

Tour Guide Tips *

Docent tour guides at the San Diego Botanic Garden are an important part of the visitor's perception of the Garden. Tour guides are both ambassadors and educators. The positive experience of a good tour is a treasured asset for continuing the mission of connecting people of all ages to plants and nature.

Each tour guides learns to flow with the audience. It's OK that you don't know everything about all the plants - just be honest when you don't know and offer to help find a resource to answer unknown information if you like. Guests can be a great resource of information and should be encouraged to share with the group. Here are some practical tips for new (and not so new!) tour guides.

1. Enthusiasm is vital!
2. "Thanks for visiting the Garden" is a good opener.
3. Introduce yourself, and show interest in where the guests are from.
4. Invite questions - don't always provide non-stop information as the guests might enjoy asking about plants they see along the way even before you start talking.
5. Have visitor guides available if needed. (Encourage recycling at end of visit).
6. Explain where restrooms, snacks, and water are located, and encourage a visit to the gift shop and plant nursery after the tour.
7. Explain length of tour and return point - for example - "we will be visiting different areas of the Garden, though not the entire Garden, for (amount of time), and will be returning to the gift shop at the end of the tour. You are welcome to continue further exploration from there."
8. Bring up history of the Garden, such as the Larabees, where appropriate, size of the Garden, Non-profit status.
9. Mention upcoming events in the Garden that might be of interest as you go along, and maybe the joys of volunteering.
10. End your tour with a thank you and welcome back.

Ground rules (children and adults)

- Stay on the path.
- Please don't get ahead of the guide.
- Please do not collect any plant material even if it is dead. It is part of the ecosystem of its location and may be very important right where it is! It could also be toxic or allergenic to your skin.
- Please do not chase the wildlife - this is their safe home.
- Please do not talk on your cell phone during the tour unless urgent.

A **sample** tour route follows, with some information relevant to each area. It is meant to guide but is not comprehensive in detailed plant information. (Go study! - the links provided are a good start**) You can always adapt your tour to the interests and time restraints and educational goals of the visitors-both young and old. Be especially aware of

time as you go along, if several guides are involved, so that you return the guests to agreed upon point at the same time for smoothness of transition to the rest of their visit, or their departure.

Area #1

Canary Islands - Mediterranean Climate Zone

Mediterranean climates predominate along latitudinal lines 30 degrees - 40 degrees both north and south of the equator. The land masses involved include North Africa, Southern Europe and Canary Islands, the West coast of California, Cape South Africa, Australia (southwest only), and Arid South America (Central and western Chile).

Plants of interest

- [*Echium candicans* \(Info\)](#) (Pride of Madeira) - several different varieties bloom from white through purple and blue; large, often planted along slopes and freeways.
- [*Dracaena draco* \(Info\)](#) (Dragon Tree) - on our logo, dragon's blood legends, Stradivarius varnish , basket weaving.
- [*Geranium maderense* \(Info\)](#) - a true geranium (many that we call geraniums are pelargoniums).
- [*Quercus suber* \(Info\)](#) (Cork Oak) - 8-10 year cycle of harvesting the bark; used in gaskets for machinery during WWII thus planted as part of the "war effort"; acorn woodpeckers are carnivorous and hide acorns in bark to use them as "farms" of insect grubs/larvae to eat.
- [*Acanthus mollis* \(Info\)](#) (Bear's Breeches) - foliage used as design model for Corinthian column capitals of Greco- Roman architecture.

Area #2

Lawn Area and Driveway by Lawn House

Plants of interest:

- [*Agathis robusta* \(Info\)](#) (Queensland Kauri - [*Auracaria*](#) family) and [*Auracaria columnaris* \(Info\)](#) . Heavily logged by Europeans as excellent masts for ships.
- [*Erythrina lysistemon* \(Info\)](#) (Coral Tree) when in bloom leaves go deciduous.
- [*Erythrina mexicana* \(Info\)](#) (Mexican Coral Tree)
- [*Plumeria rubra* \(Info\)](#) (Frangipani) - native to Mexico; described by Linnaeus in 1753; grows in sub and tropical climates worldwide now.
- [*Thevetia thevetioides* \(Info\)](#) (Yellow Oleander = Giant Thevetia) native to Mexico and Central America - all parts of the plant are toxic.
- [*Duranta repens* \(Info\)](#) (Skyflower) Has lavender flowers but yellow fruits, often together on the same tree. Poisonous. Native to Central America but an invasive weed in Australia.
- [*Caryota spp.* \(Info\)](#) (Fishtail Palm) Monocarpic; produce sugar but must be processed first as has toxic crystals.

Area #3

Lower Pond

Plants of Interest:

- [*Jacaranda mimosifolia* \(Info\)](#) (Jacaranda Tree) - bluish-purple flowers; originally native to South America - popular in South Africa and Australia.
- [*Cyperus papyrus* \(Info\)](#) (Papyrus plant) used by ancient Egyptians to make scrolls - peeled the pith into strips, laid together and glued together with its own juices by pounding out the lignin.
- [*Araucaria bidwillii* \(Info\)](#) (Bunya Bunya, or Monkey Puzzle Tree) found in the fossil record of 200 million years ago; cones are enormous-weigh 10-15 pounds; aborigines in their native Australia ate the seeds.
- [*Kigelia pinata* \(Info\)](#) (Sausage Tree) Elephants eat the fruit - seeds dispersed in their dung; pollinated at night by bats; if processed the fruit can be used in alcohol production, and known as a cure for rheumatism; raw it is toxic to humans; also used in skin lotions and remedies.
- [*Russelia equisetiformis* \(Info\)](#) (Coral Fountain, Firecracker Plant) Evergreen stems and leaves bend over to form a graceful mound, covered in bright red tubular flowers in dense clusters. Butterflies and hummingbirds like it.

Area #4

Rainforest

Rainforests typically receive between 10-14" of rain a day - San Diego County is lucky to get 10" a year. The rainforests are warm and frost-free year round, and lie between the Tropic of Cancer and the Tropic of Capricorn. There are typically 4 layers to the rainforest: emergent, canopy, understory, and forest floor. There are many plants specially adapted to the rainforests humid, warm conditions. They may have huge leaves if they are in the lower levels of the forest - to increase surface area for photosynthesis as well as acting as umbrella-like structures to shed water away from the root system and the pores of the leaves so as not to drown it. There are also frequently "drip tips" and channels on the leaves to shed the water away from the roots. the underside of shaded leaves may be reddish to trap sunlight more effectively. Floor plants wrap roots around trunks of trees to climb up to the sunlight (philodendrons are good at this!).

Plants of Interest:

- Epiphytes (air plants) these plants compete for sunlight, water, and nutrients but don't need soil- they grow on other plants but unlike parasites, they do not take away any nutrients from their host plant. Orchids ([*Orchidaceae*](#) family [\(Info\)](#)) are the most prolific and famous of the epiphytes.
- Bromeliads - leaves form a cup that collects water that can act as an entire ecosystem for amphibians and insects. The [*Bromeliaceae*](#) family [\(Info\)](#) includes

pineapple ([Ananas comosus \(Info\)](#)) (terrestrial) as well as "Spanish Moss" which is not moss and NOT Spanish and hangs in the branches.

- [Ficus religiosa \(Info\)](#) (Bo Tree) - it is believed that the Buddha found enlightenment while meditating under the Bo Tree - it is often venerated with altars and shrines incorporated into the tree in southeast Asia; its leaves have drip tips.
- Strangler Figs - name given to multiple species of [Ficus \(Info\)](#) which have adapted to low-light growing, competing for sunlight. They start as epiphytes - a seed is deposited by an animal in the crook of a host tree, then the ficus sends down "air roots" as well as growing upward toward the light. The resulting root system can actually "strangle" the host plant as it loses the competition.
- Tree ferns - young fronds can be eaten if processed correctly.

The giant Torrey Pines ([Pinus torreyana \(Info\)](#)) we see are not typical to a rainforest but provide some canopy and a place for us to perch epiphytes!

Area #5

Sidewalk from Rainforest platform and Stairs

Plants of interest:

- [Justicia carnea \(Info\)](#) (Brazilian Plume Flower, flamingo plant) shade grower; blooms June - Fall.
- [Brighamia insignis \(Info\)](#) (Olulu, Cabbage on a Stick) critically endangered in the wild; native to Hawaii mainly on cliffs of volcanic basalt; hawk-moth pollination.
- [Gardenia thunbergia \(Info\)](#) (White Forest Gardenia) beautiful, large fragrant flowers bloom in summer; fruits browsed by large antelope; in [Rubiaceae](#) family - as is Coffee.
- [Ochna serrulata \(Info\)](#) (Mickey Mouse Plant) a shrub with flowers that have bright red persistent sepals in late summer that resemble the face of Mickey Mouse to which are attached fruits that turn black.
- [Hypoestes aristata \(Info\)](#) (Ribbon Bush) this evergreen shrub has purple flowers that bloom profusely in winter when very little else is in flower in the garden.
- [Strophanthus speciosus \(Info\)](#) (Poison Rope plant) native to Africa; seeds used to make poison arrows, fruits used as a spear poison, pounded and roasted roots as snakebite remedy in cattle and humans.

Cycads: Often confused with ferns or palms - but are neither. They are gymnosperms in the [Cycadaceae](#) family ([Info](#)) They have similarities to conifers and to the Ginkgo tree, producing cones, but never a true flower. They were common in the Triassic and Jurassic periods (245 to 140 million years ago), thus sometimes called "living fossils" or Dinosaur plants. Central trunk topped by whorl of leaves. Pollinated by insects or wind, male (with motile sperm cells) and female cones on separate plants. Today over 100 species. There are many species of Cycads throughout the Garden.

Area #6

Herb Garden / Ficus area

The herb garden plantings change frequently, therefore it is a good idea to check out what is growing beforehand. The herbs planted represent 4 basic aspects of herbs: culinary, medicinal, fragrance/aroma, and household/domestic uses. Separate information on herbs is available in other documents. Just a few are mentioned below.

Plants of Interest:

- [*Ginkgo biloba* \(Info\)](#) (Maidenhair tree) Gymnosperm found in the fossil record 200 million years ago. Dioecious like cycads (separate male/female plants); seeds produced by female have a sickening odor so most trees planted are male, with motile sperm cells. Deciduous. Survived the nuclear blast at Hiroshima and the Chernobyl meltdown. National tree of China and symbol of the city of Tokyo. Enhances memory.
- [*Laurus nobilis* \(Info\)](#) (Bay Laurel tree) used to make wreaths to crown poets, scholars and athletes in ancient Greece; flavors soups and stews; repels weevils when placed in rice or flour containers; antiseptic and digestive medicinally.
- [*Rosmarinus officinalis* \(Info\)](#) (Rosemary) aromatic perennial used as flavoring; said to enhance memory and alleviate hangovers.
- [*Lavandula spp.* \(Info\)](#) Lavender - flowers used for aromatic qualities; aids in sleep; attracts butterflies; name from Latin "lavare" - to wash - used by romans to bathe in.
- [*Aloysia citrodora* \(Info\)](#) (Lemon Verbena) - fragrant leaves used in teas, perfumes, oils and vinegars; used as mild sedative.
- [*Myrtus communis* \(Info\)](#) (Myrtle tree) evergreen, flowering small tree or shrub, known since ancient times; beloved of Aphrodite in Greek mythology, of Venus in Roman- symbol of love and immortality throughout the Mediterranean. Used in wedding rituals.

**In this same area are 2 showy, interesting plants:

- [*Aristolochia gigantea* \(Info\)](#) (Dutchman's Pipe) - Large, reddish-purple veined blossoms; native to Brazil; pollinated by flies which get trapped by stiff hairs in the blossom for 24 hours, then hairs lie down and the fly is released. Blooms summer through early Fall.
- [*Ficus mysorensis* \(Info\)](#) (Giant Fig) tree native to tropical Asia; very extensive root structure and canopy; provides a perch for Staghorn ferns ([*Platycerium bifurcatum* \(Info\)](#))

On the way to Bamboo is the subtropical fruit garden. See separate document for information.

Area #7

Bamboo ([Bambuseae](#) family)

The bamboo display garden was started in the mid 1970's and completed in 1996. The American Bamboo society was founded in 1979 at the then Quail Gardens. This garden is home to one of the largest collections in North America. There are separate documents with information on Bamboo. There are runners and clumpers, the sheath is fibrous with silica in them which can cause irritation, the culms emerge from the ground in the diameter they will remain. Many are monocarpic. All bamboo of a species flower concurrently. Bamboo has multiple uses in commercial products - such as flooring, fencing, fabric, and furniture. It is a great landscape plant which can cascade, create privacy and screening, or stand out as a sculptural focus. James Hubbel, renowned artist, created the lotus sculpture near the pond. Just a few are mentioned below:

Plants of Interest:

- [*Bambusa vulgaris vittata* \(Info\)](#) Painted Bamboo
- [*Bambusa lako* \(Info\)](#) Timor Black Bamboo 70' tall
- [*Bambusa oldhamii* \(Info\)](#) Clumping Timber Bamboo

Area #8

Desert Gardens - Old and New. + Madagascar

All 3 of these gardens display plants that have adapted to harsh climates. Adaptations for water conservation include shape, texture, structure, leaf characteristics, and outer covering. Old World represents plants from Africa/Asia in origin.

Plants of Interest:

- Aloes ([*Aloaceae*](#) family, now named the [*Asphodeloideae* \(Info\)](#)) - leaf succulents, rosette shape, gelatinous interior. Can range from a few inches to large arborescent (tree-like) varieties. Perennial - tall flower spike with tubular blooms attractive to our hummingbirds (Sunbirds in their native Africa). Aloe vera famous medicinally, but there are many others.
- Euphorbias ([*Euphorbiaceae*](#) family [\(Info\)](#)) - many are succulent; flower parts fused; may have colorful bracts. Range from all over the world but most of the succulent variety are from Africa/Canary Islands. Range in size from very small to large tree-like; often spiny. ALL have a milky sap which is toxic. Example - Sticks on Fire ([*Euphorbia tirucalli* \(Info\)](#)), Spurge ([*Euphorbia characias ssp. Wulfenii* \(Info\)](#)) and Poinsettia ([*Euphorbia pulcherrima* \(Info\)](#)) are Euphorbias.

New World represents plants from the Americas-western hemisphere in origin.

Plants of Interest

- Cacti ([*Cactaceae*](#) family [\(Info\)](#)) - 1600+ species in the Americas. Stem succulents. Many different shapes-sphere, column, pads. Areoles are distinguishing feature. Spines are vestigial leaves. Tuberles (ribs) provide for expansion/contraction as well as channeling moisture to roots. Flowers can be quite showy - close rapidly after pollination. Fruits eaten by wildlife and humans.

- Agaves ([Agavaceae family \(Info\)](#)) - leaf succulents, rosette shape, most are monocarpic (die after producing flower spike). Leaves more fibrous; used commercially to produce tequila, sisal, and sweetener.
- Palo verde tree - ([Genus species \(Info\)](#)) tiny leaves and small yellow flowers; can photosynthesize in its branches - as they have adapted to contain chlorophyll in them.
- [*Bursera microphylla* \(Info\)](#) - Elephant tree
- [*Fouquieria columnaris* \(Info\)](#) - (Boojum tree) In the [Fouquieriaceae](#) family - includes the ocotillo ([Fouquieria splendens \(Info\)](#)) found in Baja California and Northern Mexico, Sonoran desert. Small legume like leaves go deciduous when moisture is scarce.

This tour would take 1 hour - to 1 hour and fifteen minutes approximately. Ends at the gift shop, or flip it to go in the opposite order. There are areas of the Garden not covered on this tour and descriptions are brief - meant to stimulate interest. At the end of the tour be sure to thank the guests for visiting - encourage membership and return visits!

*This document was compiled from many different sources - tour guides from the past such as Kay Worley and Mo Price and many docents who teach and create in our garden - great teachers such as Robert Kopfstein, Peter Jones, Phyllis Flechsig, Sally Sandler, Mary Friestedt and more - with a little help from the internet along the way. I hope this document will be helpful for those who come next!

**Links associated with the scientific names of plants will open pictures taken in the SDBG for the [Docents Bloom Board](#). The (Info) links will do a Google search for you.

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