



1

Oriental Flowering Cherry
Prunus serrulata



2

Box Elder
Acer negundo var.
californicum

Forest Science Tree Trail U.C. Berkeley



3

Monterey Cypress
Cupressus macrocarpa



4

Bald Cypress
Taxodium distichum



5

Copper Beech
Fagus sylvatica
f. *purpurea*



6

California Bay
Umbellularia californica



7

Blue Gum
Eucalyptus globulus



8

Pygmy Cypress
Cupressus pygmaea



9

Ponderosa Pine
Pinus ponderosa



10

Italian Stone Pine
Pinus pinea



11

Maidenhair Tree
Ginkgo biloba



12

Port Orford Cedar
Chamaecyparis lawsoniana



13

Southern Magnolia
Magnolia grandiflora



14

Douglas-fir
Pseudotsuga menziesii



15

Dawn Redwood
Metasequoia glyptostroboides



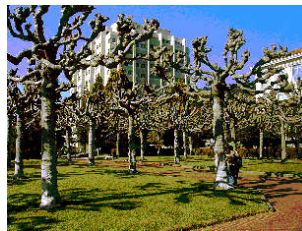
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Yellow Poplar
Liriodendron tulipifera



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White Alder
Alnus rhombifolia



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London Plane
Platanus x acerifolia



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Canary Island Pine
Pinus canariensis



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Giant Sequoia
Sequoiadendron giganteum



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California Buckeye
Aesculus californica



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Coast Live Oak
Quercus agrifolia



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Coast Redwood
Sequoia sempervirens



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American Sweetgum
Liquidambar styraciflua



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Chinese Pistache
Pistacia chinensis

Forest Science Tree Trail

Sponsored by the Division of Forest Science - ESPM - UC Berkeley

1. Oriental Flowering Cherry (*Prunus serrulata*) frames the entrance to the Dining Commons. It heralds the spring on campus with its cluster of light pink or white, fragrant flowers.
2. Box Elder (*Acer negundo* var. *californicum*) is a native variety of ash-leaved maple found along streams at low elevations in California. Note, leaves are opposite and composed of a number of leaflets. The fruits are winged samaras that will be found only on female trees. Box elder is considered by some to be a weed since it is found in many urban wastelands.
3. Monterey Cypress (*Cupressus macrocarpa*) is a rare species in its native range around Point Lobos, south of Monterey. On the wind-swept cliffs, trees are commonly short, gnarled and twisted. This species has been planted extensively around the world as an ornamental, often for hedging and, in some places, as a windbreak. As a group, the cypresses are very difficult to distinguish; compare with tree # 8, the Pygmy Cypress.
4. Bald Cypress (*Taxodium distichum*) is closely related to the redwoods that you have already seen on this trail. It is native to the swamps of the southeastern United States, where it may send up "knees" from the roots. These project above water level, and are thought to provide aeration. This tree provides food and cover for wildlife and its wood makes good construction lumber.
5. Copper Beech (*Fagus sylvatica* f. *purpurea*) is a form of European beech selected for its deep reddish-purple leaves. Beech is widespread throughout Europe and was popular as a furniture wood, particularly the curved backs and legs of chairs. It can produce large quantities of nuts that are an important food source for wildlife. You will pass close by to an American beech after looking at a Douglas-fir.
6. California Bay (*Umbellularia californica*) is native to the Bay area hills and the Berkeley campus. Crush the foliage and smell the aromatic oils that make this a useful flavoring in cooking. True bay leaves come from the Mediterranean bay tree (*Laurus nobilis*), but these leaves are a worthy substitute. The wood of bay is often referred to as myrtlewood.
7. Blue Gum (*Eucalyptus globulus*) is the tallest tree on campus, and this is the tallest hardwood stand in America. Some of the trees in this grove are over 200 feet tall. Over 600 species of *Eucalyptus* are native to Australia and nearby New Guinea. They were planted in California to serve as windbreaks and a source of fuel. In the future they may provide an important source of pulp for paper.
8. Pygmy Cypress (*Cupressus pygmaea*). There is nothing dwarf about this tree that was planted to celebrate Arbor Day in 1983. It is called "pygmy" because of its small stature in its native range in the pygmy forests of Mendocino and Sonoma Counties. Under the extreme soil conditions of the pygmy forest it may grow to no more than 4 feet tall in 100 years. Here, in better soil, it will grow to over 50 feet.
9. Ponderosa Pine (*Pinus ponderosa*) - on the east lawn of Mulford Hall. This group of trees is of Sierra Nevada provenance. Ponderosa pine is a symbol of the American west, where it is common to all major mountain chains including the Rocky Mountains, the Cascades and the California Coast Ranges. It is also present in the Sierra Madre Occidental of Mexico where it intergrades with other species. This is a prime timber producing species of the western United States and an imposing member of our mixed conifer forests.
10. Italian Stone Pine (*Pinus pinea*), the pine parasol (umbrella pine) of the western Mediterranean, also extends eastwards round Peloponnesia, eastern Turkey to Lebanon. The truly natural range of this pine is unknown, for it has been planted extensively over generations for the culinary gourmet's pine nuts. This group of pines has received bolts and cables as preventive tree surgery.
11. Maidenhair Tree (*Ginkgo biloba*) is known as the living fossil. Known from the fossil record to have existed for over 200 million years, today it is the only living member of its group. Trees are male or female. Look out for fruits on the female trees in the fall. Notice the shape of the leaves - they reminded early Chinese writers of duck's feet.
12. Port Orford Cedar (*Chamaecyparis lawsoniana*), adjacent to Strawberry Creek, is frequently planted in parks for its dense drooping fern-like sprays. This tree is native to the north coast of California, from about Fort Bragg to southern Oregon. Recently, a water-borne fungus has been causing root disease in natural populations of this species. Crush some leaves to smell the aromatic oils.
13. Southern Magnolia (*Magnolia grandiflora*), as the name suggests, has large flowers that are creamy white. Often on the same tree you can see the full range from floral buds, through open flowers, to fruits. This tree is a popular ornamental, but likes humidity, being a native of the southeastern United States.
14. Douglas-fir (*Pseudotsuga menziesii*), with a natural distribution similar to ponderosa pine, produces more timber than any other North American species. This graceful giant is a very important source of structural timber, and has been planted commercially in many parts of the world. To explain the nomenclature confusion; it was Menzies, sailing with the Vancouver expedition in 1791, who first discovered this species and David Douglas who sent seeds home to the London Horticultural Society in 1827.

15. Dawn Redwood (*Metasequoia glyptostroboides*). Yes, the scientific name is an oral nightmare to the uninitiated. This species was known only from the fossil record, until living trees were discovered in a remote part of China in 1941. (Will we see the Wollemi pine soon on campus? Also known from the fossil record and found, for the first time in 1994, only 150 km from Sydney, Australia). The dawn redwood is deciduous, an uncommon trait in conifers.

16. Yellow Poplar (*Liriodendron tulipifera*) is named scientifically for its tulip-like flowers. Its common name is misleading, since this species is quite unrelated to the poplars; perhaps the slender leaf stalks and leaf blades that quiver in the wind are reminiscent of poplars and aspens. Note the very characteristic notched leaf blade. This is a close relative of the magnolias, and an important commercial species in eastern North America.

17. White alder (*Alnus rhombifolia*) commonly grows alongside streams throughout much of California. Nodules on the roots, containing nitrogen-fixing actinomycetes, add nitrogen to the soil, making this a valuable species in riparian woodlands. White alder is commonly used in landscaping.

18. London Plane (*Platanus x acerifolia*) is possibly the most common street tree in the world. The scientific name *acerifolia* refers to the resemblance of its leaves to those of the maples (*Acer*). The *x* in the scientific name refers to its hybrid origin, believed to be between the oriental plane from Greece and Turkey and the western plane from eastern North America. Perhaps hybrid vigor is the cause of its rapid growth rate. The trees here, by the Campanile, and in Sproul Plaza, are regularly trimmed each year, yet growth seems to be ever more vigorous.

19. Canary Island Pine (*Pinus canariensis*) is a graceful pine commonly seen on the campus. You will need to visit Tenerife, or one of the other Atlantic islands off the north coast of Africa to see this species in the wild. It is listed as rare, but recent replanting has replaced exotic species on the islands.

20. Giant Sequoia (*Sequoiadendron giganteum*), when full grown is the most massive living organism; others may lay claim to being more extensive, or taller. The total weight of the General Sherman Tree in Sequoia National Park is estimated to be over 1,000 tons, including a trunk of 625 tons. (Compare this to the blue whale at about 160 tons, the largest animal that ever lived.) The giant Sequoias are native to a few locations on the western slopes of the Sierra Nevada.

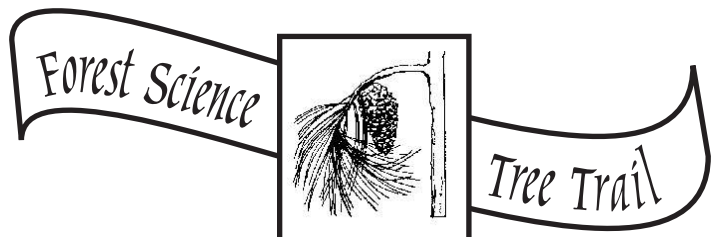
21. California Buckeye (*Aesculus californica*) is typical of the drier slopes of the Sierra Nevada and the Coast Range mountains of California. These trees are drought adapted; losing their leaves in midsummer on dry sites to decrease water loss. Buckeye is used as an ornamental because of its large off-white flowers in spring. In late summer, fruits containing large seeds called horse chestnuts hang from the leafless branches. The strange architecture is common in older trees.

22. Coast Live Oak (*Quercus agrifolia*) is on top of Faculty Glade. This would be a good shady resting place for lunch or leisure. These trees would have been a prominent part of the landscape around Berkeley and much of the central coast of California when the first settlers arrived. Vancouver predicted the importance of the port of San Francisco in 1792 and he commented on the groves of oaks that were a sign of fertile soil. Today, California Live Oaks are being threatened by the Sudden Oak Death Syndrome.

23. Coast Redwood (*Sequoia sempervirens*) trees make up this small grove south of Stephen's Hall. Relatives of the giant Sequoia and the dawn redwood, coast redwoods are the tallest trees in the world. They are closely associated with the California fog-belt, and are found along the coast from south of Monterey to southern Oregon. The Faculty Club and a few other campus buildings are built from redwood.

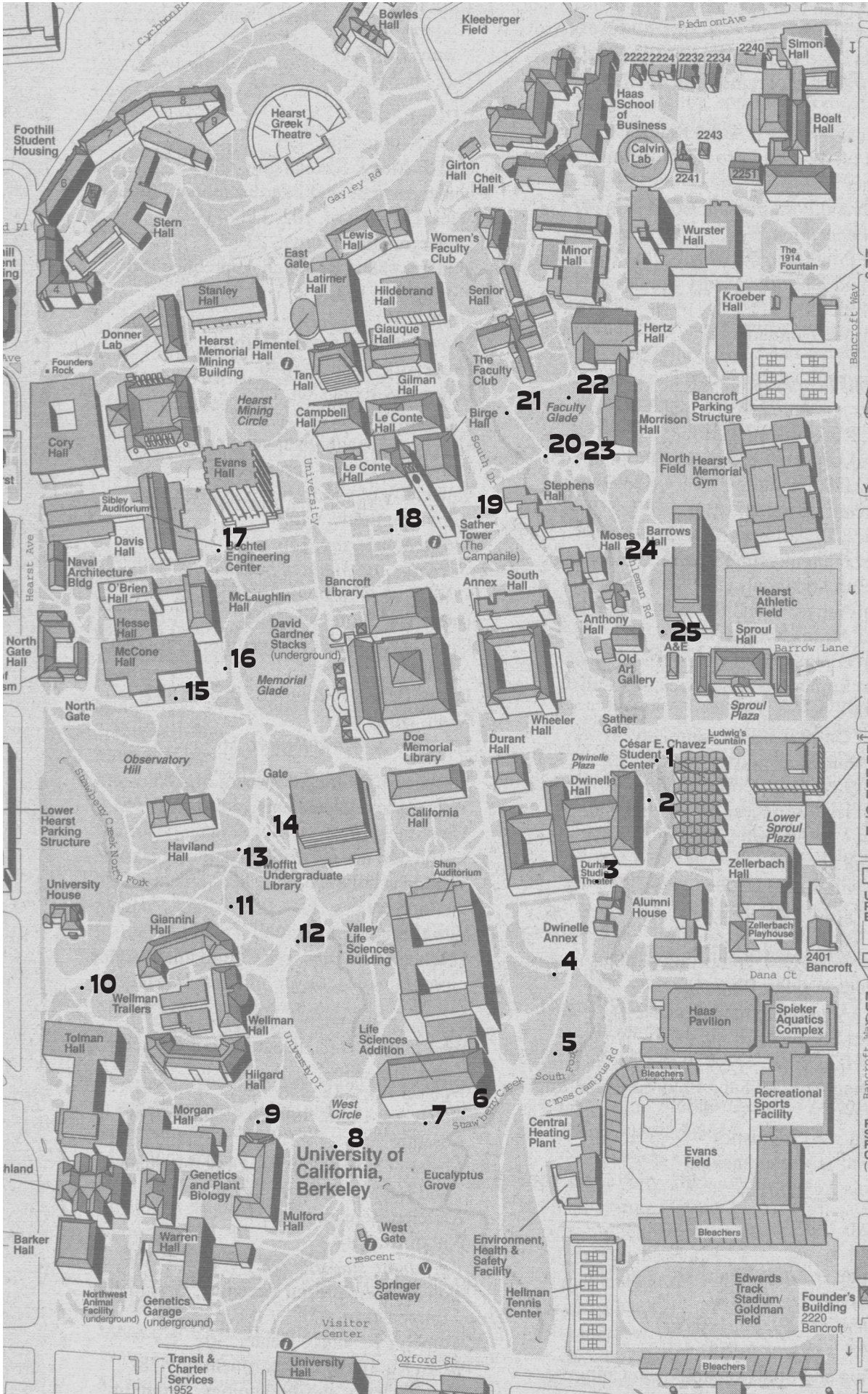
24. American Sweetgum (*Liquidambar styraciflua*) may be mistaken for a maple, but the leaves are spirally arranged along the shoot, not in opposite pairs as in maple. Sweetgum is regularly planted as a street tree and in parks; preferred street trees have crimson leaves in the fall. It is an important tree of the southeastern United States, providing veneer for plywood and pulp for paper.

25. Chinese Pistache (*Pistacia chinensis*). This tree northwest of Barrow's Hall is not the source of pistachio nuts, but a Chinese relative of the commercial nut tree *Pistacia vera* that is native to Iran. In China the wood of this tree is used for lumber.



We hope you enjoyed the tree trail.
The Division of Forest Science is
located in Mulford Hall if you have
any questions. Thank you!

East



North

South

West