are rare;
- Maintaining stands of large trees in open spaces and community and developed parks;
- Protecting and enhancing trees in historically significant parks such as through increased tree maintenance and tree planting programs; and,
- Maintaining the history, design, cultural integrity and functional use of developed parks, as feasible.

Methods

The libraries at the Santa Barbara Historical Society, the Santa Barbara Botanic Garden, and the University of California, Santa Barbara were visited to obtain historical information about the parks in question.

Hard copy files located at the Parks and Recreation Department were also referenced to create a clearer picture of the history of the respective parks. Of the resources examined, the Park Commission Meeting Minutes revealed information about major tree removals. Aerial images of the City through the years were found in the Public Works archives. These images were compared to determine how canopy coverage has changed over time.

The City's tree inventory database was consulted to create a list of current species in the parks. The City's tree inventory database was also utilized to get a better understanding of the size composition of the parks current tree population. The *Trees of Santa Barbara* books, held in the Santa Barbara Botanic Garden Library, were used to create historical tree inventories. Versions from the 1940, 1948, 1976, and 2007 were referenced. The tree inventories through time were cross-referenced to determine the change in species density and diversity in the parks over the years.

Site visits with the City Arborist were conducted at each of the parks. The site visits were taken to confirm the present tree composition of the parks and verify original plantings.

Although some planting and removal dates and park tree inventories were collected through the aforementioned resources, large gaps in the historical records of the parks exist. While the site visits allowed for an estimation of the number of original plantings that exist today, the total number of trees originally planted in the parks is unknown. A complete record of tree removals during the past century is unattainable as well.

Preliminary Findings

The trees in the assessed parks reflect the City's diverse horticultural heritage and create an arboretum that links other cultures, times, and places. Park tree histories create a clearer picture of the current species and age composition and highlight the historic vision and development of the selected parks. Ultimately, the information will help inform future management of the parks, including the development of planting proposals. These planting proposals will provide a baseline as park uses change or as parks become candidates for development and landscaping changes. It is also recommended that education and outreach plans be created to inform the public about park and tree history. Considering nominating older specimens for historical specimen designation is also an option.

General themes between the assessed parks became apparent upon completion of the park histories. East and West Alameda Plazas and Upper and Lower Orpet Parks have an extensive horticultural heritage and were intended to be worldly arboretums displaying a wide range of exotic tree species. Both of these parks have a large number of species that are either unique to the parks (six tree species in East and West Alameda Plazas and 16 tree species in Upper and Lower Orpet Parks) or rarely found in Santa Barbara's urban forest (appearing five or less times). This means the loss of a particular species within the parks is likely to have a significant impact on species diversity within Santa Barbara's urban forest as a whole.

Table 1 summarizes the number of species in each of the five parks

Park Name	Total Number of Species	Number of Species Representing Original Plantings	Number of Rare Species*	Number of Unique Species**
East and West Alameda Plaza	82	18	4	15
Upper and Lower Orpet Park	93	19	13	18
Plaza del Mar	19	9	0	2
Plaza Vera Cruz	17	7	1	0
Mission Historical Park	13	N/A	1	0

*Rare species are defined as being found five or fewer times in Santa Barbara's public urban forest (excluding only being found once)

**Unique species are only found in the specified park

East and West Alameda Plaza

Introduction

Alameda Plaza, located in downtown Santa Barbara, is one of the city's oldest public spaces.¹ The park spans two city blocks, creating East Alameda Plaza and West Alameda Plaza, offering a botanical setting and some of Santa Barbara's largest and rarest trees. The Plazas are a popular location for large community events, including Summer Solstice and the Earth Day Festival as well as smaller private events such as weddings and birthdays. East and West Alameda Plazas would not be the arboretum they are today without the conscious planting efforts of past generations. The horticultural legacy of East and West Alameda Plazas began with the first Parks Superintendent, Dr. Doremus, whose intent was to create a park showcasing tree specimens from around the world. His vision still stands in the form of the 82 tree varieties present in the Plazas today.² An understanding of the vision for the park, history of tree plantings, and the current composition of trees in East and West Alameda Plazas, will help to maintain and enhance this horticultural legacy.

Historical Tree Management

To create this collection of trees, Dr. Doremus began planting specimens cultivated in his West Alameda Plaza nursery. With the help of a part-time gardener, Dr. Doremus started the nursery "to give his acquisitions a chance to grow until conditions were right for them to be moved to their permanent location."³ Many of these specimens came from seeds he collected during his travels. Dr. Doremus' original intent for the Plazas can easily be seen in the variety of tree species planted shortly after his appointment as Parks Superintendent and the inception of the Park Commission, both occurring in 1902. One of the first trees planted was the Northern Rata (*Metrosideros robusta*) in 1905. Planted in East Alameda Plaza, this species is endemic to New Zealand. It was later removed in 1974 because of old age.⁴ Several young Montezuma Bald Cypress (*Taxodium mucronatum*) and two Fern Pines (*Podocarpus gracilior*) were planted in the Plazas in 1908. The Fern Pines were propagated by Francesco Franceschi from seeds brought back from Kenya. A male specimen was planted in West Alameda Plaza while a female specimen was planted in East Alameda Plaza.⁵ (This species was known for 30 years in California as *Podocarpus elongata*.)⁶ The Montezuma Bald Cypress trees were propagated by Dr. Franceschi from seeds from the famous Council Tree in Mexico City.⁷ Although the planting date is unknown, a *Schefflera actinophylla* grew in Alameda Plaza until it was killed by frost in 1913. In 1914, a Brisbane Box tree (*Lophostemon confertus*) and a Black Acacia tree (*Acacia melanoxylon*) were planted, both coming

¹ Designated as a public space on the first city maps in 1855

² Tree Inventory

³ Wilson, Edith. *Dr. A. Boyd Doremus "The Father of Santa Barbara's Parks"*. *Noticias* Vol. XXVII No. 1, 1981.

⁴ Beittel, Will. *Santa Barbara's Trees*, 1976.

⁵ Van Rennselaers, Maunsell. *Trees of Santa Barbara*, 1940.

⁶ Van Rennselaers, Maunsell. *Trees of Santa Barbara*, 1948.

⁷ Van Rennselaers, Maunsell. *Trees of Santa Barbara*, 1948.

from Australia.⁸ Three Redwood trees (*Sequoia sempervirens*) were planted by King Albert, Queen Elizabeth and Prince Leopold of Belgium on their visit to Santa Barbara in 1919.⁹ While many other trees were planted by Dr. Doremus and the first Park Commission, these records provide a snapshot of the historical precedent for planting worldly trees in the Plazas.

Dr. Doremus' horticultural tradition continued after the original planting of East and West Alameda Plazas. In 1921, Wild Sand Strawberry trees (*Arbutus unedo*) were planted along Micheltorena Street.¹⁰ In 1926, a Dragon tree (*Dracaena draco*) was removed from the corner of Victoria and State Street (the old grounds of the Arlington Hotel) and replanted in West Alameda Plaza.¹¹ This tree still stands in West Alameda Plaza and was named the National U.S. Champion Dragon Tree by Matt Ritter, a California Polytechnic State University professor, on February 14, 2014.¹² In 1935, two rows of Queen Palms (*Syagrus romanzoffiana*) were planted facing each other along Santa Barbara Street.¹³ These Queen Palms, which were cultivated in Dr. Doremus' "nursery of [Queen Palms] in Alameda Plaza for this purpose", replaced two rows of Fan Palms that had been planted in 1874.¹⁴ Through the development of the parkway, these trees are now part of the street tree inventory and are the designated street tree for this block.

Many other trees were planted in the early years of East and West Alameda Plazas but the planting dates are unknown. The following trees were planted in East and/or West Alameda Plaza before 1940.¹⁵ Research on historic tree plantings in the Plazas, review of the City's data on trees in the Plazas, and a site visit indicate that most of the following trees were likely planted before 1925.

- **East Alameda Plaza:**

- A Queensland Kauri tree (*Agathis robusta*) that was propagated from seeds produced by Peter Reidel in 1905.
- An Australian Willow Myrtle (*Agonis flexuosa*) was planted overhanging Sola Street. There still exists a specimen overlooking Sola street but based on its small size it was planted later to replace the original planting.
- At least one Mexican Blue Palm (*Brahea armata*). There is only one Mexican Blue Palm in the Plazas today but it is under 6 feet tall so it does not represent the original planting.

⁸ Parks Commission Minutes, December 1, 1914.

⁹ Historic Resources Inventory, Santa Barbara Historical Society, 1978.

¹⁰ Parks Commission Minutes, September 15, 1921.

¹¹ De Forest, Elizabeth. *The Santa Barbara Gardner*: Vol. 1 No. 8 pg 8., 1926. (In the Parks Commission Meeting Minutes, May 3, 1926, a large palm is noted as being removed from Arlington Hotel and replanted in Alameda Plaza in 1926)

¹² Baldwin, Randy. "Quest to Find the Biggest Dragon Trees (*Dracaena draco*), in Santa Barbara, California" http://www.smgrowers.com/info/Dracaena_dracoSantaBarbara.asp

¹³ NewsPress article: "Trees Planted Along Streets", 1935.

¹⁴ Doremus, A. Boyd. *Santa Barbara Parks- A Report of the Superintendent*, 1908.

¹⁵ Van Rennselaers, Maunsell. *Trees of Santa Barbara*, 1940.

- A notable Forest Gray Gum (*Eucalyptus teretocornis*) that was the tallest in the region at 122 feet in 1939. This species may also be referred to as a Forest Red Gum or *Eucalyptus umbellata*.
- A Holly Oak (*Quercus ilex*). One Holly Oak is recorded in the City's tree inventory database as being located in East Alameda Plaza but during a site visit with the City Arborist, this specimen was determined to be a Coast Live Oak (*Quercus agrifolia*). Either the Holly Oak was removed and a Coast Live Oak took its place or historically the tree has been misidentified.
- A Colorado Blue Spruce (*Picea pungens*).
- **West Alameda Plaza:**
 - Two Bangalay trees (*Eucalyptus botryoides*) with one measuring over 100 feet tall in 1940, making it the largest of its kind in California at the time. According to a recent site visit, the only Bangalay trees in the Plazas are located in East Alameda Plaza. They are large enough to be original plantings so it is likely they were falsely recorded as being located in West Alameda Plaza. An unknown number of Canary Island Pines (*Pinus canariensis*).
 - A Soapbark tree (*Quillaja saponaria*).
 - An Aleppo Pine (*Pinus halepensis*) that was 100 feet in 1974.
- **East and West Alameda Plaza**
 - An unknown number of Victorian Box trees (*Pittosporum undulatum*) with one specimen in East Alameda Plaza measuring over 60 feet tall in 1940.

The following trees were planted in East and/or West Alameda Plaza between 1940 and 1974.^{16,17} The diversity of tree species shows that Dr. Doremus' legacy was continued long after his direct influence over the park.

- **East Alameda Plaza:**
 - An unknown number of Green Dracaena trees (*Cordyline australis*).
 - An unknown number of Loquat trees (*Eriobotrya japonica*).
 - One Southern Magnolia (*Magnolia grandiflora*).
 - One Snowy Fleece tree (*Melaleuca genistifolia*).
 - One Irish Yew tree (*Taxus baccata*)¹⁸.
 - An unknown number of Abyssinian Banana trees (*Ensete ventricosum*).
 - One Tawhiwhi (*Pittosporum tenuifolium*).
- **West Alameda Plaza:**
 - At least one Deodar Cedar (*Cedrus deodara*).
 - An unknown number of Rustyleaf Fig trees (*Ficus rubiginosa* 'australis').
 - A Nut Pine (*Pinus edulis*).

¹⁶ Van Rennselaers, Maunsell. *Trees of Santa Barbara*, 1940.

¹⁷ Beittel, Will, Richard Border, Katherine Muller. *Trees of Santa Barbara*, 1974.

¹⁸ Currently the only Irish Yew tree in current tree inventory

- An unknown number of Paradise Palms (*Howea forsteriana*).
- Several clumps of Senegal Date Palms (*Phoenix reclinata*).
- An unknown number of Windmill Palms (*Trachycarpus fortunei*).
- An unknown number of *Pittosporum eriocarpum* were planted on the Anacapa Street side.
- A White Ironwood tree (*Vepris undulata*) was planted to the north of the center of the plaza.
- An unknown number of European Fan Palms (*Chamaerops humilis*).
- **East and West Alameda Plaza:**
 - An unknown number of Moreton Bay Fig trees (*Ficus macrophylla*).
 - An unknown number of Chilean White Palms (*Jubea chilensis*).
 - An unknown number of Canary Date Palms (*Phoenix canariensis*).

Records indicate that the removal of trees in East and West Alameda Plazas focused on removing old specimens that posed a potential hazard to the public.¹⁹ For example, in 1939 a “fine large Koa (*Acacia koa*) died” and was removed.²⁰ Similarly, in 1942, a Monterey Cypress (*Cupressus macrocarpa*) and Monterey Pine (*Pinus radiata*) were removed because both trees were “dead and dangerous.”²¹ In 1951, twelve large Monterey Cypress (*Cupressus macrocarpa*) and Monterey Pine (*Pinus radiata*) trees were removed presumably for health or safety concerns. These trees represented individuals from both East and West Alameda Plazas. In 2015, a Southern Magnolia (*Magnolia grandiflora*) was removed from West Alameda Plaza because of old age. This tree likely represented an original planting. Two other Southern Magnolia trees exist in the Plazas, one of which is an original planting.

Similar to the incomplete records of tree plantings in East and West Alameda Plazas, detailed records do not exist for all trees that have been removed. It is known, however, that the following trees were removed from East and West Alameda Plazas between 1940 and 1974.^{22, 23} The rationale behind the removals is unknown. However, City ordinances establish criteria under which tree removals are likely to occur and so it can be assumed that in addition to safety, trees were most likely removed due to disease or death.

- **East Alameda Plaza:**
 - A Port Orford-Cedar (*Chamaecyparis lawsoniana*).
 - A Rose-Apple Jambos (*Syzygiun jambos*) was removed from just south of the center of East Alameda Plaza.
 - A large California Incense Cedar (*Libocedrus deccurrens*).
 - A Pink Flame tree (*Brachychiton discolor*) was removed from East Alameda.
- **West Alameda Plaza:**

¹⁹ NewPress article: “TIMBERRRRR!”, 1949.

²⁰ Van Rennselaers, Maunsell. *Trees of Santa Barbara*, 1948.

²¹ Park Commission Meeting Minutes, May 18, 1942.

²² Van Rennselaers, Maunsell. *Trees of Santa Barbara*, 1940.

²³ Beittel, Will, Richard Border, Katherine Muller. *Trees of Santa Barbara*, 1974.

- A small Queensland Nut (*Macadamia ternifolia*).
- A Lombardy poplar (*Populus nigra italica*) that was across from 116 E Sola Street.
- An unknown number of Catalina cherry trees (*Prunus lyonii*).

Over the last four decades (from 1974), the planting and management of trees in East and West Alameda Plazas has remained consistent with prior management objectives. A Queensland Kauri Pine was planted in 1987 in East Alameda Plaza.²⁴ This tree, which originates from New Zealand, still stands today and represents a continuation of Dr. Doremus' horticultural legacy. In 1993, three shade trees were planted at the time the Kids World playground was constructed. This planting was not likely motivated by a desire to carry on the horticultural legacy of East and West Alameda Plazas. Rather, these trees were likely planted to create a more pleasant atmosphere around the playground. The importance of tree diversity was still upheld during this time period since no trees were removed during construction. A few years later, around 2000, former City Arborist Dan Condon planted three African Mahogany trees and a Kentucky Coffee tree, continuing the legacy of creating a park focused around tree diversity. All four of these trees still stand today.

Trees in the Plazas Today

The tree plantings and removals in the years following Dr. Doremus' time as Parks Superintendent suggest that the original intent of East and West Alameda Plazas has remained fairly constant over the years. East and West Alameda Plazas still boast a diverse array of trees, even though species diversity has declined. The Plazas experienced a net loss of thirty tree varieties since the 1970's. (There were 112 tree varieties in the 1970's compared to only 82 tree varieties today.²⁵) East and West Alameda Plazas also have many tree varieties that are either very rare to Santa Barbara's urban forest, occurring 5 or fewer times, or only present in the Plazas. Of the 211 tree varieties that occur 5 times or less in Santa Barbara's public spaces, 19 of these are represented in East and West Alameda Plazas. Six of those 19 varieties occur only in the Plazas. For example, the Irish Yew tree (*Taxus baccata*) located in East Alameda Plaza is the only specimen of its kind in Santa Barbara. It was also verified by the City Arborist as being an original planting. Understanding the frequency of tree varieties inside East and West Alameda Plazas in relation to their occurrence elsewhere in Santa Barbara will help to maintain species diversity not only inside the Plazas but also in the larger context of Santa Barbara's urban forest.

Although species diversity has decreased over the past four decades, the total number of trees in East and West Alameda Plazas has increased from 300 trees to 399 trees (including street trees). As depicted through image 1 and image 2 on page 13, total canopy cover has remained relatively constant between 1938 and today. The large, old trees present in the 2012 aerial image most likely are also represented in the 1938 aerial image, with the increase in the number of trees during this time period either

²⁴ Beittel, Will. *Santa Barbara's Trees*, 2002.

²⁵ A current tree inventory list was compared to inventories from the early 1970's.

being concentrated within the designated circles and/or represented by small specimens that do not drastically alter canopy cover.

On May 12th, 2015, a site visit to East and West Alameda Plazas helped to corroborate the findings noted above. Many of the trees in East and West Alameda Plazas appear to be of similar age because of their mature stature, supporting the assumption that most of the trees in the park are between 90 and 105 years of age.²⁶

The site visit also concluded that 42% of the trees in West Alameda Plaza and 54% of the trees in East Alameda Plaza are palm species. These trees represent 21 different palm species, and a quarter (25%) of all tree varieties in East and West Alameda Plazas. A majority of the young trees in both East and West Alameda Plazas are palm species as well. As the trees aged 90 to 105 years begin to die off, the maturing palm species could begin to dominate the skyline.

A separate site visit was conducted on June 23rd, 2015 with the company of the City Arborist. Previously identified trees were inspected to determine the likelihood that they represent original plantings. In addition to the trees listed below, the City Arborist noted that several Canary Island Palms (*Phoenix canariensis*) and Senegal Palms (*Phoenix reclinata*) were tall enough and had a large enough DBH to be original plantings.

- **East Alameda Plaza:**
 - One Queensland Kauri (*Agathis robusta*).
 - Two Southern Mahogany trees (*Eucalyptus botryoides*).
 - One Forest Red Gum tree (*Eucalyptus teretecornis*).
 - One White Feather Honey Myrtle tree (*Melaleuca decora*).
 - One Irish Yew tree (*Taxus baccata*).
 - There are currently four Moreton Bay Fig trees (*Ficus macrophylla*) but only one is an original planting.
 - One Southern Magnolia tree (*Magnolia grandiflora*).
- **West Alameda Plaza:**
 - One Dragon tree (*Dracaena draco*).
 - There are currently seven Canary Island Pines (*Pinus canariensis*). Six have been identified as being tall enough to be original plantings and the seventh was likely planted at a later date.
 - One Soapbark tree (*Quillaja saponaria*).
 - There are currently four Redwood trees (*Sequoia sempervirens*). Three have been identified as probable original plantings and likely represent the Redwood trees that King Albert planted.
 - One Bottle tree (*Brachychiton populneus*).
- **East and West Alameda Plazas:**
 - There are currently three Victorian Box trees (*Pittosporum undulatum*) and all three are large enough to be original plantings. The specimen

²⁶ *The Alameda Plazas Self-Guided Tree Tour* pamphlet, 2002.

in East Alameda Plaza represents the specimen measured in 1940 but is currently dead and needs to be removed.

- The Fern Pine (*Podocarpus gracilior*) in West Alameda Plaza is definitely an original planting while the specimen in East Alameda Plaza is large enough to be an original planting.
- There are currently six Montezuma Bald Cypress trees (*Taxodium mucronatum*). One is definitely an original planting, three are possibly original plantings, and two are not original plantings.
- Two Chilean Wine Palms (*Jubaea chilensis*).

Based on the results of the site visit with the City Arborist, there are at most 40 trees in East and West Alameda Plazas that represent original plantings. The only urgent health concern is the Victorian Box tree (*Pittosporum undulatum*) in East Alameda Plaza that is dead and needs to be removed. No other visible stresses affect the original plantings but it is likely most of them will reach the end of their life in the next 10-30 years.

Future Management & Key Considerations

A key objective of the 2014 Santa Barbara Urban Forest Management Plan is to “maintain and protect historic and culturally significant trees.”²⁷ Key considerations to the successful implementation of this objective include maintaining the species diversity, age diversity and horticultural heritage of East and West Alameda Plazas. As previously noted, species diversity has decreased from 112 tree varieties in the 1970’s to 82 tree varieties today.²⁸ Although East and West Alameda Plazas still represent one of Santa Barbara’s most horticulturally diverse parks, it is important to note this downward trend. A lack of commercial cultivation of, and thus access to, certain tree species complicates the issue of regaining lost tree species. As outlined in the Santa Barbara Urban Forest Management Plan, “maintaining high species diversity can provide increased protection against disease, pest and environmental changes.”²⁹ Secondary benefits of species diversity include “nearly year-round color, fragrance and texture due to varied growing seasons, and educational opportunities in the areas of species preservation, ecology, biodiversity, and cultural uses of trees.”

Improving the age diversity of trees in East and West Alameda Plazas can be achieved in conjunction with maintaining species diversity while creating added benefits as well. While varied tree age reduces the possibility that all trees in the stand begin to die off at the same time, having a “healthy mixture of young, medium and older trees also provides a more complex habitat for wildlife and can support a greater number of species.”³⁰ Dr. Doremus is credited with planting many of the mature trees currently in East and West Alameda Plazas, which leads to the assumption that these trees were planted between 1910 and 1925.³¹ Because many of the trees in East and West

²⁷ Santa Barbara Urban Forest Management Plan, pp. 42, 2014.

²⁸ Comparison of 1970’s inventory to current tree inventory.

²⁹ Santa Barbara Urban Forest Management Plan, pp. 5, 2014.

³⁰ Santa Barbara Urban Forest Management Plan, pp. 39, 2014.

³¹ *The Alameda Plazas Self-Guided Tree Tour* pamphlet, 2002.

Alameda Plazas are of similar age, losing a number of trees within a short period of time becomes a concern. Since urban forest management objectives prioritize maintaining species and age diversity within City parks, especially historical sites such as Alameda Plaza, it will be important to focus on planting young tree species that are not currently present in the Plazas or whose presence in the Plazas is threatened.

Recommendations

A number of options exist that will help to maintain the historical intent of the Plazas, their diverse tree population and their unique aesthetic nature that makes them a popular location for community and private events alike. It is recommended that planting efforts be focused around increasing species diversity to help counteract both the decline in tree varieties since the 1970's and the inevitable die-off of many of the older trees within the next 10-30 years or more as they reach the end of their life-cycle. The increase in species diversity can come from either a re-introduction of lost species, an increase in the number of specimens of current species, or an addition of entirely new species. If the motivation for planting new trees is to replace older specimens that are reaching the end of their life cycle, planting them in the vicinity of the older trees would be logical. Otherwise, alternate planting locations can be determined.

In order to counteract the lack of commercial cultivation of certain tree species, working with local nurseries to propagate commercially unavailable rare species is outlined in the Santa Barbara Urban Forest Management Plan as a potential solution. To this aim, development of the following is recommended:

- Develop a tree planting plan that identifies possible planting locations in consideration of park uses (e.g. maintaining open space for recreation) and maintenance.
- A prioritized list of tree species historically present in the Plazas that are no longer commercially available. As discussions with local nurseries move forward, this list will serve as a focal point for future species propagation.
- A list of potentially viable new species (never before present in the Plazas) created with the assistance of the City Arborist, among others. This list should identify species currently being cultivated by local nurseries that would do well in the Plazas' environment as well as remain consistent with the types of exotic species historically introduced into the Plazas. Taking into consideration a species' country of origin may be a strategy for achieving consistency.
- A plan to further encourage education and outreach in the Plazas to inform the public about park and tree history.
- A database that prioritizes maintaining the historical records of tree plantings and removals in East and West Alameda Plazas and Santa Barbara's entire urban forest as a whole.
- A plan to assist historic trees threatened by the drought. This may require the designation (or the recommendation for designation) of historic trees within the Plazas.

It is recommended that the current use of the Plazas as a location for large community events and small private events be kept in mind during all future management decisions.

Figure 1.

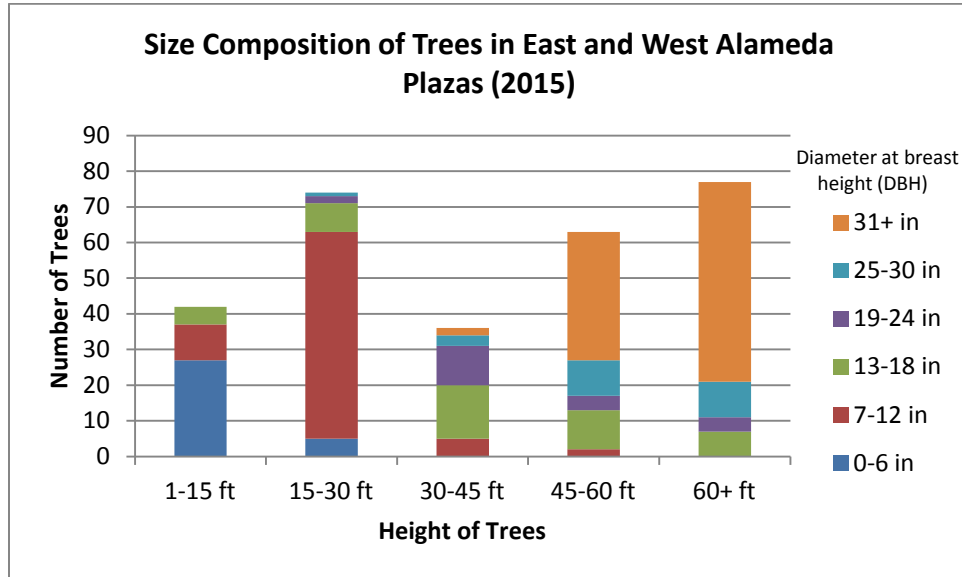


Figure 1. illustrates the size composition of trees in East and West Alameda Plazas

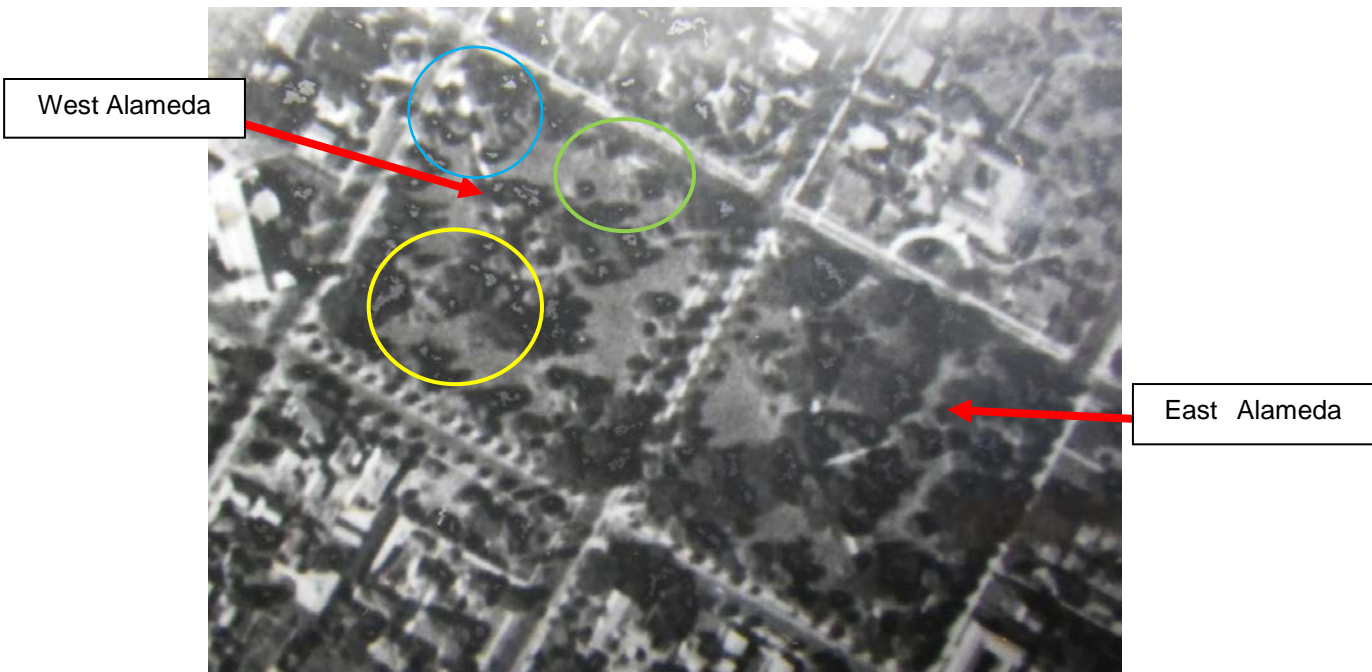


Image 1. 1938 aerial image of East and West Alameda Park

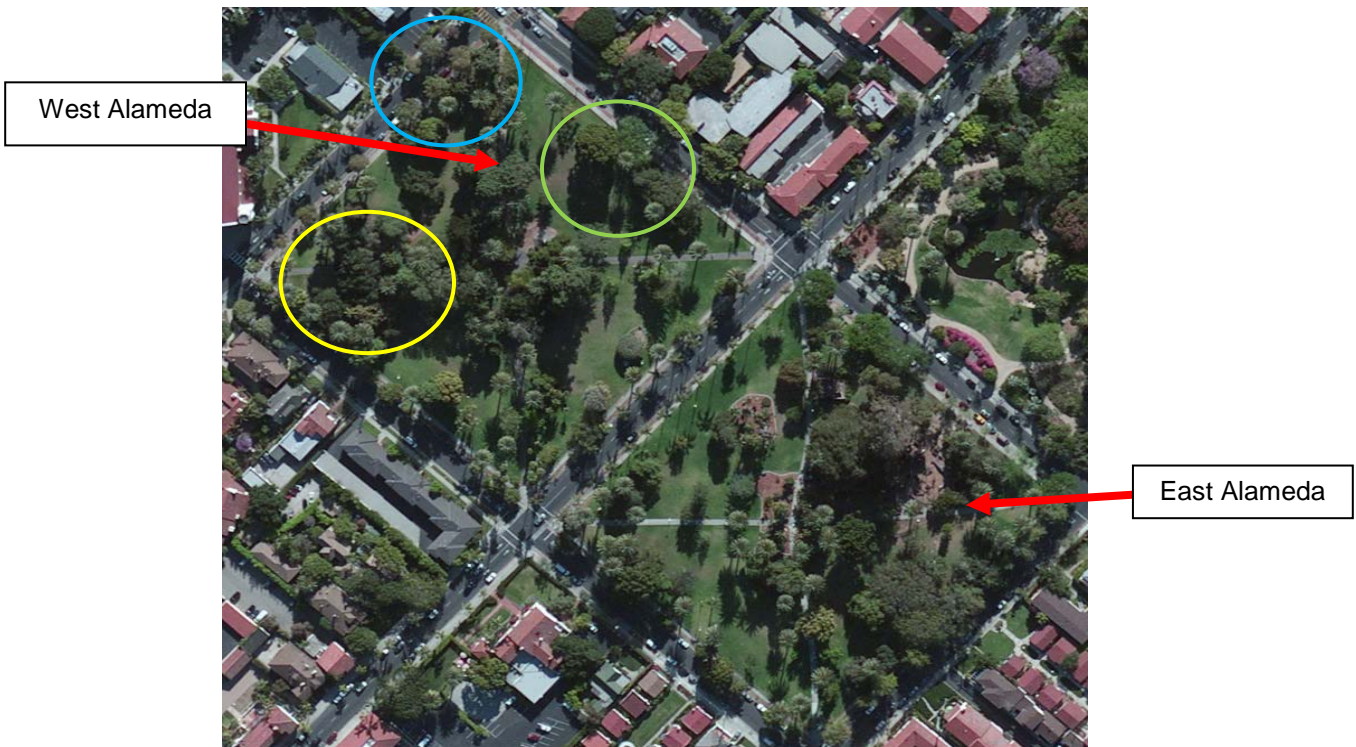


Image 2. 2012 aerial image of East and West Alameda Park

Upper and Lower Orpet Park

Introduction

Orpet Park, located in the Riviera neighborhood, was originally named Hillside Park because of its nestled location in the hills of Santa Barbara. In the early 1900's, this area of the Riviera was largely treeless and undeveloped. The construction of the State Normal School in 1912 not only spurred development but also acted as the catalyst for the ultimate acquisition of Hillside Park. A group of residents created the Riviera Company with the intention of discussing the purchase of land to be turned into a City park for perpetuity.³² The land composing Upper and Lower Orpet Parks was finally purchased by the City in 1919 from private property owners with funding help from the Riviera Company.³³

Shortly after his appointment as Parks Superintendent on July 1, 1921, E.O. Orpet established Hillside Park as a horticultural showplace.³⁴ Over the next decade, present-day Orpet Park "served as an experimental horticultural space with over five hundred tropical and semi-tropical shrubs, trees, and plants," many of which were introduced from seed in 1930 by Mr. Orpet.³⁵ Mr. Orpet is well known for introducing 30 different species of aloes to Santa Barbara as well as convincing the California Highway Department to use ice plant as a means to prevent erosion. Similar to the horticulturists to precede him, namely Dr. Francesco Franceschi, Mr. Orpet brought back numerous plant species from abroad with the intention of propagating them to be introduced into Santa Barbara's open spaces. The initial years of Hillside Park were greatly influenced by this desire.³⁶ Some examples include the Puya from South America, exotic vines from New Caledonia, aeoniums from the Canary Islands, three types of peonies from Japan, and a foliage plant from Madagascar.

E.O. Orpet served as Parks Superintendent until 1930 but the horticultural legacy he created continued for decades to come. In 1963, Hillside Park was renamed in his honor and is now known as Orpet Park. Looking at tree management in the park over the years reveals that his legacy continues today.

Historical Tree Management

Shortly after his appointment as Parks Superintendent in 1921, Mr. Orpet began planting his legacy in the area that would one day hold his surname. Most of the species Mr. Orpet introduced were exotics that originated in other continents including Australia, New Zealand, and Africa. Although specific planting dates for many of the trees Mr. Orpet introduced are not available, the park was "cleared and plowed, and trees were

³² Wilson, Edith. *Noticias* Vol. XXVII No. I, 1981.

³³ Johns, Richard. *100 years of Santa Barbara City Parks*, pp. 14, 2002.

³⁴ Days, Mary Louise. *Park Histories*, pp. 3, 1977.

³⁵ *Noticias* Vol. XLVII No. I, 2001.

³⁶ Johns, Richard. *100 years of Santa Barbara City Parks*, pp. 10, 2002.

planted” in April of 1923, placing the following planting dates after that time.³⁷ In the 1920’s, Mr. Orpet planted an Australian Juniper-Myrtle (*Agonis juniperina*) in present-day Lower Orpet Park, and a Scrub Yellow-Wood (*Acronychia baueri*) and a Cape Olive tree (*Elaeodendron capense*) in present-day Upper Orpet Park.³⁸ Around the same time, he also planted a *Taiwania cryptomerioides*, which was presented to the City of Santa Barbara by the late Charles Sprague Sargent who, at the time, was the Director of the Arnold Arboretum of Harvard University.³⁹ In 1976, the *Taiwania cryptomerioides* and the Scrub Yellow-Wood (*Acronychia baueri*) were only found in Orpet Park. Currently none of these tree species exist in any of Santa Barbara’s open spaces.⁴⁰ In May of 1926, the Park Commission decided to plant more conifers in Orpet Park.⁴¹ In 1932, Mr. Orpet introduced the Golden Fragrance tree (*Pittosporum napaulense*) to present-day Upper Orpet Park, making it the first of its kind in an open space in Santa Barbara. This species is no longer represented in any of Santa Barbara’s open spaces, including Orpet Park. There are several Coast Live Oak street trees (*Quercus agrifolia*) that are planted along Alameda Padre Serra and Moreno road. Although these trees are not within the limits of Orpet Park, at least five of them can be attributed to Mr. Orpet.

Following Mr. Orpet’s term as Parks Superintendent, the park continued to be planted with exotics from around the world, many of them being the only one of their kind in Santa Barbara. The following list contains some of the trees that were introduced to present-day Orpet Park after 1930⁴²:

- **Lower Orpet Park**
 - 1933- Chinese Gum tree (*Eucalyptus ulmoides*)
 - 1935- Brush Bloodwood tree (*Baloghia lucida*)
 - 1935- Tarajo Holly tree (*Ilex latifolia*)
 - 1953- *Rhus javania* is native to the Himalayans
 - 1956- Maidenhair tree (*Ginkgo biloba*)
 - 1958- Pompom tree (*Dais cotinifolia*)
 - 1961- Red Alder tree (*Cunonia capensis*)
 - 1961- New Zealand Christmas Trees (*Metrosideros excelsa*)
 - 1962- Surinam Cherry tree (*Eugenia uniflora*)
 - 1963- *Hakea arborescens*
 - 1963- Maidenhair tree (*Ginkgo biloba*) dedicated to Mr. Orpet.
 - 2000- American Elm (*Ulmus americana*)⁴³
- **Upper Orpet Park**
 - 1935- Argan tree (*Argania sideroxylon*)

³⁷ Parks Commission Meeting Minutes, April 2, 1923.

³⁸ Beittel, Will. *Santa Barbara’s Trees*, 1976.

³⁹ Van Rennselaers, Maunsell. *Trees of Santa Barbara*, 1948.

⁴⁰ ArborAccess Inventory

⁴¹ Parks Commission Meeting Minutes, May 3, 1926.

⁴² Beittel, Will. *Santa Barbara’s Trees*, 1976.

⁴³ This tree was planted in memory of the 168 citizens that lost their lives in April 19, 1995 bombing of the Alfred P Murrah Federal Building in Oklahoma City, Oklahoma and was grown from a seed retrieved from the remnant of the American Elm that was obliterated by the bomb in front of the Federal Building.

- 1973- *Melaleuca pubescens*

Based on the above data, at least 15 tree species were lost from Upper and Lower Orpet Parks since the original planting of the park in the 1920's.

Upper and Lower Orpet Parks saw little development other than the addition of exotic trees over the years. It wasn't until 1972 that there is any record of construction on site when a restroom and bus stop were demolished in the upper park area. In 1975, controversial heavy pruning of trees occurred in Upper Orpet Park.⁴⁴ Local horticultural enthusiasts felt the trees were becoming too manicured and losing their natural appeal, including the Scrub Yellow-Wood tree.

Trees in the Park Today

Today there are 236 trees in Orpet Park representing 93 species. Thirty-one of those species appear less than six times in Santa Barbara's public spaces. Of these 31 species, 26 species are only found in Upper and Lower Orpet Parks. Because of the large number of tree species unique to Orpet Park, the loss of a particular species within the parks could also mean the loss of that species in Santa Barbara's urban forest. Orpet Park has already witnessed a slight decline in species diversity over the past forty years seeing a net loss of six species during that time period.⁴⁵ With such a high concentration of horticultural diversity but a lack of depth, it becomes important to manage the park in ways that will maintain the species diversity while improving the occurrence rate of rare species.

Unlike other managed open spaces in Santa Barbara, palm species were never heavily introduced into the park. Instead, a theme of diversity seems to have run through the decades, maintaining the work E.O. Orpet started. Most tree species occur once or twice in Orpet Park except for the Coast Live Oak (*Quercus agrifolia*), which is represented by 55 trees. Coast Live Oaks are native to the Santa Barbara region so some of older members of the oak population in the park may represent a natural stand allowed to persist following the original development of the park. The only other tree species that appears more than ten times is the *Ficus sp.*, which is represented by 11 trees. Sixty species occur only once in Orpet Park and 26 species occur between two and five times (Figure 1). It is hypothesized that because of the historical importance placed on creating Upper and Lower Orpet Parks as a horticultural showplace, a vast number of species were introduced while the frequency with which they were planted went overlooked. This may have also been the result of a number of factors including experimentation or the availability of resources. Figure 1 helps to illustrate how the loss of a single tree will disproportionately affect species richness within Orpet Park.

None of the tree species for which there is a record of Mr. Orpet planting exist in the park today. This may be evidence of a younger tree stand in Upper and Lower Orpet

⁴⁴ Day, Mary Louise. *Park Histories*, pp. 59, 1977.

⁴⁵ Beittel, Will. *Santa Barbara's Trees*, 1976.

Parks. Figure 2 below shows the size composition of trees in the parks. A majority of the trees are less than 30 feet tall and have a DBH under 12 inches.

On October 13, 2000, an unidentifiable tree was planted in the center of Lower Orpet Park in memory of the “public safety employees of the City of Santa Barbara who gave their lives in the line of duty.” Currently, only a small twig stands in place of the tree.

On July 16th, 2015 a site visit was conducted in Upper and Lower Orpet Parks with the company of the City Arborist. Previously identified trees were inspected to determine the likelihood that they represent original plantings. At most, 31 trees in Upper and Lower Orpet Parks represent specimens planted by Mr. Orpet in the 1920’s. The following trees were noted as probably representing original plantings based on their height and DBH:

- **Lower Orpet Park**
 - One Fig tree (*Ficus spp.*).
 - One Swamp Mahogany tree (*Eucalyptus robusta*).
 - One Red Ironbark tree (*Eucalyptus sideroxylon*).
 - Two Lemon-Scented Gum trees (*Eucalyptus citriodora*).
 - One White Feather Honey Myrtle (*Melaleuca decora*).
 - Two Red Gum trees (*Eucalyptus camaldulensis*).
 - One Fern-Leaf Catalina Ironwood (*Lyonothamnus floribundus*).
- **Upper Orpet Park**
 - One Blue Gum tree (*Eucalyptus globulus*).
 - One White Feather Honey Myrtle tree (*Melaleuca decora*).
 - One Coast Live Oak tree (*Quercus agrifolia*).
 - One Coast Redwood tree (*Sequoia sempervirens*). This specimen is dead and needs to be removed.

The following trees were noted by the City Arborist as possibly representing original plantings:

- **Lower Orpet Park**
 - Two Rusty Leaf Fig trees (*Ficus rubiginosa*)
 - One Chinese Banyan tree (*Ficus thoningii*), which is the only one of its kind in Santa Barbara’s open spaces.
 - One Steedmans Gum tree (*Eucalyptus steedmanii*), which is the only one of its kind in Santa Barbara’s open spaces.
 - One Gum Myrtle tree (*Angophora costata*), which is the only one of its kind in Santa Barbara’s open spaces.
 - One Norfolk Island Pine tree (*Araucaria heterophylla*)
 - One Lemon-Scented Gum tree (*Eucalyptus citriodora*)
 - One Longleaf Ironwood tree (*Casuarina glauca*)
 - One Blue Gum tree (*Eucalyptus globulus*)
 - One *Brachychiton spp.*
- **Upper Orpet Park**

- Six Coast Live Oak trees (*Quercus agrifolia*)
- One Victorian Box tree (*Pittosporum undulatum*)
- One Mysore Fig tree (*Ficus mysorensis*)
- One Mexican Fan Palm (*Washingtonia robusta*)

Because of the diversity in possible original planting tree species, it is difficult to make a blanket statement concerning the predicted end-of-life of these older trees. Aside from the dead Coast Redwood tree (*Sequoia sempervirens*), these trees appear to be in good health as of the July 16th, 2015 site visit. Only two of these species, the Victorian Box tree (*Pittosporum undulatum*) and the Fern-Leaf Catalina Ironwood (*Lyonothamnus floribundus*), are considered short-lived tree species, meaning a 50-80 year life is within the upper range of their predicted life spans. The rest of the above noted species live anywhere between 100 to 300 years on average. Since none of the trees are visually stressed, it is likely these trees will continue to grow in a healthy manner for some decades to come.

Future Management & Key Considerations

A key objective of the 2014 Santa Barbara Urban Forest Management Plan is to “maintain and protect historic and culturally significant trees.”⁴⁶ Key considerations to the successful implementation of this objective include maintaining and/or improving the species diversity, species density, age diversity and horticultural heritage of Upper and Lower Orpet Parks. While Upper and Lower Orpet Parks display a wide range of species diversity, that diversity is threatened by the low frequency with which species occur. (Sixty tree species occur only once in Upper and Lower Orpet Parks.)⁴⁷ As outlined in the Santa Barbara Urban Forest Management Plan, maintaining high species diversity is important since it “can provide increased protection against disease, pest and environmental changes.”⁴⁸ Secondary benefits of species diversity include “nearly year-round color, fragrance and texture due to varied growing seasons, and educational opportunities in the areas of species preservation, ecology, biodiversity, and cultural uses of trees.” Increasing the species density of tree varieties within Upper and Lower Orpet Parks will help maintain species diversity as well as increase the age diversity of trees within the Parks.

Recommendations

A number of options exist that will help to maintain the unique aesthetic nature and historical intent of Upper and Lower Orpet Parks. It is recommended that planting efforts be focused around increasing species density within the Parks. Many of the low frequency species in Upper and Lower Orpet Parks also have low frequencies in Santa Barbara’s urban forest. Fortifying species density within Upper and Lower Orpet Parks will have the ripple effect of fortifying species density citywide. It is recommended that a list be created containing species that are rare in both the Orpet Parks and Santa

⁴⁶ Santa Barbara Urban Forest Management Plan, pp. 42, 2014.

⁴⁷ ArborAccess Inventory

⁴⁸ Santa Barbara Urban Forest Management Plan, pp. 5, 2014.

Barbara’s urban forest. This list will then be used as a priority list for future plantings, focusing on those species that are commercially available. Looking to parkways or other parks as a location for these trees is a possibility if it is determined a majority of the trees in Upper and Lower Orpet Parks are not nearing the end of their life-cycle. Although it is unlikely that the older trees in the parks will be lost due to old age in the coming decade, it is advised that when these trees do begin to die-off they are replaced with species from the priority list. This will help to maintain the historical intent of the parks.

It is also recommended that a plan to further education and outreach within Upper and Lower Orpet Parks to inform the public about park and tree history be developed and implemented. This will help to “enhance public awareness and appreciation of the urban forest as a community resource.”⁴⁹ Achieving this objective will hopefully also lead to “expand[ed] public participation in urban forest preservation and enhancement”⁵⁰ as outlined in the Urban Forest Management Plan.

Figure 1.

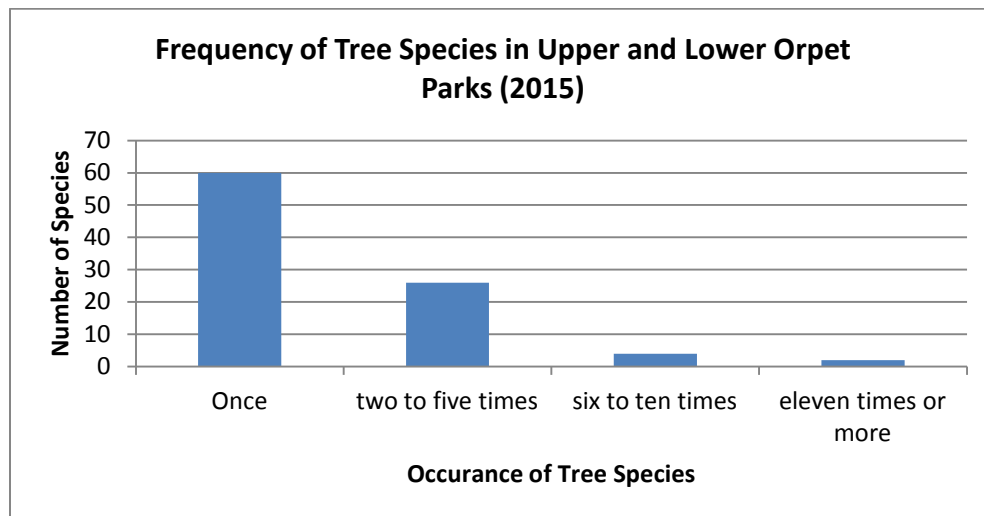


Figure 1. illustrates the number of times a particular species is represented in Orpet Park.

⁴⁹ Santa Barbara Urban Forest Management Plan, pp. 45, 2014

⁵⁰ Santa Barbara Urban Forest Management Plan, pp. 46, 2014.

Figure 2.

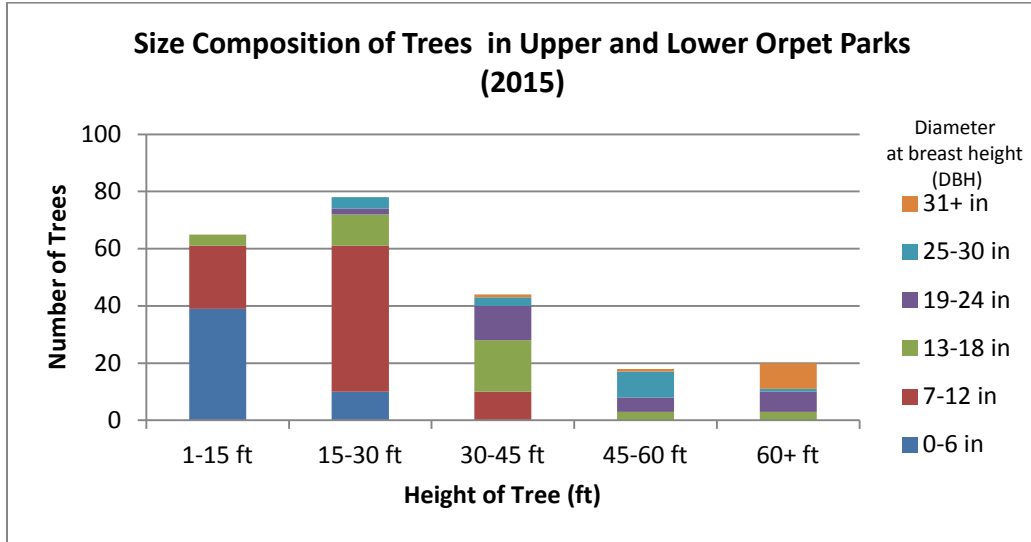


Figure 2. illustrates the size composition of trees in Upper and Lower Orpet Parks.

Plaza del Mar

Introduction

Plaza del Mar, located steps from West Beach along what is today Cabrillo Boulevard, was acquired by the City of Santa Barbara in 1900 from the Diblee Trustees and the Chamber of Commerce for \$2,000. Before this time, however, it was historically an open space that had never been developed. It is shown as a wetland on the 1869 City map and was designated as a “public garden” in 1891.⁵¹ By the time it became a City owned park, Plaza del Mar was already a popular spot for “bathing, strolling and enjoying concerts.” Most of the old trees in Plaza del Mar were “planted between 1908 and 1920 by Dr. Doremus” but the successful planting of the plaza did not come easy.⁵² Although there are records of the plaza being improved with “two lawn rectangles, benches, palm trees, and wide walkways” in 1898, the area was still described as an alkali swamp by Dr. Doremus when the Park Commission took it over.^{53,54} Although Dr. Doremus suggested pumping the water out of the area using a Dutch-inspired windmill, landfill was ultimately used to fill in the swamp.

Numerous other construction projects occurred over the years in Plaza del Mar with the intention of creating a “classic community gathering place for concerts and political speeches.”⁵⁵ Plaza del Mar lived up to this intent for the first few decades, being used as an area for organizations to hold picnics, festivals, and rallies during the years of World War I. The Los Baños del Mar Bathhouse, built in 1901, was described as a “proud and fantastic spectacle...with no equal on the Pacific Coast” and helped to attract visitors to the plaza.⁵⁶ When Cabrillo Boulevard was extended to Leadbetter in 1943, bisecting Plaza del Mar, the bathhouse was reconstructed in the location it stands today opposite the plaza. In 1919 and 1924 cement tennis courts were constructed in the park, now a part of Pershing Park, which are still in use today.⁵⁷

Historical Management

There are no complete tree inventories for Plaza del Mar, making it difficult to fully understand how tree density and canopy cover has changed over the years. There are sparse records of when certain trees became present in the park. As noted earlier, the planting of trees in Plaza del Mar proved difficult because of the presence of an alkali swamp. Despite this obstacle, Dr. Doremus successfully introduced multiple Montezuma Bald Cypress trees (*Taxodium mucronatum*) and planned to eventually have an entire grove of “these grand and noble trees.”⁵⁸ There is also a record of a palm nursery being located “in the back of the baseball fields” as early as 1903 but it is

⁵¹ Days, Mary Louise. *Park Histories*, 1977.

⁵² NewsPress. “A Tiny Park of Shady Character”, 1994.

⁵³ Days, Mary Louise. *Park Histories*, 1977.

⁵⁴ Doremus, A. Boyd. *Santa Barbara Parks- Report of the Park Superintendent*, 1908.

⁵⁵ NewsPress. “A Tiny Park of Shady Character”, 1994.

⁵⁶ NewsPress. “A Tiny Park of Shady Character”, 1994.

⁵⁷ Wilson, Edith G. Dr. A. Boyd Doremus “The Father of Santa Barbara’s Parks”. *Noticias* Vol. XXVII No. 1, 1981.

⁵⁸ Wilson, Edith G. Dr. A. Boyd Doremus “The Father of Santa Barbara’s Parks”. *Noticias* Vol. XXVII No. 1, 1981.

unclear what those palms were ultimately used for.⁵⁹ According to a NewsPress article in 1994, most of the old trees in the plaza at that time were planted by Dr. Doremus between 1908 and 1920, making most of the old trees in the plaza today between 110 and 120 years old.⁶⁰ According to *Trees of Santa Barbara*, the following trees were present in Plaza del Mar in 1948 and may represent some of the trees Dr. Doremus introduced:

- Two Yate trees (*Eucalyptus cornuta*). There are currently three Yate trees in the plaza. Two of the trees have a DBH between 25 and 30 inches and are above 60 feet tall making it likely they represent original plantings.
- One Silver Dollar Gum tree (*Eucalyptus polyanthemos*).
- One Scribbly Gum tree (*Eucalyptus racemosa*).
- One Glossy Privet tree (*Ligustrum lucidum*) that was the largest one of its kind in Santa Barbara in 1948.
- Multiple small Heath Melaleuca trees (*Melaleuca ericifolia*) at the south end of the tennis courts. These were removed in 1971.⁶¹
- Multiple Melaleuca Decora trees (*Melaleuca genistifolia*) that were labeled in 1948.
- One Cape Pittosporum tree (*Pittosporum viridiflorum*) that was the largest one of its kind in Santa Barbara with a 40 foot branch spread.

The following trees were likely introduced into Plaza del Mar between 1948 and 1974:

- One Apple Box tree (*Eucalyptus bridgesiana*) located to the west of the entrance road. This same tree still stands.
- Multiple Moreton Bay Fig trees (*Ficus macrophylla*). There are currently two Moreton Bay Fig trees in the plaza and it is likely one of them represents an original planting, having a DBH greater than 31 inches and being between 45 and 60 feet tall.
- An unknown number of Rusty Fig trees (*Ficus rubiginosa*). There are currently three Rusty fig trees in the plaza.
- One New Zealand Christmas tree (*Metrosideros excelsa*). There is still one New Zealand Christmas tree in the plaza that may represent an original planting.

The following trees were likely introduced into Plaza del Mar after 1974:

- Multiple Bird of Paradise plants (*Caesalpinia spinosa*) located along the service drive.
- One Watkins Fig sapling (*Ficus watkinsiana*) planted at the corner of Cabrillo Boulevard and Castillo Street shortly before 2007.

⁵⁹ Park Commission Meeting Minutes, January 11th, 1904.

⁶⁰ NewsPress "A Tiny Park of Shady Character", 1994.

⁶¹ Beittel, Will, Richard Border, Katherine Muller. *Trees of Santa Barbara*, 1974.

- Three Narrow-Leaved Ironbark trees (*Eucalyptus crebra*). There are currently only two in Plaza del Mar and they represent the only two specimens of their kind in Santa Barbara's open spaces.

By 1981, there were a number of eucalyptus species and three of those eucalyptus species were only found in Plaza del Mar.⁶²

Trees in the Park Today

There are currently seventy-five trees in Plaza del Mar representing 19 unique tree species. The Canary Island Date Palm (*Phoenix canariensis*) is the most dominant species in the plaza, represented 27 times. Although there is no planting record for these trees, it is likely most of them were planted at the same time because of the uniform parallel lines they form following the plaza's walkway and then extending out along Castillo Street. All of these Canary Island Date Palms also have similar attributes, a DBH between 25 and 30 inches and a height between 45 and 60 feet, further supporting the notion that all were planted at the same time. It is possible these palms represent specimens from the palm nursery that was present in Plaza del Mar in the early 1900's. Their current location behind the baseball fields would fit the historical description of the palm nursery, provided the baseball fields have not moved during that time frame as well. The Mexican Fan Palm (*Washingtonia robusta*) is the second most prevalent tree species within the plaza, appearing nine times. A cluster of these trees outlines the southern corner of Plaza del Mar and, similarly to the consistency of the Canary Island Date Palms, all of the specimens have a DBH between 19 and 24 inches and are at least 45 feet tall, suggesting they were all introduced into the plaza at the same time. The third most prevalent species is a palm as well, Queen Palm (*Syagrus romanzoffianum*), appearing seven times in the plaza. The remaining 16 species appear 5 times or less.

Along with boasting a number of species that are rare within Plaza del Mar, two of these species represent rare tree species, appearing five times or less, within Santa Barbara's open spaces as a whole. The Apple Box tree (*Eucalyptus bridgesiana*) in Plaza del Mar is the only specimen of its kind in Santa Barbara. There are two Narrow-Leaved Ironbark trees (*Eucalyptus crebra*) in Plaza del Mar that are also the only ones of their kind in Santa Barbara. As a result, losing these trees will decrease species diversity within not only Plaza del Mar but also Santa Barbara as a whole.

Because of the multiple delineation changes made to Plaza del Mar over the years and its close proximity to Pershing Park, historical records may include trees that once were within Plaza del Mar but are no longer fall within the plaza's current lines. Trees surrounding Los Baños del Mar are of specific concern.

A site visit was conducted on August 10, 2015 with the company of the City Arborist. Previously identified trees were inspected to determine the likelihood that they represent

⁶² Wilson, Edith G. Dr. A. Boyd Doremus "The Father of Santa Barbara's Parks" Noticias Vol. XXVII No. 1, 1981.

original plantings. The following trees probably represent original plantings based on their height and DBH:

- Three Yate trees (*Eucalyptus cornuta*).
- Three Rusty Leaf Fig trees (*Ficus rubiginosa*).
- Nineteen Canary Island Date Palm trees (*Phoenix canariensis*).
- One Moreton Bay Fig Tree (*Ficus macrophylla*).
- One Montezuma Bald Cypress tree (*Taxodium mucronatum*).
- Two Narrow-Leaved Ironbark trees (*Eucalyptus crebra*).
- One Eucalyptus tree
- One Deodar Cedar tree (*Cedrus deodara*).
- One Queen Palm tree (*Syagrus romanzoffianum*).

Based on the results of the site visit with the City Arborist, there are at most 32 trees in Plaza del Mar that represent original plantings. This is a large percentage (42%) of the total number of trees in the park and it includes nineteen Canary Island Date Palm trees. As noted previously, these trees were likely all planted at the same time. Since there are no urgent health concerns with any of the trees, it is likely they will continue to thrive for the next 50-100 years.

Future Management & Key Considerations

A key objective of the 2014 Santa Barbara Urban Forest Management Plan is to “maintain and protect historic and culturally significant trees.”⁶³ Key considerations to the successful implementation of this objective include maintaining and/or improving the species diversity, species density, age diversity and horticultural heritage of Plaza del Mar. Although 19 trees species exist within Plaza del Mar, the low occurrence rate of a majority of these species threaten the horticultural heritage of the plaza. Maintaining the species diversity within Plaza del Mar is important for reasons other than simply maintaining the horticultural heritage of the plaza. As outlined in the Santa Barbara Urban Forest Management Plan, maintaining high species diversity is important since it “can provide increased protection against disease, pest and environmental changes.”⁶⁴ Secondary benefits of species diversity include “nearly year round color, fragrance and texture due to varied growing seasons, and educational opportunities in the areas of species preservation, ecology, biodiversity and cultural uses of trees.” Increasing the species density of tree varieties within Plaza del Mar will help maintain species diversity as well as increase the age diversity of trees within the plaza.

Recommendations

While Plaza del Mar does boast historically significant trees, the historical importance of this plaza is not tied solely with these trees. As previously noted, Plaza del Mar was a popular location for City residents to congregate. Today it is mainly used by transients.

⁶³ Santa Barbara Urban Forest Management Plan, pp. 42, 2014.

⁶⁴ Santa Barbara Urban Forest Management Plan, pp. 5, 2014.

It is recommended that a program to increase the usage base of the plaza be created. This can also be tied into the development of a plan to further education of and outreach within Plaza del Mar to inform the public about park and tree history.

Plaza Vera Cruz

Introduction

Plaza Vera Cruz has always been a public space, appearing as a designated public square on a City map dated 1853. It was officially made a public park on April 21, 1855. The historic area of Plaza Vera Cruz was longer than it is today. In 1873, fencing for one block of the plaza was authorized.⁶⁵ According to Park Commission meeting minutes, the plaza was filled to “proper grade” in 1903.⁶⁶ In 1905, the Woman’s Club was allowed to use the area as a children’s playground if they also planted and cared for at least 20 shade trees until the Parks Commission (incepted in 1905) could get around to developing it as a park.^{67,68} This represented the first public playground in the City.⁶⁹ By 1911 the Parks Commission took back Plaza Vera Cruz, removed the play equipment and started to develop the area.⁷⁰ By 1909 the plaza was described as “one of the most attractive...in any city” by C.M. Robinson. Leasing of the plaza by outside parties continued throughout the life of Plaza Vera Cruz. For example, in 1951 the Santa Barbara Kiwanis Club asked to construct a youth center building that was approved. In 1965, part of the plaza was leased to the school district for recreational and physical education for Lincoln School, which was not renewed in 1970. It was around this time that the Los Niños Headstart Nursery School began to use the youth building and still occupies that space today.

Historical Tree Management

No historic comprehensive tree inventories for Plaza Vera Cruz exist. As noted earlier, one of the first tree plantings in the plaza were likely the shade trees that the Woman’s Club was conditionally required to plant in 1905. In this way, historical tree management was not motivated by a desire to introduce a large variety of exotic tree species to the plaza. Instead, tree planting was likely motivated in large part by the utility they provide (e.g. providing shade). It is known that the following trees were planted before 1948:

- One Red Gum tree (*Eucalyptus camaldulensis*).
- One Yate tree (*Eucalyptus cornuta*). In 1974, a Yate tree stood in the west center section of the plaza where one still stands today. There is also a record of a Yate tree falling during a storm in 1983.
- One *Eucalyptus occidentalis* that was the only specimen of its kind in Santa Barbara’s open spaces in 1948. This tree species is no longer present in any of Santa Barbara’s open spaces.
- One Silver Dollar Gum tree (*Eucalyptus polyanthemos*). There is currently only one Silver Dollar Gum tree in Plaza Vera Cruz.
- Multiple large shrubs of Pink Melaleuca (*Melaleuca nesophila*).

⁶⁵ Days, Mary Louise. *Park Histories*, 1977.

⁶⁶ Park Commission Meeting Minutes, September 30th, 1903.

⁶⁷ Wilson, Edith G., Dr. A. Bpyd Doremus “The Father of Santa Barbara’s Parks”, *Noticias* Vol. XXVII No. 1, 1981,

⁶⁸ NewsPress Article “Vera Cruz Park Activities in 1905”, 1983.

⁶⁹ Redmon, Michael. “100 Years of City Parks 1902-2002”, pg. 14, 2002.

⁷⁰ Wilson, Edith G., Dr. A. Boyd Doremus “The Father of Santa Barbara’s Parks”, *Noticias* Vol. XXVII No. 1, 1981.

- An unknown number of Montezuma Bald Cypress trees (*Taxodium mucronatum*).

By 2007, a Cliff Date Palm (*Phoenix rupicola*) stood along the eastern boundary of the plaza but the planting date is not known.⁷¹ This specimen still stands today.

Trees in the Park Today

There are currently forty-one trees in Plaza Vera Cruz representing 17 tree species. The most frequent tree species is the Canary Island Date Palm (*Phoenix canariensis*), which is found seven times within the plaza. There are no historic records of this tree species within the park suggesting that these trees are recent plantings. Figure 1. graphically displays the lack of species density within Plaza Vera Cruz. None of the tree species within Plaza Vera Cruz appear five or less times within Santa Barbara's open spaces. Although species diversity within Plaza Vera Cruz is fragile, losing a species within the plaza will not have a large impact on the species diversity of trees in Santa Barbara's open spaces. Four of the 17 trees species are palms (25%) and are represented by 14 individuals (34%). Having a high percentage of palms in the plaza is not a unique feature of the plaza.

A site visit was conducted on August 10, 2015 with the company of the City Arborist. Previously identified trees were inspected to determine the likelihood that they represent original plantings. The following trees probably represent original plantings based on their height and DBH:

- Five Montezuma Bald Cypress trees (*Taxodium mucronatum*).
- Two Senegal Date Palms (*Phoenix reclinata*).
- Two Mexican Fan Palm trees (*Washingtonia robusta*)
- One Yate tree (*Eucalyptus cornuta*).
- One Silver Dollar Gum tree (*Eucalyptus polyanthemos*)
- Two California Fan Palm trees (*Washingtonia filifera*)
- One Date Palm tree (*Phoenix dactylifera*)

Based on the results of the site visit with the City Arborist, there are at most 14 trees in Plaza Vera Cruz that represent original plantings, which represent approximately 25% of the trees in the Plaza. There are no urgent health concerns so the trees are likely to thrive in the park for the next 50-100 years.

Future Management & Key Considerations

A key objective of the 2014 Santa Barbara Urban Forest Management Plan is to "maintain and protect historic and culturally significant trees."⁷² Key considerations to the successful implementation of this objective include maintaining and/or improving the species diversity, species density, age diversity and horticultural heritage of Plaza Vera

⁷¹ Beittel, Will. *Trees of Santa Barbara*, 2007.

⁷² Santa Barbara Urban Forest Management Plan, pp. 42, 2014.

Cruz. Since the focus of this plaza has historically been to provide a recreation area for children, trees were likely introduced into the park to provide shade. As outlined in the Santa Barbara Urban Forest Management Plan, maintaining high species diversity is important since it “can provide increased protection against disease, pest and environmental changes.”⁷³ Secondary benefits of species diversity include “nearly year-round color, fragrance and texture due to varied growing seasons, and educational opportunities in the areas of species preservation, ecology, biodiversity, and cultural uses of trees.”⁷⁴ Although there is not a historical precedence for exotic trees in the plaza, increasing tree diversity will aid the health of Santa Barbara’s urban forest in the aforementioned ways as well as fortify species diversity in Santa Barbara’s urban forest.

Another relevant objective of the 2014 Urban Forest Management Plan is to “provide urban forest benefits that enhance visitor experiences in City parks.”⁷⁵ This objective mainly relates to the maintenance and replacement of trees within the park since “park trees are on an eight to ten-year pruning cycle and lost trees are rarely replaced.”⁷⁶ Future management of the park should include “more frequent pruning...to prolong park tree life and health.”⁷⁷

Recommendations

A number of options exist that will help to increase the species diversity and density of trees in Plaza Vera Cruz if it is decided that that should be the main objectives in the Plaza. Without a strong history of tree management, Plaza Vera Cruz presents itself as an opportunity to take the plaza in multiple directions.

If increasing species diversity and density is made a goal within the plaza, it is recommended that older specimens reaching the end of their life be identified and replacement plans be created. Since the tree species in Plaza Vera Cruz do not have a large impact on species diversity within the City, replacing trees with the same species is not necessary. This allows for the most appropriate and available tree species for the space to be selected. This may also allow for the opportunity to fortify tree species that are rare or infrequently found in Santa Barbara’s urban forest.

It is recommended that a plan to further education and outreach within Plaza Vera Cruz to inform the public about park and tree history be developed and implemented. This will help to “enhance public awareness and appreciation of the urban forest as a community resource.”⁷⁸ Achieving this objective will hopefully also lead to “expand[ed] public participation in urban forest preservation and enhancement”⁷⁹ as outlined in the Urban Forest Management Plan.

⁷³ Santa Barbara Urban Forest Management Plan, pp. 5, 2014.

⁷⁴ Santa Barbara Urban Forest Management Plan, pp. 5, 2014.

⁷⁵ Santa Barbara Urban Forest Management Plan pp. 41, 2014.

⁷⁶ Santa Barbara Urban Forest Management Plan pp. 41, 2014.

⁷⁷ Santa Barbara Urban Forest Management Plan pp. 41, 2014.

⁷⁸ Santa Barbara Urban Forest Management Plan, pp. 45, 2014

⁷⁹ Santa Barbara Urban Forest Management Plan, pp. 46, 2014.

Figure 1.

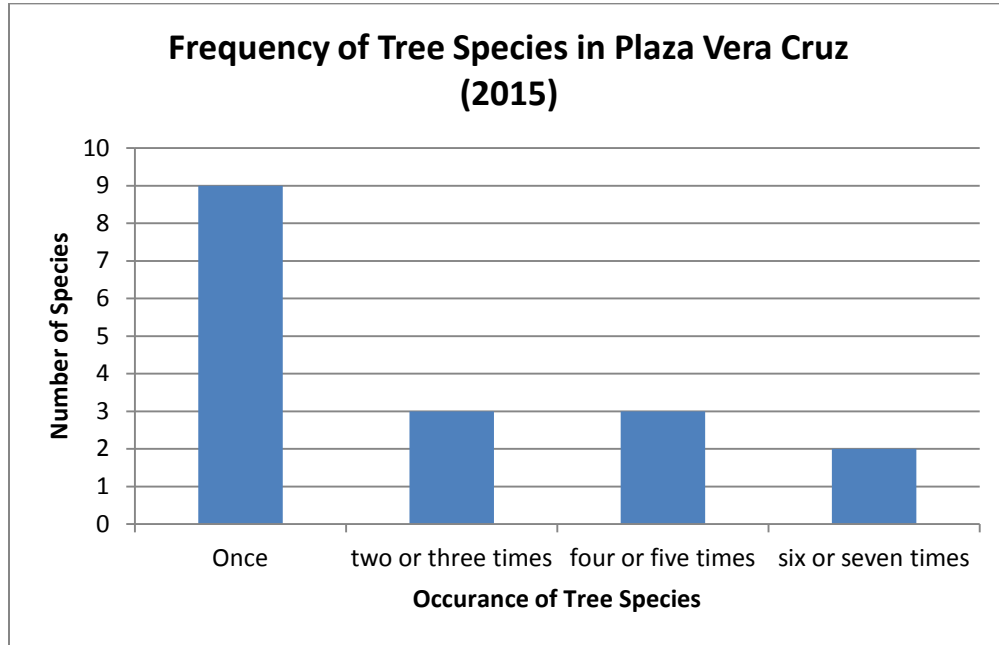


Figure 1. illustrates the number of times a particular species is represented in Plaza Vera Cruz.

Mission Historical Park

Introduction

Mission Historical Park is comprised of an 8 acre grassy area and the A.C. Postel Memorial Rose Garden directly opposite the Santa Barbara Mission and a 2 acre portion just north of Alameda Padre Serra that contains a historic filter house, grist mill, reservoir, and aqueduct. The 8 acre portion was purchased from the Franciscan Fathers of California for \$53,068.80 in 1939 while the remaining 2 acres was given as a gift to the City in 1948.⁸⁰ Historically known as Mission Plaza (or Park), City Council changed the park name to Mission Historical Park in March of 1957.

Mission Historical Park is known for the rose garden situated along the southeast edge of the park. In 1954, three nurseries donated 1,500 plants, mostly roses, with the intention of creating a garden that would “become one of the most attractive and colorful in the nation.”⁸¹ By 1961, however, the rose garden was in very poor condition and the local Rose Society requested to sponsor it.⁸² In 1985, the rose garden received a donation from the estate of A.C. Postel and was redesigned and named in Mr. Postel’s honor. Other enhancements to the rose garden were made possible through this donation, including the restoration of the historic fountain, construction of wheelchair-accessible ramps, and the installation of sidewalks. The A.C. Postel Rose Garden continues to be a major draw for residents and tourists alike and benefits from the day-to-day work of 65 volunteers.

Mission Historical Park is a popular location for private gatherings, such as weddings in the rose garden, as well as impromptu picnics along the sloped grassy area of the park. The 2 acre portion containing the historical remains is used mainly as a small walking tour. Since the rose garden is the main attraction at Mission Historical Park, information pertaining to historical tree plantings is limited. Unlike other city parks, planting a wide variety of exotic species was never a priority for Mission Historical Park.

History of Tree Management

Unlike other City Parks, the planting of exotic tree specimens was never an important aspect of the management of the park. Instead, a large grassy area was maintained as well as the rose garden. Although the planting date is unknown, several olive trees (*Olea europaea*) were planted between Alameda Padre Serra and Los Olivos streets by the Garden Club of Santa Barbara and Montecito “as a memorial peace offering to victory in the World War- 1914-1918.”⁸³ Although the exact planting date is unknown, based on the wording of the plaque it is likely these trees were planted before World

⁸⁰ *Park Histories* by Mary Louise Days (1977)

⁸¹ “Outside Nurserymen Give Roses for Mission Park” NewsPress (1954)

⁸² *Park Histories* by Mary Louise Days (1977)

⁸³ *Trees of Santa Barbara* (2007)

War II broke out in 1939. According to *Trees of Santa Barbara*, the following trees were present in 1974:

- A naturalized stand of Black Wattle (*Acacia mearnsii*)
- A naturally occurring stand of White Alder (*Alnus rhombifolia*)
- One Sugar Gum (*Eucalyptus cladocalyx*) located at the end of Plaza Rubio. The same tree still stands in Mission Historical Park today.
- Multiple Blue Gum trees (*Eucalyptus globulus*). There are currently three Blue Gum trees in the park today and all have a DBH greater than 31 inches and a height greater than 60 feet, making it likely these trees represent the original plantings.
- Two Chinese Juniper trees (*Juniperus chinensis*)
- Two Mexican Blue Palms (*Erythea armata*)
- An unknown number of Chilean Wine Palms (*Jubea chilensis*). There are currently two Chilean Wine Palms in the park and both have a DBH greater than 31 inches and are between 30 to 45 feet in height.

An unknown number of Peruvian pepper trees (*Schinus polygamus*) are noted as growing in the park in 1976.⁸⁴ Several Canary Island Date Palms (*Phoenix canariensis*) are noted as growing in Mission Historical Park by 2007.⁸⁵ There are currently 7 Canary Island Date Palms in the park today.

Trees in the Park Today

There are currently 189 trees in Mission Historical Park represented by 13 different species. More than 75% of these trees are represented by just three tree species. Seventy-eight of these trees are Coast Live Oaks (*Quercus agrifolia*) and may represent a naturalized stand. The second most frequent tree species is the California Pepper tree (*Schinus molle*) represented 36 times. The Olive tree (*Olea europaea*) is represented 33 times and, as aforementioned, was introduced into the park in honor of those who served during World War I. Six of the tree species appear only once or twice. So while the park represents a diverse array of tree species, the population of the trees in the park is concentrated into a handful of these species.

There is currently only one tree species, the Chilean Wine Palm (*Jubea chilensis*), within Mission Historical Park that is considered rare, appearing five or less times, in the open spaces of Santa Barbara. The other tree species within the park occur frequently throughout Santa Barbara. As a result, losing a tree species within Mission Historical Park will have a negligible effect on tree diversity in Santa Barbara's open spaces as a whole.

Future Management & Key Considerations

⁸⁴ *Santa Barbara's Trees* (1976)

⁸⁵ *Trees of Santa Barbara* (2007)

A key objective of the 2014 Santa Barbara Urban Forest Management Plan is to “maintain and protect historic and culturally significant trees.”⁸⁶ Key considerations to the successful implementation of this objective include maintaining and/or improving the species diversity, species density, age diversity and horticultural heritage of Mission Historical Park. Although the Santa Barbara Urban Forest Management Plan outlines the importance of maintaining high species diversity since it “can provide increased protection against disease, pest and environmental changes,”⁸⁷ it may be inappropriate to focus on species diversity when considering future tree management decisions within the park. Mission Historical Park was never historically managed for a diversity of tree species and currently does not have a large impact on the species diversity of trees within the city. Instead, focusing on creating a landscape of native species may be more appropriate. While most of Santa Barbara was historically devoid of trees, “native stands near creek corridors, in canyons and along hillsides” did exist.⁸⁸ Mission Historical Park is located along a hillside near Mission Creek and so likely did boast a native stand of trees before park maintenance of the park altered the landscape.

Recommendations

Since the planting of exotic trees throughout Mission Historical Park was never a management objective, future management of the park may need not focus on increasing species diversity. Instead, the species within the park that appear once or twice should be evaluated to determine their possible age. If trees are reaching their end-of-life, it is recommended that younger specimens should be planted with the intention of replacing the older specimen. Located near Mission Creek, the surrounding foliage is representative of a native riparian habitat. Shifting the areas of Mission Historical Park with a high density of trees towards a diverse stand of native trees would have the effect of blending in with the surrounding environment. Although current drought conditions make lawns an inefficient use of water, this open space needs to remain available to City residents as a gathering area offering open vistas of downtown Santa Barbara, the harbor, and Santa Cruz Island in the distance. It is also recommended that a plan to further education of and outreach within Mission Historical Park to inform the public about park and tree history be developed and implemented.

⁸⁶ Santa Barbara Urban Forest Management Plan (2014)

⁸⁷ Santa Barbara Urban Forest Management Plan (2014)

⁸⁸ Santa Barbara Urban Forest Management Plan (2014)