

SELF-GUIDED TOUR FALL 2011

WELCOME to this seasonal tour of the UC Botanical Garden. The tour, which highlights a range of plants from around the world, is a circuit and takes about an hour. It starts in the Plaza at the Garden Entrance and ends at the Arid House. Look for the orange markers with white numbering to guide you to the featured plants.

The Entrance Plaza has been planted with a stunning array of “water-wise” plants that immediately capture the eye with their fantastic forms, colors and shapes. The signboard located at the lower edge of the Plaza introduces these themes. Behind the sign is:

1. ST CATHERINE’S LACE (*Eriogonum giganteum*). Native to the Channel Islands off the southern coast of California, this rare plant produces masses of small white flowers – providing nectar and pollen for both bees and butterflies. Even after full bloom is over the dry, lacy flower heads remain attractive. It is an example of “island gigantism” whereby plants and animals may evolve into larger species in the absence of predators. The Channel Islands have never been joined to the mainland and offer a unique and diverse flora and fauna.

Leave the Plaza and take the lower paved road to the California Area. Turn right and locate on your right at the Alpine Fell-Field:

2. PARISH’S ERIOGONUM (*Eriogonum parishii*). This delightful low growing annual starts as a basal rosette of leaves and then produces a flowering stalk that, in the fall, supports a pink/purple cloud of tiny seed heads. It is native to dry gravelly places at an altitude of between 4,000 and 6,000 feet. Look in this bed for other species of *Eriogonum* (commonly called buckwheat).

Continue downhill and pause at the 2nd Garden bench on your right. Although autumn foliage displays are most flashy in the high mountains, these next two California natives, growing at low elevation, provide a seasonal color spot.

3. WESTERN SPICEBUSH (*Calycanthus occidentalis*), and **CALIFORNIA GRAPE** (*Vitis californica*). Directly above the bench, the large, fragrant leaves of the western spicebush turn a glossy, golden yellow before falling to the ground. Further down the path, the spectacular golds and reds of the California grape provide a lovely waterfall of color. Look closely and you may see clusters of tiny, green grapes that ripen to a deep wine-purple. The grape selection, ‘Roger’s Red’, is a particular favorite, as it was named in honor of former Garden horticulturist Roger Raiche. It is now known to be a hybrid between *V. californica* and a wine grape *V. vinifera*.

*Continue along the path and turn left into the Serpentine Area. Admire the deep greenish-silver coloration of the state rock of California and its unique associated flora. Look for the brochure explaining the geological and botanical features of this area. With the benches on your right, turn uphill and right at Bed 9. Go past the Hybrid Oak and turn right at Bed 46 down the wooden steps (noticing on your left the particularly showy *Eriogonum fasciculatum* var. *foliosum*.) Cross the boardwalk over Strawberry Creek and go up to the Terrace of the Conference Center.*

4. WINDMILL PALM (*Trachycarpus fortunei*). This slow-growing elegant palm is ideal for a patio or terrace location. Its pleasing fan-shaped fronds require little maintenance and its roots are not invasive. Touch the coarse brown fiber covering the trunk. It feels like burlap sacking!

Cross the **Terrace** to your right and go down the concrete steps past the **Tropical House**. A brochure is available that highlights the treasures of this greenhouse. Follow the wooden steps up through the palms. On the other side of the paved road locate:

5. EUONYMUS GRANDIFLORUS. This is also commonly known as a spindle tree. In Europe, the hard fine-grained wood was used to carve spindles. In fall, the leaves of this semi-evergreen shrub turn shades of scarlet, a perfect foil for the orange seeds splitting out of their yellow and pink fruit capsules. This particular example is a cutting from an original specimen collected in Bhutan in 1974.

Turn right towards the **Herb Garden**. Growing out of the wall, look for the exotic purple and white flowers of:

6. COMMON CAPER PLANT (*Capparis spinosa*). It is the immature bud of the caper that is pickled or preserved resulting in the tasty product beloved by gourmet cooks for sauces and garnishes. Originally, as was the case for many culinary herbs, the caper was used medicinally. This plant needs dry, extremely well drained, rocky soil to flourish.

Continue on the main paved road uphill and turn right down the path at the **Eastern North American Collection sign**. On the left is a sprawling plant:

7. SCARLET TRUMPET VINE (*Campsis radicans*). Do not plant this stunning vine if you have a small garden! It spreads rapidly by suckering roots and grows fast to 40 feet. It attaches to any support with its aerial rootlets, somewhat like ivy. The velvety scarlet flowers bloom in early fall. This east coast native is reminiscent of the widely grown blood-red trumpet creeper, *Distictis buccinatoria*.

Pass the picnic table and follow the steps down to:

8. SWEET GUM (*Liquidambar styraciflua*). This tree yields a valuable timber and an aromatic resin. It is a popular street tree admired for its spectacular fall colors. Where do these colors come from? As the days grow shorter, the tree begins to prepare for winter. Chlorophyll, the green color in the leaves, breaks down. The remaining red and yellow pigments now show up strongly “in their true colors”! After a few weeks, the leaves dry out and fall to the ground.

Ahead, you will find a selection of trees, including:

9. GRAY BIRCH (*Betula populifolia*) and **PAPER BIRCH** (*Betula papyrifera*). There are about 40 species of birch worldwide. Their most distinctive feature is their smooth pale bark, often peeling off in long strips. The bark of each species is different and is a ready means of identification. Native Americans prefer the bark of the paper birch to make canoes and to cover lodges and tepees.

Turn uphill to the left. At Bed 310 go up the wooden steps at the right fork. Join up with the main trail through the **Mexico and Central American Area** and turn right. On your right, by the sign, locate:

10. WAX MALLOW (*Malvaviscus mollis*). This is a relative of the hibiscus and attracts hummingbirds. In herbal medicine, the leaves and flowers are boiled and drunk as a tea to treat coughs.

Further along, on your right, look for a plant whose common name warns of its characteristics:

11. MAL HOMBRE (*Urera caracasana*). DO NOT TOUCH this plant. This “BAD GUY” has stinging hairs that can cause irritation. Also known as scratch bush, it is in the nettle family. Herbalists have reported it as useful in treating the effects of poison ivy, in stopping nosebleeds and even curing syphilis.

Continue along this path, enjoying the views of the wooded canyon and, in the distance, San Francisco Bay. This is a favorite spot for hummingbirds attracted by the bright nectar-filled flowers of the various salvias and penstemons. On your right, opposite the massive Wigandia urens, in Bed 367, is:

12. BOUVARDIA TERNIFOLIA. Growing in light shade, this shrubby plant produces intensely colored red bugle shaped flowers in summer and fall. Bouvardias are named for Dr. Charles Bouvard, physician to Louis XIII of France in the 17th Century. He was also Superintendent of the Jardin des Plantes in Paris and carried out research on the medicinal uses of plants.

Continue along this path for some 250 feet, it leads you out of the shade and into a brighter, dryer area. In Bed 375 look for:

13. MILKWEED (*Asclepias elata*). Milkweeds are so called because they bleed a white juice when broken. This juice contains latex and toxic alkaloids that act to deter attack by insects. Interestingly, larvae of the Monarch Butterfly choose the milkweed as their food plant and even incorporate some of the plant's toxins into their bodies to provide protection from predators. The genus is named for Asclepius, the Greek god of healing, indicating that these plants were once important medicinally. In the fall they produce the unusual seedpods you will see here. These contain silk or floss filaments attached to individual seeds. When ripe, the pods burst and the seeds are dispersed by the wind.

Follow this path up the hill. On your right, at the corner of Bed 377 look upward through the oak tree for the towering flower spike of:

14. AGAVE SP. It seems that all parts of agave plants have a use! Agave syrup is a sweetener made from the sap of the hearts (piñas) of the plant. The distilled liquor tequila is also made from the famous blue agave. The stringy fibers of agave leaves produce sisal and other fibers, while the sharp tips and leaf edges may be used as rudimentary needles and nails. Agaves are also attractive landscaping plants and range from small, quite delicate types to this large eye-catching specimen - its flowering spikes dripping with nectar attract bees.

*At the top of this path you move into the **South American Area** of the garden. The intriguing scent may be traced to:*

15. BARRACO (*Escallonia illinita*). Are you reminded of maple syrup, peanut butter, or perhaps curry? Resins in the leaves produce these scents. The plants make good windbreaks and are tolerant of salt spray, so would be optimal in seaside landscapes.

*At the next junction cross the road and enter the **Crops of the World Garden**. Enjoy a garden filled with agricultural crops displayed according to their continent of origin. Look carefully at the labels – you may be surprised!*

Walk through this area and out onto the main paved road. Turn left, downhill and pause half-way down. Notice on your left:

16. EASTERN NORTH AMERICAN AREA. Here you will find brilliant masses of late summer-early fall flowers from “back East”. Look for asters, rudbeckias, the towering joe-pye weed.

*Turn right off the main paved road at Bed 428 into the **Chinese Medicinal Herb Garden**. You will notice additional plant labels here that refer to the medicinal properties of various plant parts. On your left by #11 “Astringent Herbs”, look up at the leaves, which turn butter-yellow in Fall, of:*

17. GINGKO or MAIDENHAIR TREE (*Ginkgo biloba*). Besides being native to China, fossil remains show that the ginkgo occurred in California millions of years ago. This tree belongs to a group of plants called gymnosperms, which includes conifers and cycads. It has a rather unique set of reproductive structures and has separate male and female trees. Female trees produce “ginkgo nuts” which, when cleaned and roasted, are valued as a digestive aid. Ginkgo Biloba Extract (GBE), made from the leaves, is an extremely popular natural remedy for memory problems.

At the ornamental bridge turn right towards the lawn and large commemorative stone. Locate:

18. CHRYSANTHEMUM (*Chrysanthemum indicum*). Chinese gardeners regard the chrysanthemum as one of the “four noble plants” – the others being the orchid, the bamboo and the plum. These fall-blooming flowers symbolize the idealized life of the scholar in retirement and are the subject of many famous poems and paintings. Chrysanthemums are “short day” plants and bloom late in the season as the days shorten. You may notice some spring-flowering plants responding to the shorter days as well. Look at the neighboring *Magnolia liliiflora*.

*Follow this path along the top of the lawn, past the row of garden benches and into the shady Asian Area. Continue until you reach the pair of tall, vine-clad trees – Coast redwoods (*Sequoia sempervirens*). On your left admire the striking blue flowers of:*

19. CHINESE PLUMBAGO (*Ceratostigma willmottianum*). As the season progresses the foliage of this plant takes on an attractive red color. It is named for Ellen Ann Willmott, an English gardener and rose lover. She reputedly secretly scattered the seeds of another plant, *Eryngium giganteum* (henceforth known as “Miss Willmott’s Ghost”) in many of the famous gardens she visited!

*Turn right at the next intersection and then left down the steps under the majestic branches of the *Stranvaesia davidiana*. Continue along the path, down several steps and turn right by the tall stump of another Coast Redwood. Growing around the benches locate a group of five trees:*

20. DAWN REDWOOD (*Metasequoia glyptostroboides*). These trees are the result of an historic collecting expedition to China in 1947 when it was discovered that this tree, formerly believed to be extinct, was in fact still in existence. The Chinese name “water fir” indicates a preference for damp locations. The Dawn Redwood is deciduous. In late fall the leaves turn bronze-colored and then fall off as winter arrives. In the spring, delicate pale green foliage announces the growing season.

*Cross the creek at the stepping-stones and turn right up the narrow trail following the creek upstream. Climb the stone steps and turn left. At the intersection make a sharp right turn up the steps. Continue up towards the waterfall and the **Japanese Pool**. Featured around the pool (but not individually numbered for this tour to preserve the beauty of the scene):*

21. KOREAN MAPLE (*Acer pseudo-sieboldianum*), **JAPANESE MAPLE** (*Acer palmatum*), **ACER MONO**, **A. HENRYI**, **A. CISSIFOLIUM**, and **A. SERRULATUM**. Although best known for their fall color, these trees delight at any season. Tender buds and spring foliage are often brightly colored too, while flowers can be white, red, pink, or yellow. In summer, the distinctively cut and lobed leaves provide a soft shady canopy. The Garden’s collection of maples also includes species with the less commonly seen trifoliate or even simple leaf shape. Bare branches in winter create artistic shapes in the landscape, and the bark of some species is attractively colored. The seeds are enclosed in a winged samara, a seed dispersal mechanism.

*Turn left and follow the path through the **Japanese Gate**. On the left, look for another special maple:*

22. MAPLE (*Acer sieboldianum*). This tree from Japan is another example of the more than 35 different maple species found throughout the Garden's Asian collection. The Japanese Gate honors Chuiru and Haruko Obata. Professor Obata was the first Japanese-American hired in the UC Berkeley Art Department and was renowned for his evocative landscape paintings. Planted nearby is a camellia, Haruko Obata's favorite flower for use in her traditional Ikebana flower arrangements.

*Continue to the main paved road and turn left. On the left of the road, down slope, you will see a landscape dominated by the sculptural shapes of the cacti and succulents of the **New World Desert**. Plantings on the right, upslope, are native to **Southern Africa**. Before you reach the large greenhouse (the **Arid House**) turn right up the path to:*

23. TREE GRAPE (*Cyphostemma juttae*). Native to Namibia where it grows in an extremely dry environment, this plant stores water in its swollen trunk and fleshy leaves. Its pale bark also helps to keep it cool. It produces inconspicuous flowers which mature into grape-like bunches of bright (inedible) berries. To see more marvelous botanical adaptations to harsh dry environments around the world, take a few moments to explore the wonders of the adjacent Arid House. Wicked thorns, strangely contorted plant forms and surprisingly colorful blooms combine to make this a fascinating experience.

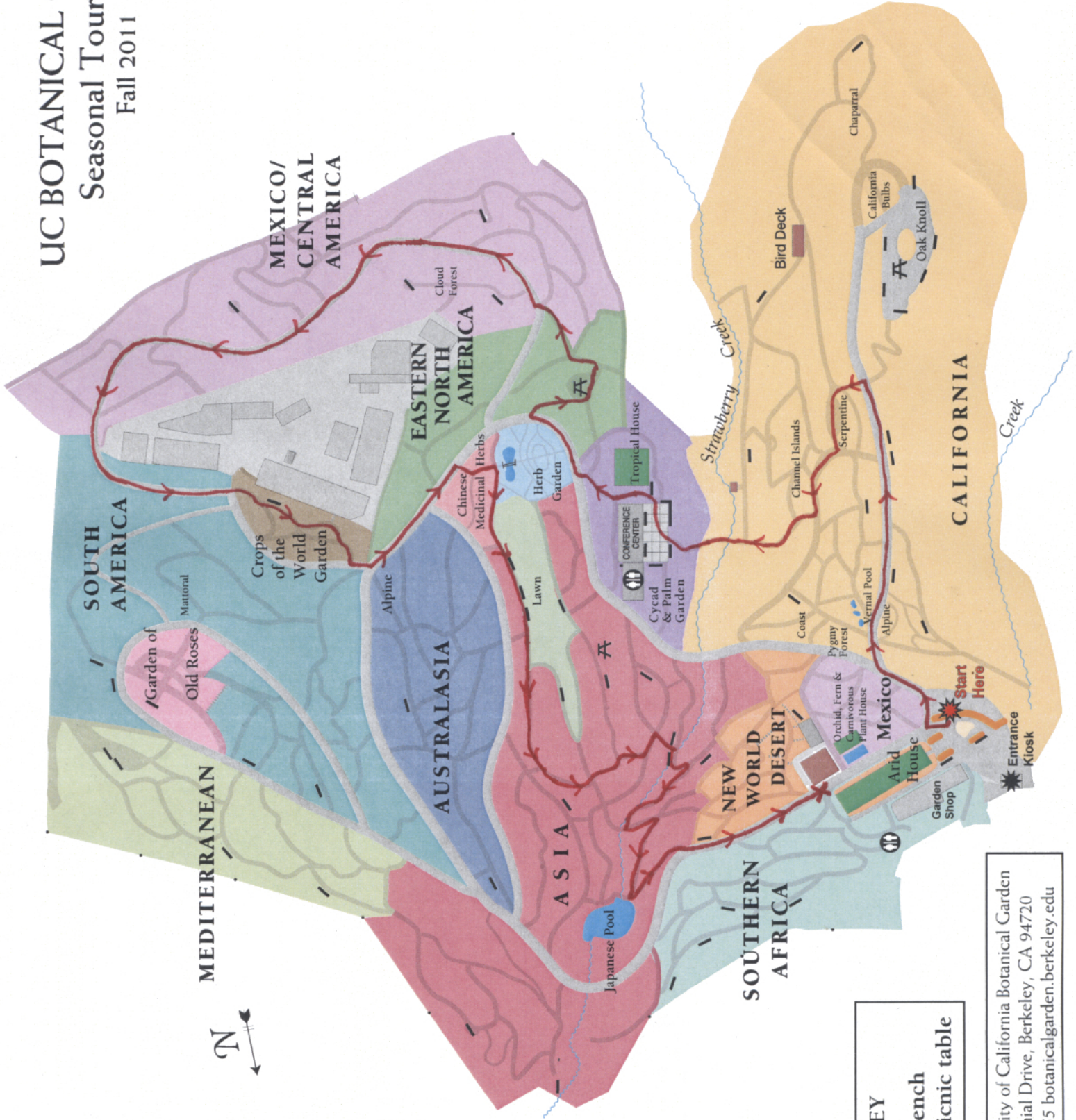
*Exit the **Arid House** into the **Entrance Plaza**. We hope you have enjoyed this seasonal walk through the Garden. Check the **Plant Sales Area** and the **Garden Shop** for unusual and collectible plants, books and gifts.*

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UC BOTANICAL GARDEN

Seasonal Tour Map

Fall 2011



KEY

- bench
- picnic table

The University of California Botanical Garden
 200 Centennial Drive, Berkeley, CA 94720
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