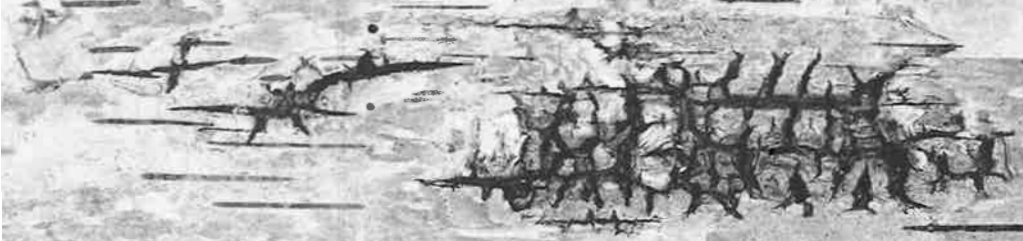
THE C. FRANK BROCKMAN MEMORIAL CAMPUS

# TREE TOUR



THE UNIVERSITY OF WASHINGTON

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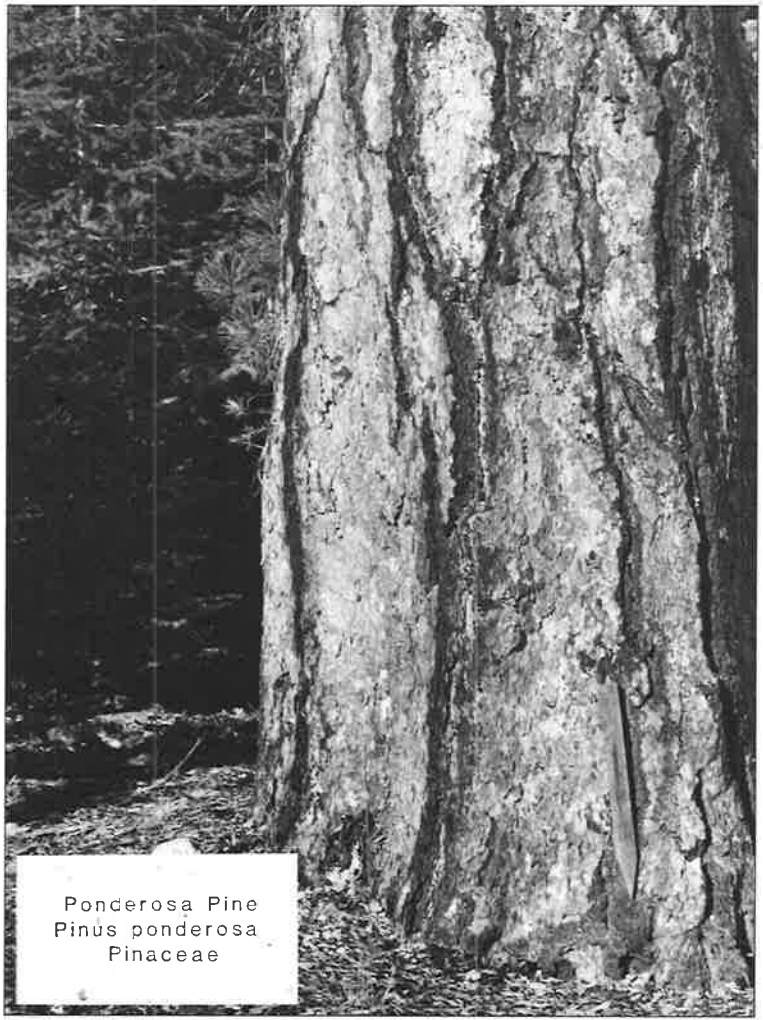
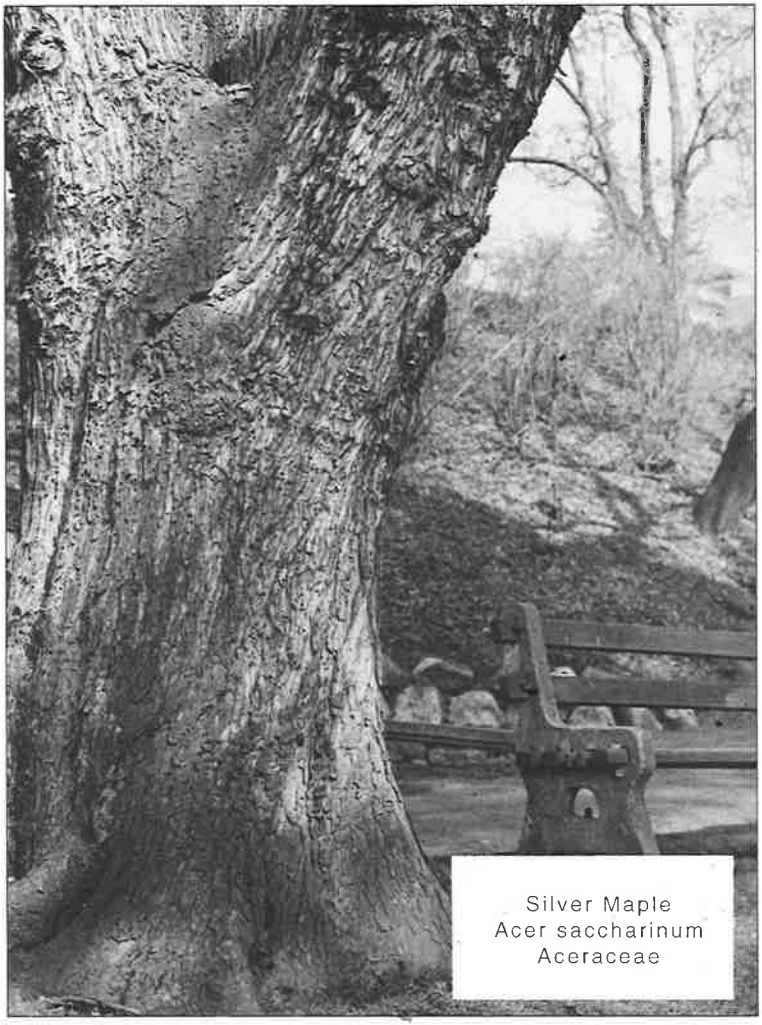
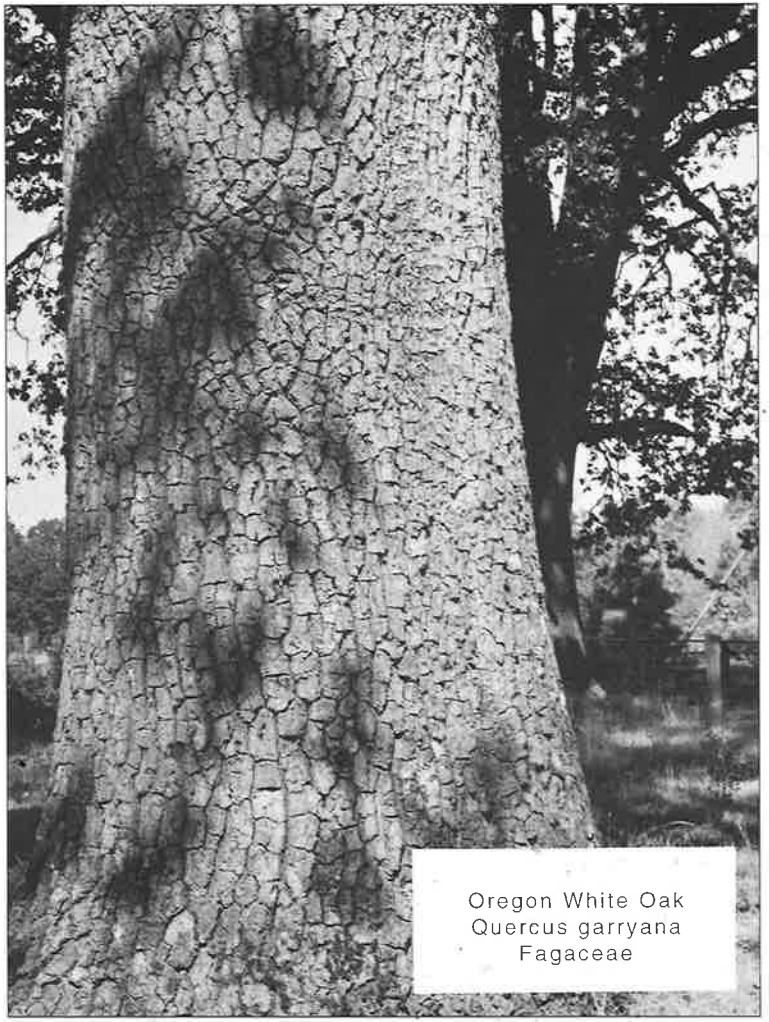


Ponderosa Pine
Pinus ponderosa
Pinaceae

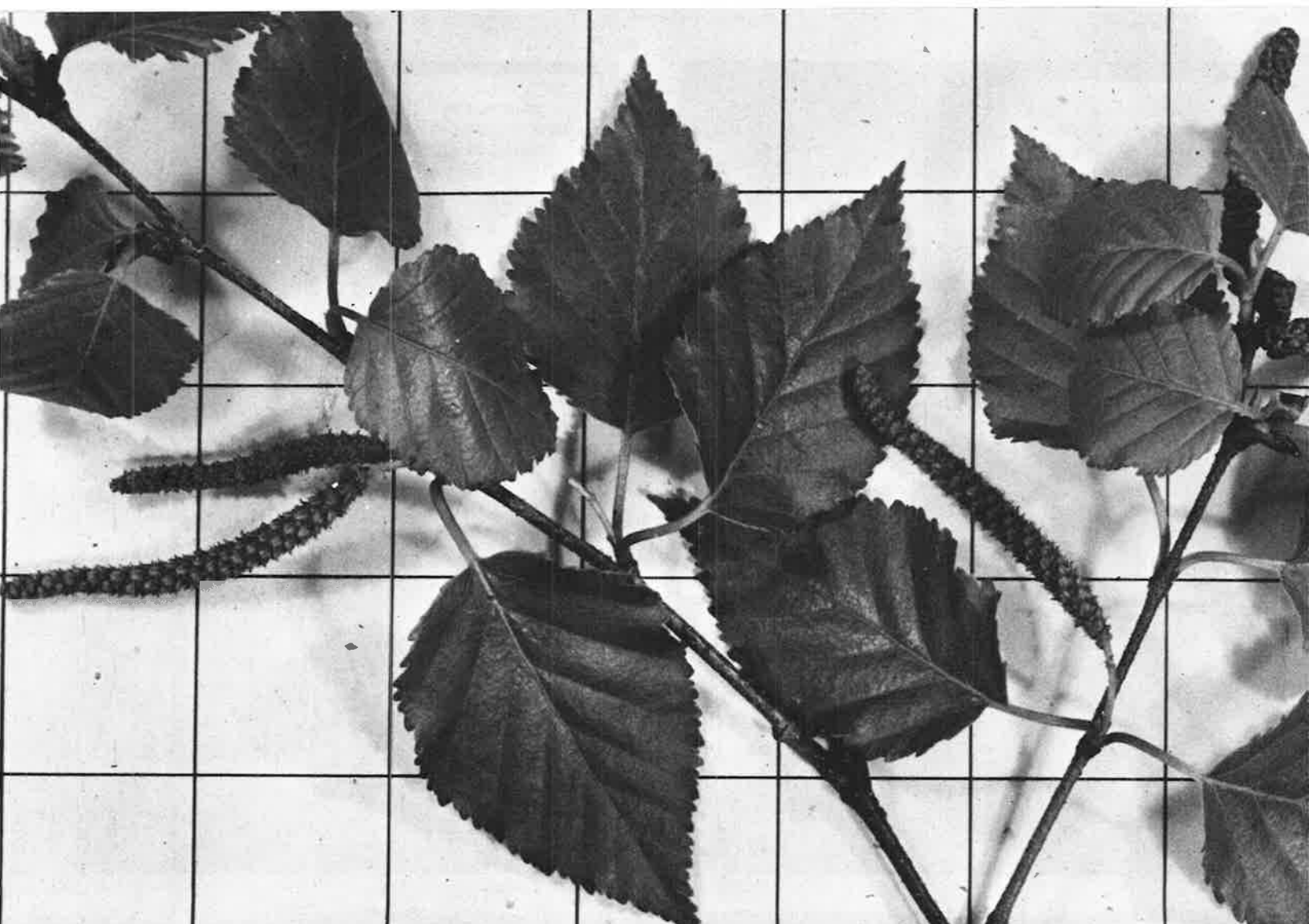
Western Redcedar
Thuja plicata
Cupressaceae



Silver Maple
Acer saccharinum
Aceraceae



Oregon White Oak
Quercus garryana
Fagaceae



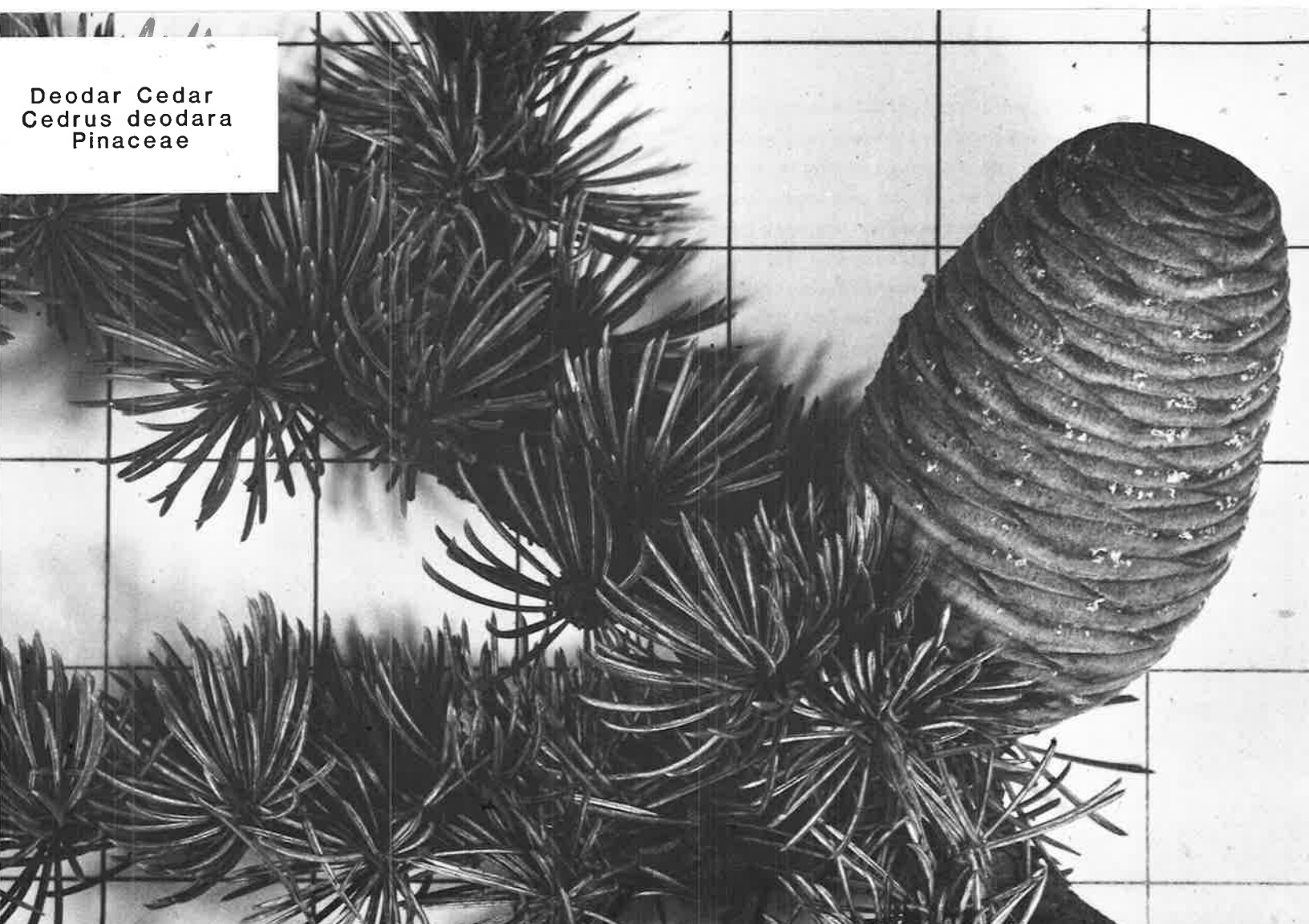
*cover: paper birch bark, detail*

*above: paper birch, detail*

## INTRODUCTION

This tour is dedicated to the memory of Professor C. Frank Brockman (1902–1985), who capped an influential, productive career in forestry and outdoor recreation by producing in 1980 the original University of Washington tree tour. Edited by Louise M. Hastie, that eight-page publication featured 81 campus trees, and had to be reprinted by popular demand. Along with the tour, Brockman authored five articles about campus trees for the *U.W. Arboretum Bulletin*. In 1968, the year he retired from the U.W. College of Forestry, his best-selling "Golden Guide" to *Trees of North America* was released. Brockman's enthusiasm and love of sharing knowledge suggests he surely would welcome this new campus tree tour.

About 480 different kinds of trees beautify the U.W. Only twenty-eight are species native on campus. Since before the turn of the century, forestry professors, botanists, gardeners and landscape architects have planted native and non-native trees for decoration and education. The campus community views trees as valuable resources, studies their ecologic roles, and admires their fascinating variations and seasonal transformations. This tour introduces you to the great green realm of a campus renowned for its lovely landscape. May you gain information and inspiration.


Deodar Cedar
Cedrus deodara
Pinaceae

1 **DEODAR CEDAR** (*Cedrus Deodara*)

Stevens Way is lined by dozens of these graceful evergreens, which excel in Seattle's soil and climate, so far from their Himalayan homeland. Unlike our native cedar (#26) these bear sharp 1–2" needles, and the erect, fist-size cones (produced only by female and bisexual trees) shatter to pieces in spring when the seeds ripen. Deodar Cedars unite the relaxed, drooping posture of hemlocks and the massive horizontal sturdiness of certain pines, whether yielding valuable wood in Indian forests or graciously decorating our landscapes. Compare Deodar with its congeners: Atlas cedar (#28) and cedar of Lebanon (#43).

2 **PACIFIC DOGWOOD** (*Cornus Nuttallii*)

Glorious floral beauty makes dogwoods beloved trees. This native species is both supremely lovely and dreadfully scourged by disease. A straight, smooth-barked "sculptural" trunk radiates tiers of ascending branches tipped by creamy flowers in April, that often blossom again in late summer or fall. The four-trunked specimen we've singled out is probably the largest of many on campus. It shows that the species is not only handsome, but can make much wood, which is extremely hard, pink, and split-prone, so has limited, specialized uses. For another dogwood see #15.

3 **MONTEREY PINE** (*Pinus radiata*)

Earth has over 100 pine species, and ten important ones grow west of Anderson Hall. Foresters relish Monterey Pine's fast growth, attained even on poor soils. Though native only in a small part of California, this bright green pine is planted in vast portions of the planet for wood. The tree is unlike most pines in bearing 3–5" needles in trios, and in its distinctive cones: roughly baseball-sized, *woody*-textured, knobby, staying closed and clinging tightly to the tree for decades. Fire forces the cones to release their seeds. Severe winters turn Monterey pines brown, but do not usually kill them.

4 **EUROPEAN LARCH** (*Larix decidua*)

Larches and tamaracks are *deciduous* conifers, primarily montane and far-northern denizens, able to grow as large as their evergreen peers, with wood as strong and useful, but offering cheery yellow fall color and an April flush of tender new needles beautiful enough to rank with the prettiest sights in treedom. European larch is grown in our area as an ornamental, being more easily cultivated than our two Washington native species, albeit no better-looking. Its cones are soft, 1½" long, and persistent.

5 **CHINA-FIR** (*Cunninghamia lanceolata*)

Bloedel Hall's northwest corner has a gorgeously colored redwood cousin featuring spongy cinnamon bark and broad, flat 1–2½" needles in sumptuous, curving array along stout twigs. This distinctive species is a large-growing, common, important Chinese conifer, its wood used to make coffins and for many less ghastly roles. China-fir has been cultivated in the West since 1804. Unlike many evergreens, it can *sucker* from its base. The walnut-sized, prickly cones fall firmly adherent to the dry, brown old twigs. Though China-fir foliage is normally shiny dark green, you see here the matte bluish form.

China-Fir
Cunninghamia lanceolata
Taxodiaceae

6 YELLOWWOOD (*Cladrastis kentukea* a.k.a. *C. lutea*)

The pea family of plants is rich in diversity, ranging from Lima beans to locust trees. Yellowwood is a rare, even endangered species of the eastern U.S., named in pioneer days from its heartwood's striking deep yellow color. Echoing the wood, in October the leaves replace their dark green with glowing yellow. As the individual west of Anderson Hall exemplifies, Yellowwood trunks tend to fork low, a trait that bothers economic foresters but endears the tree to lovers of picturesque landscape specimens. Yellowwood is a shade tree of substantial foliage, that every few years excites us in June with wisteria-like chains of white, fragrant flowers, covering the crown in splendid fashion. The smooth elephant-hide bark is gray where algæ and lichen has not coated it with a film of green or crusty silver.

7 CARRIÈRE HAWTHORN (*Cratægus* x *Lavallei*)

Next to the yellowwood west of Anderson Hall stands a big, dark hawthorn. Its twisted, muscular trunk spreads low into branches, clothed with holly-green, shiny leaves. Compared to more common hawthorns (with jagged leaves; see #75) the Carrière is strange. It owes its oddness to being a hybrid, resulting from the crossing of an evergreen Mexican species with an eastern U.S. one. During May it makes small white blossoms; in late fall and indeed early winter it finally colors its large marble-size berries orange-red, and the leaves turn an attractive burnt orange before dropping in December. Few thorns protect this old specimen, but *young* Carrière hawthorns seen at nurseries show vicious nail-like spines—with age comes relaxation of defense.

8 JAPANESE SNOWBELL TREE (*Styrax japonicus*)

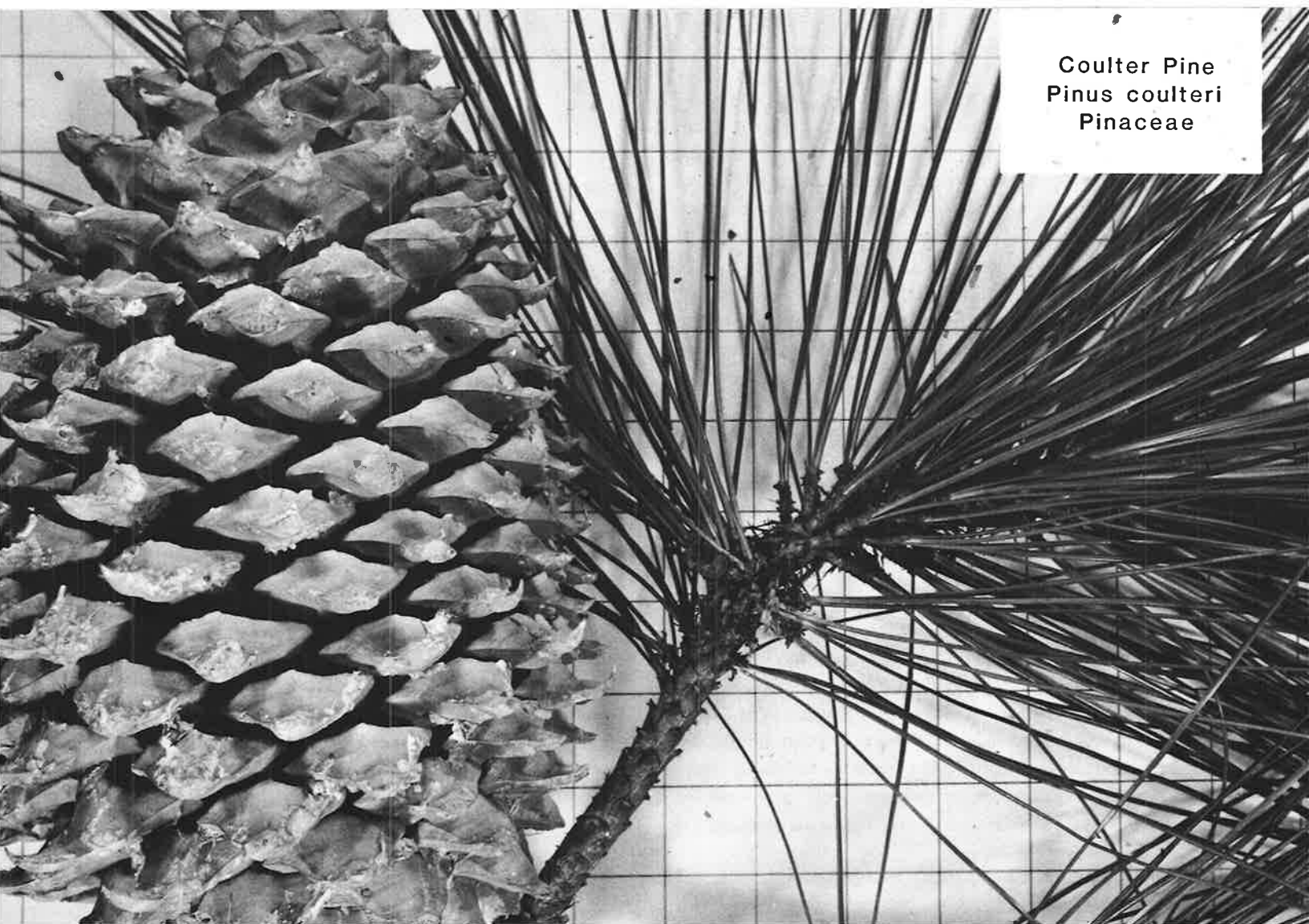
Anderson Hall's lawn has a small tree whose hard wood and petite white "bell" flowers in June make it a strong, lovely and practical tree. Refreshingly, insect pests and diseases avoid this species, and as long as it doesn't suffer summer drought it serves as an excellent residential landscape choice. It is naturally a woodland understory tree, and in fall the shiny leaves turn yellow, making a welcome, bright addition to shady Pacific Northwest gardens.

9 COAST REDWOOD (*Sequoia sempervirens*)

The most commanding tree so far on your tour is this behemoth. Stand under its wide branches, stare at its enormous trunk, and become keenly aware why it is a world famous species. Giant growth, especially lofty height, and its habit of forming pure forests of red pillars on the fog-shrouded coast of northern California, are what makes it so special. Its needles are about an inch long, flat, and rather resemble yew foliage, but are too stiff. The cones are thimble-size. Across the street in the Medicinal Herb Garden, is the Sierra or Giant redwood (#76), a mountainous peak 106 feet tall. Dawn redwood (#71) is the *deciduous* Chinese cousin of these Californians.

10 BIGCONE PINE (*Pinus Coulteri*)

Heavy cones of woody texture, armed with stout, sharp hooks distinguish the fruit of this pine. Bricklike cones require unusually thick branches and twigs. The 9–14" needles, clustered in trios, are proportionately sturdy. This Californian native's scientific name commemorates Thomas Coulter (1793–1843), an Irish botanist and physician who discovered the



Coulter Pine
Pinus coulteri
Pinaceae

species while collecting plants in Mexico and California. The tree has been cultivated since 1832 for its striking ornamental qualities. On campus, many Bigcone Pines are by McMahon Hall and Gardener's Vista, but this one at Winkenwerder Hall, behind the concrete patio, has the thickest trunk.

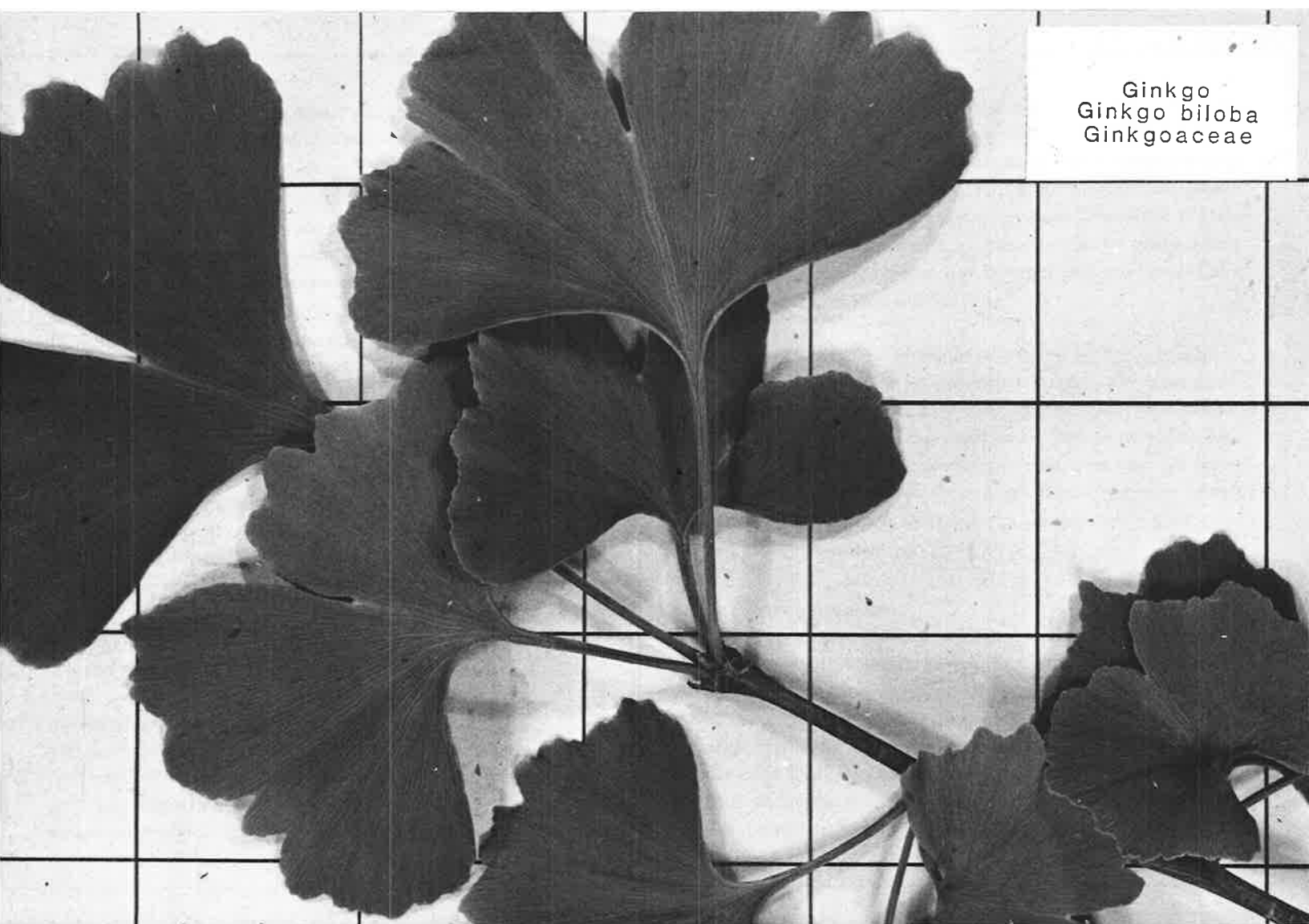
**11 LAWSON CYPRESS** (*Chamæcyparis Lawsoniana*)
Lawson Cypress of horticulture is Port Orford Cedar of forestry. Native to SW Oregon and adjacent California, this species forms large trees yielding excellent wood. As lovely as useful, it has been widely planted as an ornamental because in cultivation it shows astonishing variation: no conifer varies more in color, form and foliage. Only the wood and fragrance is constant. Rainier Vista's west side, south of Stevens Way, has more than a dozen fairly routine specimens. Their round, pea-size cones, however, may contain seeds which could give rise to yellow, bright green, baby blue or other offspring. Root-rot disease now kills Lawson Cypresses so often that nurseries stock very few varieties.

**12 KWANZAN CHERRY** (*Prunus serrulata* 'Kwanzan')
Thirty Kwanzan cherries formally line Rainier Vista south of Stevens Way. During April they erupt in a spectacle of hot pink blossoms. With vigor to match floral beauty, kwanzan is the most popular of all Japanese flowering cherries. See also #41 and 60.

**13 ENGLISH ELM** (*Ulmus procera*)
Three English elms, surrounded by a narrow bank of ivy, shade Stevens Way in front of Roberts Hall. Campus has many English elms, and these are not the largest. *Procera* means lofty. Their lower branches were removed, but numerous suckers annually reappear, often developing distinctive corky flanges, so people often use the name "Cork Elm." The leaves are dark, raspy, and lopsided. Late in fall they fade to an unspectacular gold before dropping. In earliest spring the twigs become wreathed with tiny purplish flowers, followed by pale waferlike winged seeds, produced by the thousands. The seeds are sterile, and decay readily. This elm is reproduced solely by suckers. Northeast of these three old ones is a young Siberian elm.

**14 PIN OAK** (*Quercus palustris*)
Stevens Way and the nearby vicinity has 19 Pin Oaks and 2 Black Oaks (*Quercus velutina*). Both species are from the eastern U.S., bear sharply lobed leaves, and are strong, undemanding urban shade trees. Pin oak is often preferred, with more deeply lobed leaves, easier to transplant, producing smaller acorns and prettier fall color. The name "pin" refers to plentiful slender twigs, which end up ultimately as pinlike knots in the wood. More of the 24 oak species on campus are #22, 29, 47, 52, 59 and 80.

**15 EASTERN DOGWOOD** (*Cornus florida*)
On the lawn north of the Electrical Engineering building, stands a picture of density with a solid mass of foliage, tightly set on closely spaced silvery twigs. In winter, the tree's naked silhouette is appealing, as is the rough chunky bark on its two trunks. In May the copious white flowers are stunningly attractive. A pink-flowered specimen, smaller, is over towards the rose garden. This species from eastern North America is one of the most familiar and beloved flowering trees. Its fall color can also be


Ginkgo
Ginkgo biloba
Ginkgoaceae

superb. Many specimens are on campus. Our native counterpart (#2) is leggier, larger, and nowhere near so amenable to cultivation.

16 GINKGO (*Ginkgo biloba*)

The Burke Museum displays fossil Ginkgo leaves 48 million years old which look like the ones before you. This tree of ancient lineage is the oldest unchanged tree species on the planet, so is aptly called Golden Fossil tree (it turns pure yellow-gold in fall). The two ginkgos by the Aerospace and Engineering building are still gangly, youthful, and have not yet flowered. Male ginkgo catkins droop conspicuously in April; female trees have tiny green flowers that give rise to orange, plumlike fruit ripe in October. Within the smelly fruit is an edible nut, much prized in the tree's native China.

17 AMERICAN WHITE ELM (*Ulmus americana*)

Superb form and majestic presence make this HUB bus-stop tree special. "Special" seems too weak a word when you regard the tree—nature at its best marks this tree, upon its grassy eminence.

In Seattle at least, American white elms, unlike English elms (#13) make comparatively few, tiny, and hairy seeds in spring. Also, the leaves color brighter yellow, earlier in autumn. The bark is more ropelike, less chunky. The roots don't sucker. Above all, the American Elm builds an arching, vaselike crown of uplifting branches, from which descend fine branchlets of more refined foliage.

18 HONEY LOCUST (*Gleditsia triacanthos* f. *inermis*)

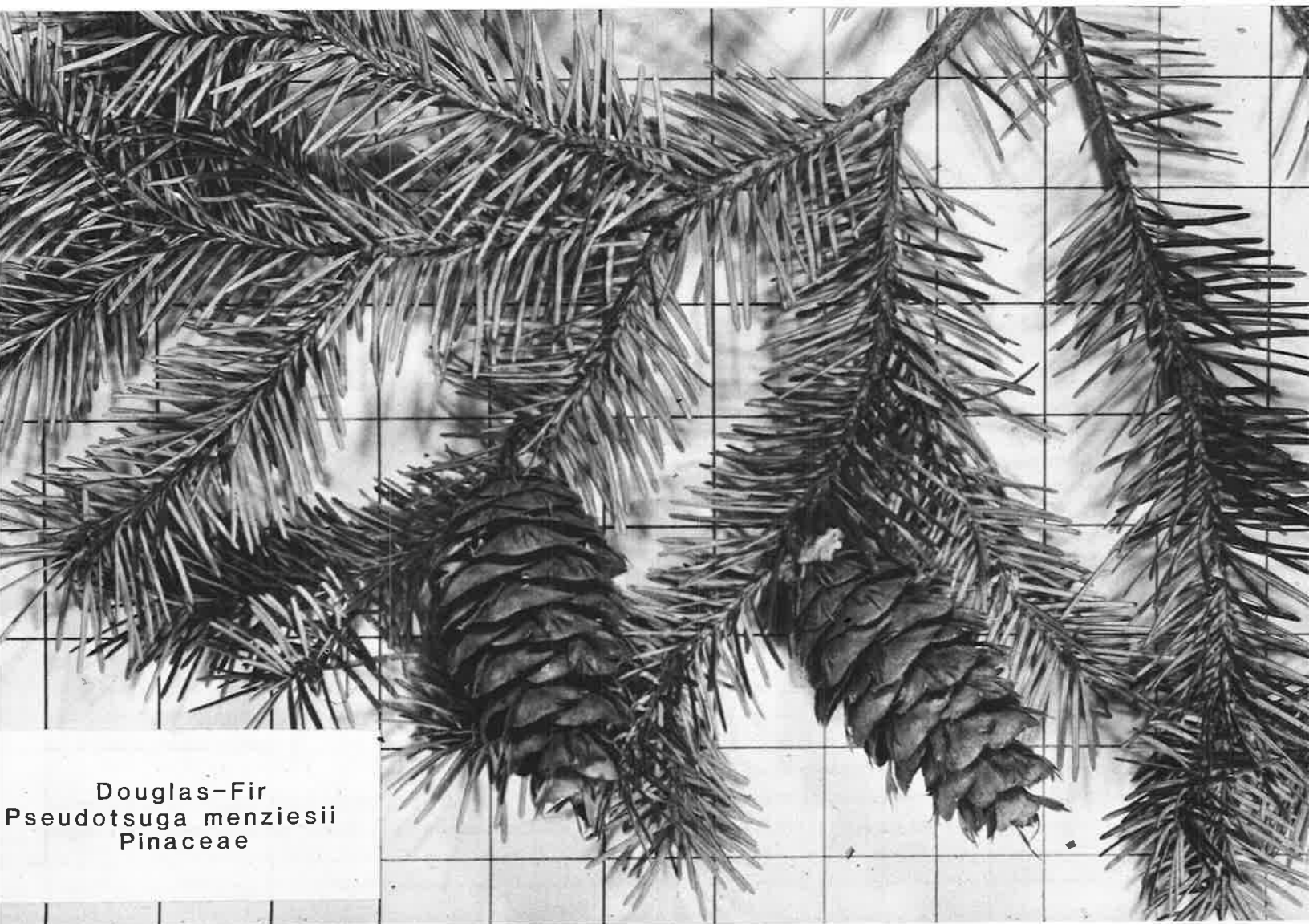
A lovely contrast between delicate greenery and red brick hardscape is afforded by the Honey Locusts gracing Loew Hall and the Engineering Library. Of various species of locusts, this is distinguished by two marked features: 1) foot-long, honey-rich seedpods; 2) fiercely hard, large thorns. As the species occurs wild in its native Midwest these traits are keenly known, but here we plant varieties that are essentially podless and thornless. Golden fall color ends the growing season.

19 GLOBE HORNBEAM (*Carpinus Betulus* 'Globosa')

Fifteen round-headed European Hornbeam trees are packed in front of the HUB by Stevens Way. They are wonderfully formal, but oppressively crowded. In early spring when the fresh green leaves cover them they are lovely. Since this species is weak both in floral beauty and attractive fall color, we cherish it for its form and foliage. Normally people plant the flame-shaped variety known as pyramidal hornbeam (such as 3 east of Kincaid Hall). These globular HUB trees are actually nursery productions which comprise a regular hornbeam trunk being used to topgraft a round, bushy variant that otherwise couldn't be termed a tree. Originally from Europe, the globe hornbeam has been in the U.S. for more than 100 years.

20 SILK TREE (*Albizia Julibrissin*)

Silk Tree's showy blossoms during the sweltering height of summer makes up for its tardiness to waken from winter dormancy. The rarefied lightness of its frondlike leaflets, and its bright pink flower puffs, makes it unmistakable. A large old specimen is on your left as you enter the HUB lawn area, and a younger one to the right. Silk Tree is so named



Douglas-Fir
Pseudotsuga menziesii
Pinaceae

from its threadlike flowers, and is unrelated to the mulberry tree from which silk is produced. Other names are pink acacia and mimosa tree. It is native over much of Asia, and now grows wild in the eastern U.S., where it was introduced in 1785. Although it produces many seedpods in Seattle, it rarely or never springs up wild here.

21 **PINDROW FIR** (*Abies Pindrow*)

A pair of lush, symmetric, dark firs, (with a Norway spruce), mark one end of Sieg Hall. The rich spires of these Himalayan evergreens are rarely seen hereabouts, but are handsome enough to make us wonder why. The needles are flat, long, but not sharp, fragrant, and both densely borne and long persisting. 3–5" cones perch at the tops of the trees, then disintegrate when mature in late summer or fall. "Pindrow" is a native vernacular name.

22 **CORK OAK** (*Quercus Suber*)

Next to the HUB's warm sunny wall is Washington's largest Cork Oak. This species is the famous Mediterranean native from which people obtain cork; strip off the spongy bark, and it grows back better than before—a great boon for humanity. Like many oaks, this one is evergreen, with rather scurfy, dull leaves, prickly and often cupped. The leaves are admirably adapted to a hot, dry existence. Like all oaks, this produces acorns, the seeds it reproduces itself from. The vigorous 'Scarlet Sentinel' maples near this rare oak are believed to be a hybrid of red and silver maples, two common species from eastern North America.

23 **BAY LAUREL** (*Laurus nobilis*)

Sniff these trees. Scratch a leaf or twig with your fingernail and inhale the spritely fragrance of sweet bay, renowned for its use as a flavoring since ancient Grecian times. The two multitrunked trees next to Sieg Hall's entrance are the largest in Washington, the taller being 40 feet. They're both males, cutting-grown specimens, and so genetically identical to most of the other bay laurels planted locally. Like the cork oak, this is a Mediterranean native that suffers damage in severely cold winters. As an element in Italian, formal or herbal gardens, bay laurels are indispensible.

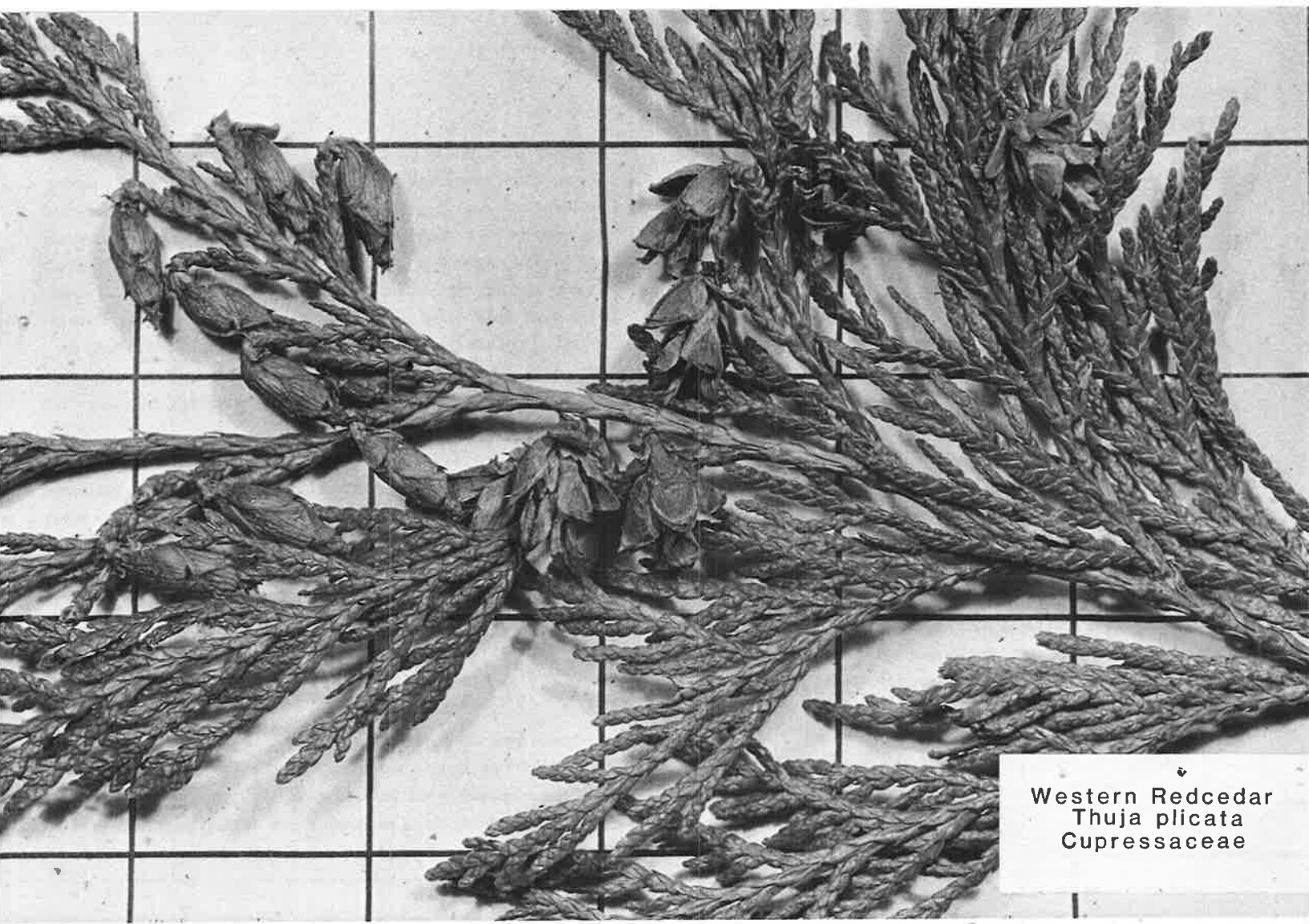
24 **CHERRY PLUM** (*Prunus cerasifera*)

Beauty of architecture juxtaposed with nature's unique form is splendidly epitomized with this tree, saved from a threatened death when Allen Library was constructed. View the tree against the library, or from within the building—either way shows how saving mature trees when new buildings go up can lend dignified beauty.

An Asia Minor species, this is the ancestor to the ubiquitous purple-leaf plums (#57). In earliest spring the tree's gnarly old trunk, rough and dark, contrasts sublimely with snow white blossoms covering every twig. Then a head of lush green new leaves adorns it. Very few, small, yellow plums are made by this craggy specimen.

25 **DOUGLAS FIR** (*Pseudotsuga Menziesii*)

Six conifers are in the HUB lawn area: three Douglas firs, two western red cedars, and a Norway spruce. One of the firs has Oregon grape (*Mahonia aquifolium*), and another has a young madrona tree (*Arbutus Menziesii*) at its base. Douglas Fir is the preeminent Pacific Northwest


Western Redcedar
Thuja plicata
Cupressaceae

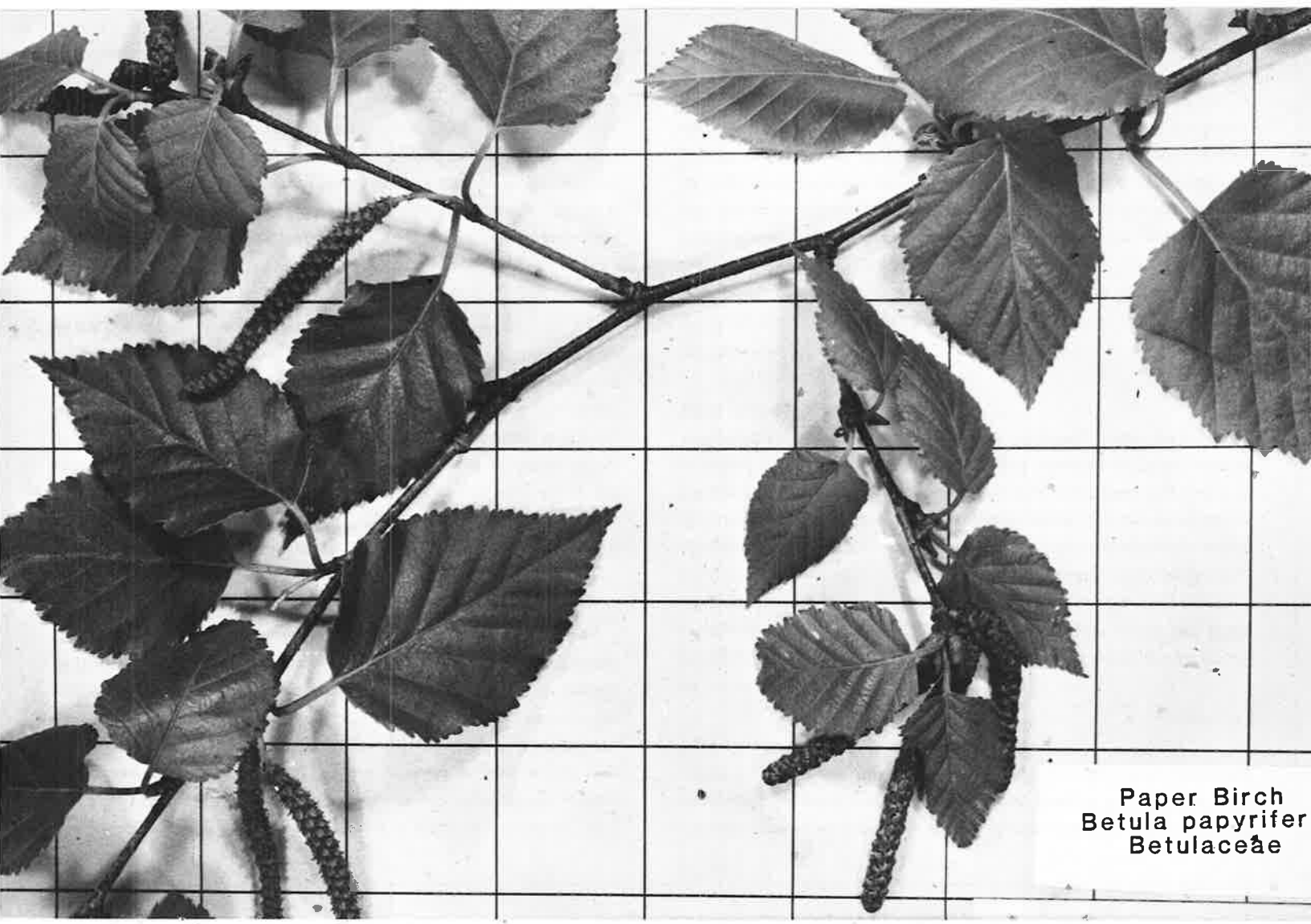
tree. It covers more acres, grows larger, and provides more wood (and bark) than any other species. Most of us know it by sight merely because it is so common. We've all seen it as Christmas trees. As a mature tree, two characteristics stand out: First, the trunks tend to be like telephone poles, without low branches, and are covered with thick, dark, corky bark—to protect from fire. Secondly, the trees are *dark*, from the density of their inch-long needles. The cones, 3–4" long, are easily distinguished from hemlock, spruce, or pine cones.

26 **WESTERN RED CEDAR** (*Thuja plicata*)
Yielding first place to its associate the Douglas fir, this cedar, along with western hemlock, ranks second in the "top ten" of Pacific Northwest tree importance. To native Indians, cedar was more useful than fir or any other tree. And its wood, although less strong, is more rot resistant, fragrant and prized for shingles, decking, and so forth. The bark is fibrous, stringy, red tinged, on a singularly fluted, buttressed trunk. The sprays of yellow-green foliage are fragrant, scaly and set with small cones no bigger than peanuts. Cedar is shorter than Douglas fir, but makes trunks as thick, and lives as long. The campus has plenty of both.

27 **NORWAY SPRUCE** (*Picea Abies*)
Somewhat dark and ragged, a mature Norway spruce has an important presence by virtue of its sheer bulk and grim swarthiness, which is relieved in late spring as its fresh young needles flush forth. Spruces are pitchy evergreens with sharp, scratchy foliage, and resinous wood of considerable usefulness. Since they grow in vast northern forests, their economic role is major. Norway spruce might be called the original or common spruce, having a wide natural distribution, and being cultivated extensively for wood and ornament. When *young* it is lovely, perfectly symmetric, the ideal Christmas tree. In age it has good wood but looks haggard. The narrow 5–9" long cones dangle.

28 **ATLAS CEDAR** (*Cedrus atlantica*)
Alone on the edge of lawn next to Suzzallo Library's tower, is a landmark evergreen, with a massive, pillar-upright trunk, from which arch forth irregular boughs laden with short, sharp tufted needles and avocado-sized cones. It is relatively rare to see such Atlas cedars, since people usually plant powder blue varieties of the species. This tree derives its names from the Atlas Mountains of Algeria and Morocco. It's closely related to Deodar (#1) and cedar of Lebanon (#43). The wood of all three kinds is as valued as the trees are stately, long lived ornamentals. Atlas cedar is comparatively spidery, with remarkably "reaching" limbs giving it an open, jagged silhouette.

29 **RED OAK** (*Quercus rubra*)
Thirteen red oaks, two pin oaks, an American beech and a European hornbeam comprise the substantial grove between Smith Hall and Suzzallo Library. Originally this area was part of the University's first International Grove, planted in 1932. Now some of the oaks are 100' tall. Among oaks this eastern North American species is distinguished by its large, shallowly but sharply lobed leaves, and huge, comparatively smooth-barked trunk. Its acorns, the size of large cherries, are produced abundantly, and when the squirrels go after them in fall there is a hectic scene. The foliage turns gold or red in autumn. See also #14.



Paper Birch
Betula papyrifera
Betulaceae

30 COPPER BEECH (*Fagus sylvatica* f. *purpurea*)

Color is the operative word for this tree. European beech is a gigantic shade tree, produces tiny nuts, and is a frequently planted ornamental because of its beauty, which is of the grand scale. Silvery, smooth bark on a great large trunk distinguishes beeches even in winter. The bluntish leaves are shaped approximately like an egg in outline. Since most of the nuts are hollow, and squirrels eat most that are not, beeches are not valued on *that* account. Related to oaks, its wood is less useful.

In *this* specimen, on the HUB lawn near Thompson Hall, the leaves are copper colored instead of the normal green. Next to the Art building (near #42–43) is a dark purple variant.

31 SUGAR MAPLE (*Acer saccharum*)

Across the lane north of the beech is an old sugar maple with an atypical concentration of heavy horizontal limbs emanating from its ashy gray trunk. Its leaves are completely normal, and color brightly in autumn. The chief attributes of this species are its major role as an important component of forests in much of eastern North America, its warm orange fall color, its highly useful wood, and its sweet sap. When the trees are leafless in late winter, their sap rises and descends with the temperature, and people extract it to use in making syrup or sugar, whose maple flavor is one of the unique delights of life. Our climate is too warm in winter for commercially worthwhile sap harvest, but the trees grow well here.

32 PAPER BIRCH (*Betula papyrifera*)

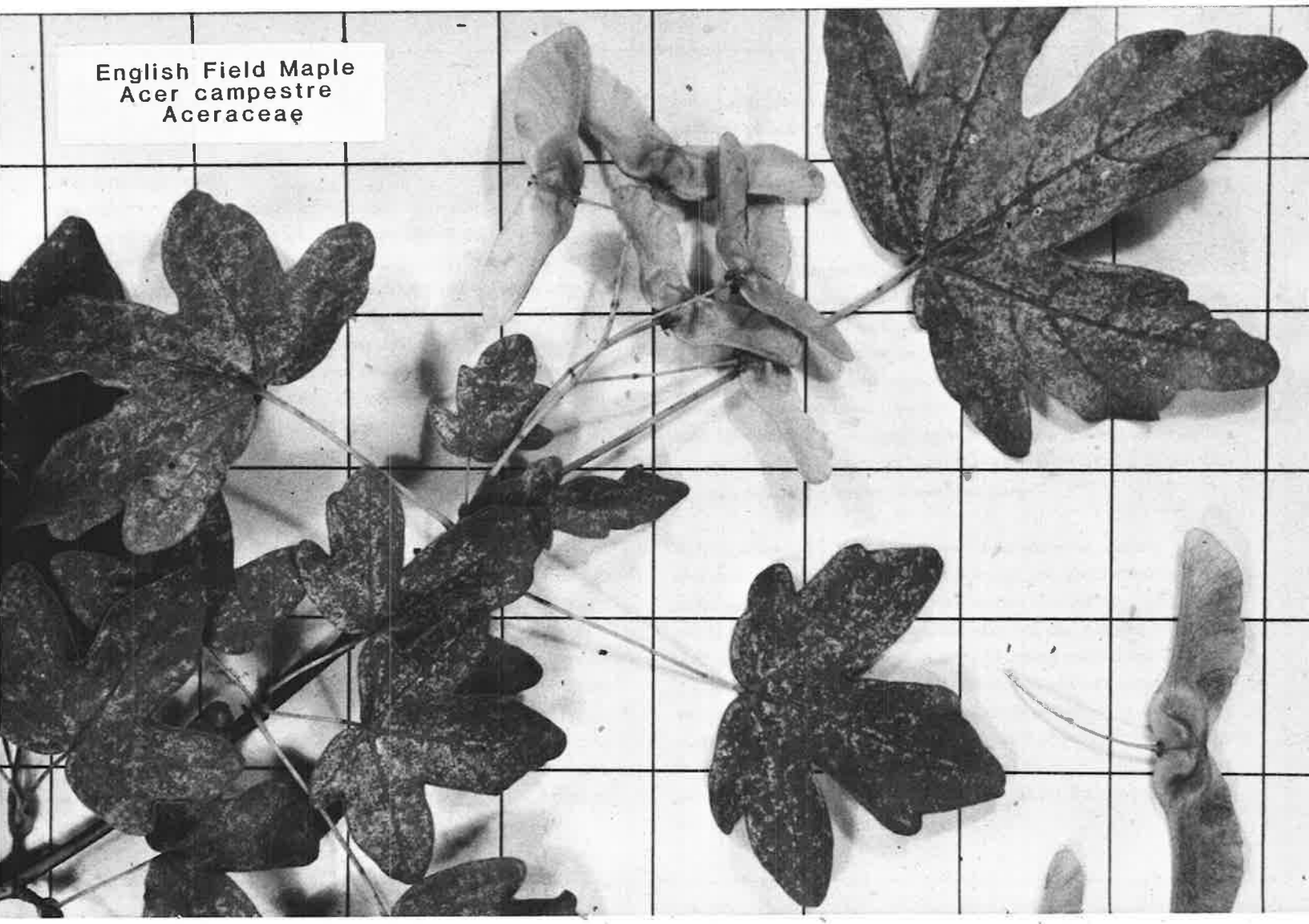
At the southeast corner of Thomson Hall stands a white-barked paper or canoe birch, a species with an extensive native range from Alaska all across Canada and the northern U.S. Native in Seattle, it is rare here, and is vastly outnumbered by its European cousin (#37). The American is distinguished year-round by its mummy-like wrapped trunk. In summer, the leaves are larger than those of European birches, and the twigs less refined and elegant. Briefly, paper birch has a whiter trunk but larger foliage. The tree we single out at this stop has been hurt by the wall constructed next to it, so its top is thin and its leaves smaller than when it was healthy. Larger examples are elsewhere on campus.

33 SWEDISH WHITEBEAM (*Sorbus intermedia*)

At the northeast corner of Thomson Hall is a small relative of the common mountain ash. Swedish whitebeam leaves suggest those of our common native alder, but otherwise the trees are unrelated and dissimilar. The Swede has creamy white small flowers borne in tight clusters in April, giving rise to little red berries—especially pretty as the leaves turn yellow in October. It may grow to be 50' or more in height, but is normally small, of limited familiarity and infrequently planted as an ornamental. As its name suggests, it is from northern Europe.

34 PINK BEAUTY CRABAPPLE (*Malus* 'Pink Beauty')

Walk past a thriving eastern white pine (see #55) and some bigleaf maples (see #48) to the amazingly low, wide 'Pink Beauty' crab apple between Stevens Way and the Communications building. This, the only 'Pink Beauty' known in Seattle, was named for its April flowers,


English Field Maple
Acer campestre
Aceraceae

which make it, in bloom, the most beautiful tree of the area. In 1948 it had been received by the arboretum, then was moved to campus when the 520 freeway project gouged a hole through that park.

The variety originated at Morden Research station, Manitoba, before 1945, as one of 1,700 open pollinated hybrid seedlings of the "rosybloom crabapples" grown in an effort to obviate the undesirable magenta floral tint prevalent in the rosybloom originals. From summer into fall the tree has dark purple, marble sized fruit. The leaves have an unusual leaden deep blue-green color.

35 KATSURA (*Cercidiphyllum japonicum*)

Across the street, Padelford Hall is very shadowy and lush with a forest-like setting of 9 Katsura trees and 11 Scots pines. Katsura is Japanese in name, but also grows in China. Its roundish leaves emerge in spring a bronzy color, then stay green all summer before lighting up in fall variously yellow, apricot or reddish. At this time they often accompany their glowing color with a fragrance of burnt sugar, strawberries, or cotton candy. As long as katsuras receive sufficient summer moisture they do very well in our climate and soils, growing large and proving hardy, disease-free and long lived.

36 SCOTS PINE (*Pinus sylvestris*)

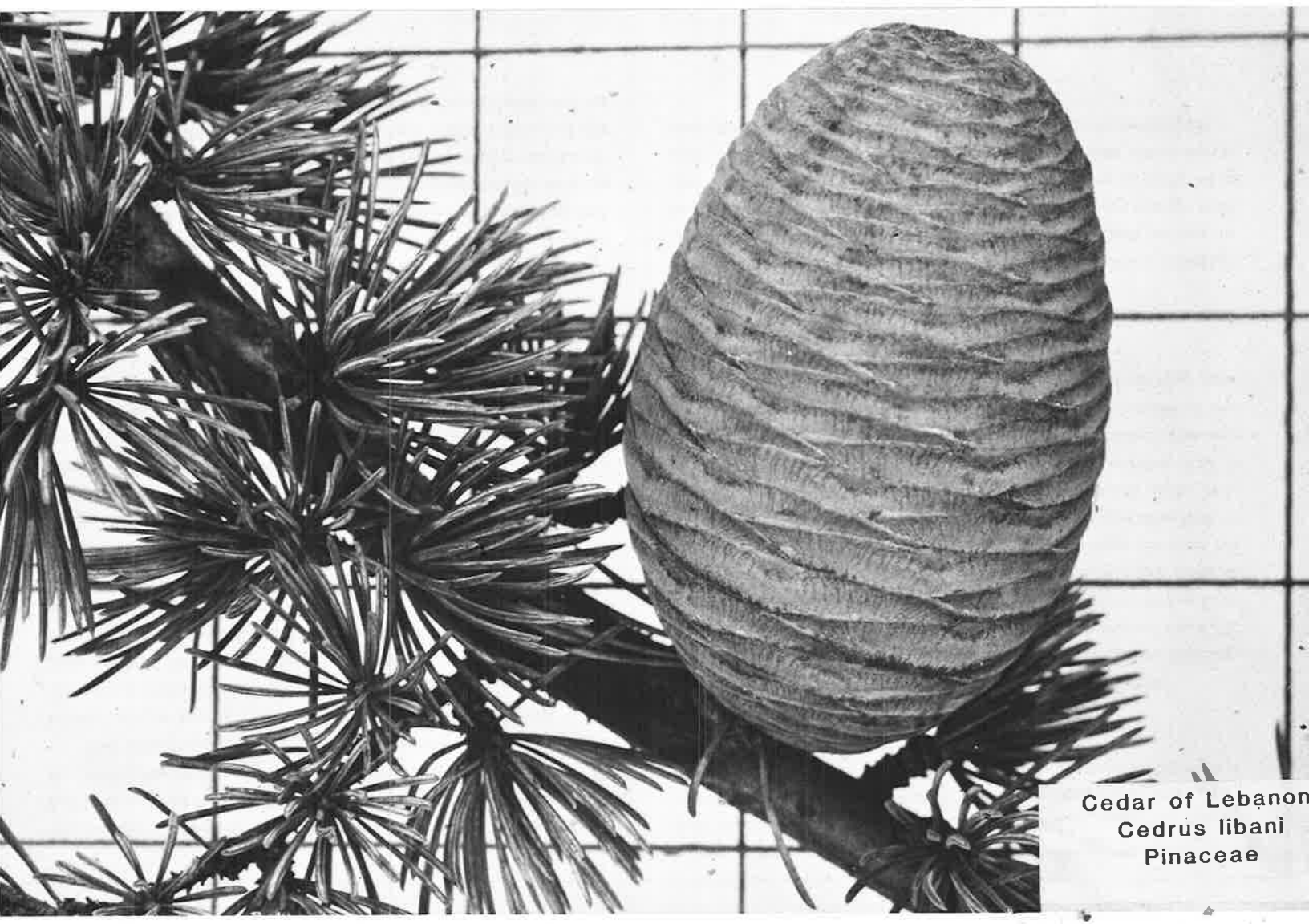
The 11 Scots pines interplanted with the Padelford Hall katsuras are best seen in winter, when their orange bark and blue-green needles show up with less competition. Look at these and you'll see how they cannot tolerate shade—it kills their lower limbs. Scotland indeed is home of this species, but it also extends to the Pacific over Asia—no other tree has such an extensive range. The Scots is identified by its slender orange trunk, 2–4" sage-green, stiff needles in pairs, and nondescript 2–3" cones. Most similar is Japanese red pine (#46). In European forestry it is a major species, as well as an ornamental in North America.

37 WEEPING EUROPEAN WHITE BIRCH (*Betula pendula* 'Tristis')

Cross Stevens Way again, edge around the Communications building, walk under the George Washington elm (*Ulmus americana*; see #17), then out on the lawn north of the Music building observe, 40 feet from an eastern white pine, a weeping white birch. This fine tree drips its slender twigs making a fountain of foliage. Like Scots pine, this birch is a denizen of northern Europe, and is widely familiar because of its bark. It is so common locally that many Seattleites may think it's native here, and in fact it does frequently spring up wild. From paper birch (#32) it is easily distinguished. This individual is noticeably infested with ugly black branch galls of dormant buds. Other cultivated varieties of this species include purpleleaf, cutleaf, fastigiate and mophead weeping; none but the cutleaf is present on campus.

38 ENGLISH MAPLE (*Acer campestre*)

Two English maples are by the wheelchair ramp at the Music building's southeast end. This species is the only *Acer* native in England, and was the first tree to receive the name "maple." It is cultivated where a tough small tree is desired and is often found in English hedgerows. Its softly lobed leaves lack the elegance and vibrant colors of some maples, and change to mere yellow in November. The seeds are conspicuous in horizontal pairs.



Cedar of Lebanon
Cedrus libani
Pinaceae

39 **HORSE CHESTNUT** (*Æsculus Hippocastanum*)

Seventeen horse chestnut trees line Skagit Lane, forming a shady colonnade. Native to Greece and Albania, this species was introduced to the U.S. in the 1740s because of all large shade trees it has the showiest floral display, with foot-long clusters of white flowers in late April or early May, a rich sight against the large dome of green foliage. Unlike the original chestnut tree (#68) the nuts produced by this species are inedible. Squirrels gather many, and plant those that they don't eat; witness many wild horse chestnut seedlings hereabouts. The leaves turn to gold or pale brown in autumn, revealing large sticky buds which will burst with a flourish early next spring. The name "horse chestnut" was probably given originally because the fruits were known as At-kastan (horse chestnut; *Castanea equina*) to the Turks, who found them useful as a drug for horses suffering from broken wind or coughs.

40 **JAPANESE MAPLE** (*Acer palmatum*)

A Japanese maple is west of the Music building, facing Miller Hall. There is no tree native in North America with as many ornamental varieties as the Japanese have with their maples. *Acer palmatum*, while one of 20 maple species native in Japan, is the most common and widely variable. It can be a low bush or a 60-foot high tree, and its leaves range from filigree laciness to the sort of ones you see on this Music building example. In color they vary delightfully too.

The Music building example is a bit brooding, rather than pure green—there is a red tinge at its leaf tips that gives the whole tree a bronzy cast.

41 **YOSHINO CHERRY** (*Prunus* x *yedoensis*)

Beyond two Douglas firs you now behold the Quad's Yoshino cherries. This is a locally famous planting that brings the campus joy every March or early April, as the dark trunks and branches blossom with millions of white or faintest pink flowers. Photographers mill about, people have picnics, everyone smiles. These trees, like the 'Pink Beauty' crabapple (#34) were moved here from the arboretum because of highway construction; their loss was our gain.

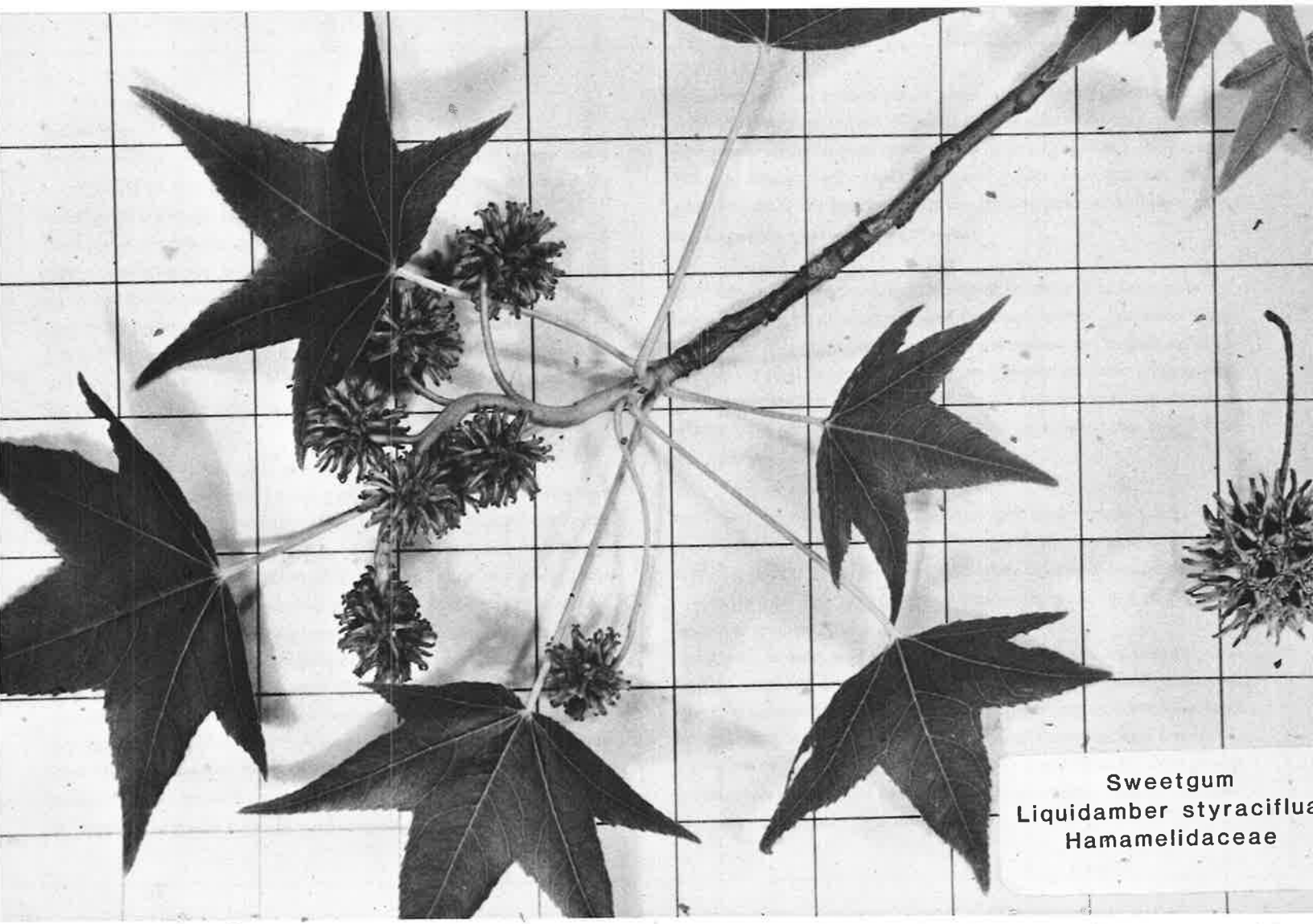
In the long run, Yoshino cherry originated about 1870 in Tokyo, as a natural hybrid. It grows larger than most flowering cherries, and sets some fruit, albeit small and plain. Later in spring you can see Hisakura (#60) and Kwanzan (#12) cherries open their pinker, larger flowers.

42 **ENGLISH HOLLY** (*Ilex Aquifolium*)

Against Raitt Hall are many English Hollies. With distinctive prickly evergreen leaves, high of gloss and usually armed with thorns and decorated by red berries, holly is known to all of us. Though Eurasian, English holly now comes up wild in Seattle. Humans have found and propagated spineless hollies and other variations with desirable features. The wood is very hard, pale, and useful for certain specialized things such as piano keys.

43 **CEDAR OF LEBANON** (*Cedrus libani*)

Two trees stand out prominently at the Art building: the purpleleaf beech (see #30) and the lofty Cedar of Lebanon. Of the many different kinds of trees whose wood qualities caused them to be called cedars, the Lebanese is the original. It is *Cedrus*, Latinized from the ancient Greek *kedros*, and grows not only in Lebanon but in Turkey and adjacent countries; it is the


Sweetgum
Liquidamber styraciflua
Hamamelidaceae

Biblical cedar. Deodar (#1) and Atlas (#28) cedars are its close kindred. These illustrious trees are not easily identified, because the three species are often very similar looking. The Art building tree, however, is a classic; it shows perfectly the peculiar attributes of the Lebanese: flushing forth early in spring bright green needles in stunning contrast to the dark green old winter needles; growing with tabular branches, bearing sharp needles longer than those of Atlas cedar, shorter and more densely set than those of the Deodar. The bark is darkest of all. *This* example bears only male cones, but if it did make female ones they'd be mostly at the top of the tree and larger than those of Atlas cedar. One reason that authentic Lebanese cedars are so rare is that they make fewer cones, which are harder to get, and which have lower seed germination rates; and the seedlings grow slowly!

44 **SWEETGUM** (*Liquidambar Styraciflua*)

Ten sweetgum trees stand between the Art building and MacKenzie Hall. They are vigorous shade trees from the southeastern U.S., with starfish-shaped leaves that smell sweetly resinous if scratched. From the leaf shape you might think it a maple, except that no maple can match the sweet odor. Moreover, maple leaves and twigs are borne in pairs opposite one another, whereas sweetgum leaves are borne like those of most trees. Several features make sweetgum one of the most popular urban ornamental trees. It is strong, adaptable to varied soil conditions, and produces a safe, handsome crown of branches. The fall leaf color can be spectacular red, but trees from the Deep South tend to hold their leaves green very late. Practically no insects or diseases bother this species. A drawback is its prickly seedballs littering the ground, crunching underfoot.

45 **YELLOW BIRCH** (*Betula alleghaniensis* = *B. lutea*)

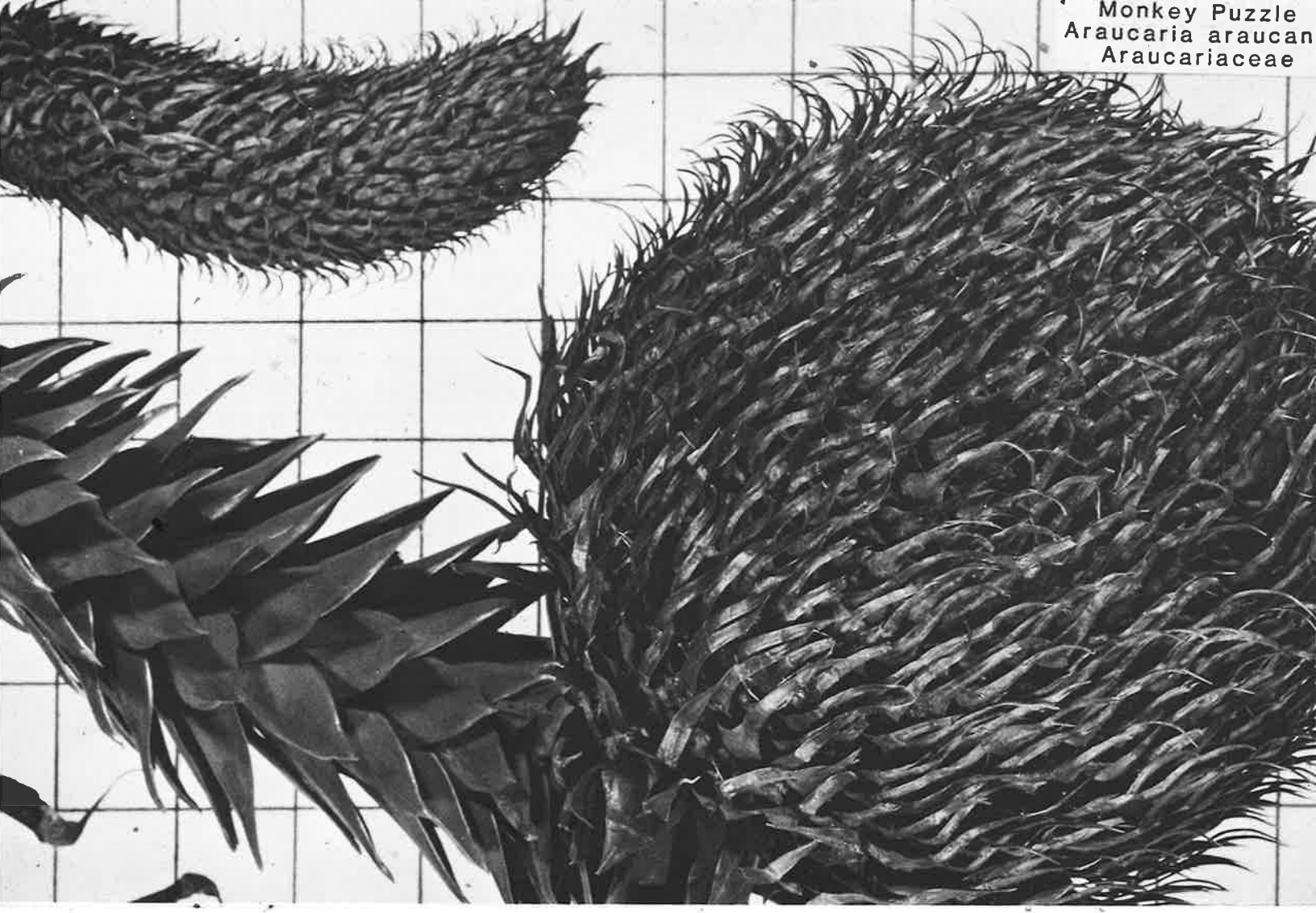
A Yellow birch stands in a grassy triangle with 8 Douglas firs and a huge English elm west of MacKenzie Hall. Too bad the birch branches are out of reach, since the living twigs smell of wintergreen. Its bark is birch-like in its horizontal, peely fashion, but is yellow-tinged dark gray instead of the familiar chalky white of more commonly seen birches. The catkins, however, and little seed-cones, declare this species a *Betula.* It is a great lumber tree in the central and eastern U.S., and its wood is very useful. As an ornamental it serves as a broad shade tree, bright in yellow fall color, free of insect and disease ravages, but not liked enough to rival its pale bark cousins.

46 **JAPANESE RED PINE** (*Pinus densiflora*)

By the shallow stairs at Balmer Hall's corner is a Japanese Red Pine, with a groundcover of ivy and juniper. The trunk's red color gives away its identity. The needles are slender, soft, yellow-green and borne in light quantity, along with cones that suggest those of Scots pine (#36). To the Japanese, it is feminine, while the Japanese black pine is masculine. As this specimen shows, it often is multitrunked and broad, not a robust upright grower like many pines. Thus it is well suited for use in garden design. Aka matsu is its Japanese name. It was first exported from Japan in 1854.

47 **WATER OAK** (*Quercus nigra*)

A crisp-foliaged Water Oak is in front of Balmer Hall, looming above a yoshino cherry, surrounded by asphalt in a heavily trafficked area. Despite its compacted root system, this tree appears the picture of strength and is as handsome as can be. From the southeastern U.S., it is


Monkey Puzzle
Araucaria araucan
Araucariaceae

semi-evergreen, and has leaves shinier on their undersides than above. Campus specimens of water oak ripen virtually no acorns, which has led to speculation that these trees are hybrids. Be that as it may, at least one parent would have been a water oak.

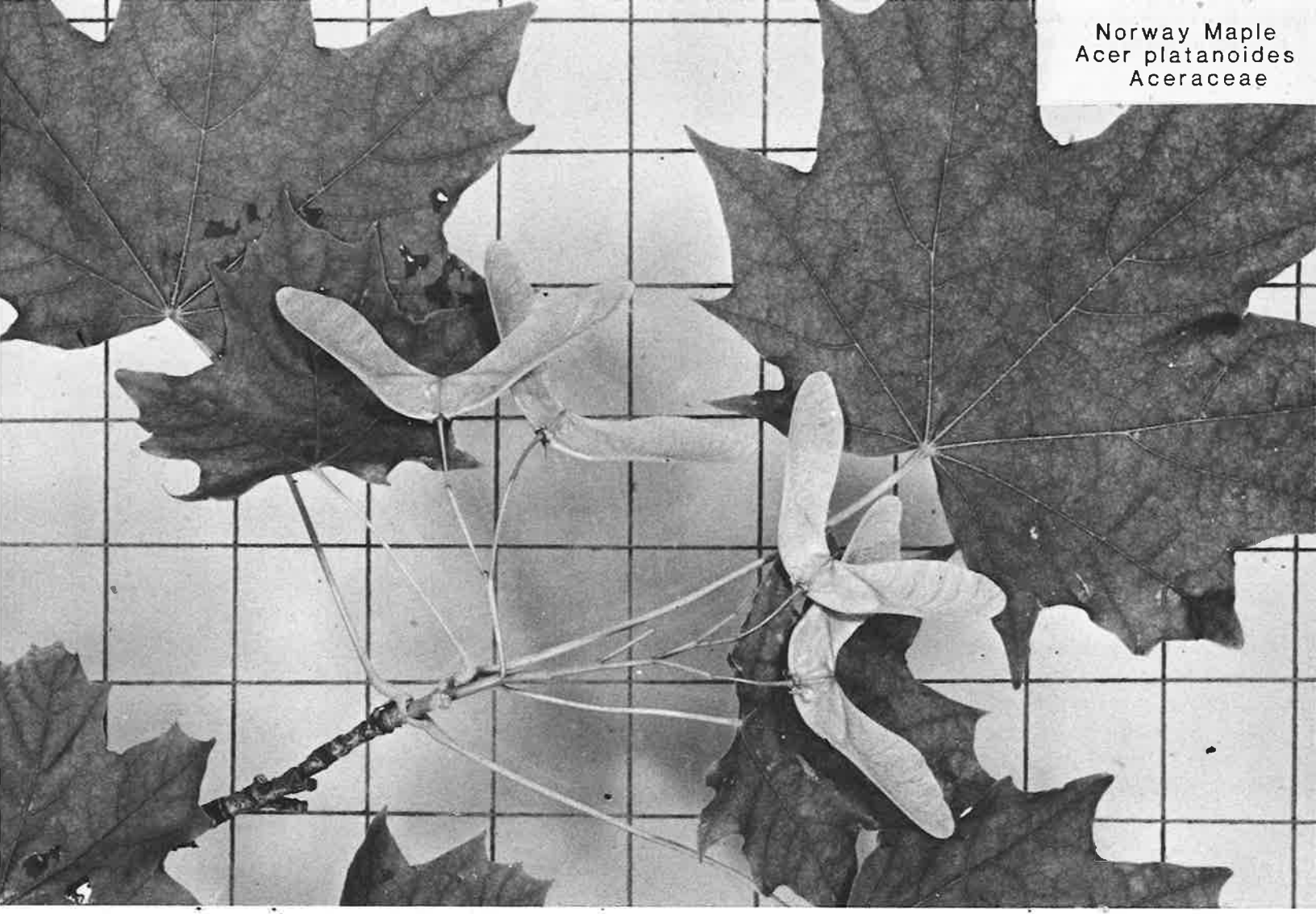
48 **BIGLEAF MAPLE** (*Acer macrophyllum*)
Going to the other end of the bicycle rack, between Balmer and Denny Halls, is a Bigleaf Maple, of monumental size, which was forestry professor Frank Brockman's favorite campus tree. Native here, this species stretches from southeast B.C. through California, but is generally confined to the coastal strip, within 200 miles of the Pacific Ocean. From other maples it is set apart by its exceptionally large leaves, drooping flower clusters and winged seeds. Moreover, it grows about as large as any other. Its fall color is less spectacular, being usually a gold of average luster, rather rarely a bright yellow or glowing gold. The specimen here is perhaps 100 years old, and is showing its age. If in the forest, it would be taller, with moss and ferns on its trunk.

49 **RED HICKORY** (*Carya ovalis*)
Alone in a grassy triangle north of Denny Hall, is the only old hickory on campus. Conveniently nearby are two of its cousins: a butternut and (larger) black walnut, also from eastern North America. Red hickory is probably a hybrid species, a cross of pignut and shagbark hickories. All hickory trees are known for their nuts, their strong yet supple wood, and bright yellow October color. This specimen, healthy and handsome, makes small nuts not worth eating. It's easily distinguished from the walnut and butternut, by having only five leaflets.

50 **MONKEY PUZZLE** (*Araucaria araucana*)
Go down the lawn now towards Savery Hall, and between a weigela shrub and another English maple (see #38) is a Monkey Puzzle. This is surely among the most memorable of all our trees. It is common in the maritime Northwest but rare or nonexistent in the rest of the U.S. Newcomers visiting here always express amazement at its dark, fiendishly snaking branches and prehistoric looking trunk. Actually it's a native of Chile and Argentina, being the only commonly cultivated South American conifer hereabouts. In nature, the nuts borne by female trees provide a valuable resource, as does the wood. The specimen you see is a single female, so although it makes the large cones, the nuts within are mostly or wholly hollow. A pollinator male (with cucumber shaped, dangling cones) is necessary.

51 **BLACK WALNUT** (*Juglans nigra*)
Further downhill by the stone bench erected by the Class of 1915 is a stately Black Walnut tree. Across the path from it is the campus' largest pine, a western white (see #56). We've all eaten ordinary walnuts, but *black* walnuts possess zestier flavor, and are harder to crack. They grow on enormous trees, native in much of the U.S. (not in the Pacific Northwest), and the wood is supreme in its fine grain, lovely dark color, and hardness. Besides the food and wood, the trees serve as excellent long lived shade trees as the two here on Denny lawn prove.

52 **BUR OAK** (*Quercus macrocarpa*)
Angling around south of Denny Hall, past a lovely pink-dogwood (see #15), you come into a shaded corner dominated by a bur oak more than



Norway Maple
Acer platanoides
Aceraceae

80 feet tall, whose straight, stout trunk develops into huge limbs high out of reach. Look up at its broad arms, bearing large leaves dark green on top, pale underneath, distinctive with their narrow "waists." Bur oak is so-called since its acorns are in bristly husks. Also called prairie oak, it is native in central and eastern North America, and is the state tree of Illinois.

53 **HYBRID PLANETREE/SYCAMORE** (*Platanus* x *hybrida*)

More than 100 hybrid Planetrees, or Sycamores if you prefer, placidly dominate Memorial Way. The original 57 were planted in 1920 as memorials for UW faculty and students killed in the first World War. These trees are appropriate for the role, being monumentally large, long lived, and handsome. The eastern U.S. sycamore (*Platanus occidentalis*) crossed with its Old World counterpart (*P. orientalis*), results in vigorous offspring that have been planted since the late 1600s. Most famous of various such hybrid clones is the one called London Plane, which grows taller, with paler bark and droopier branches than our campus trees. The leaves are maple-like, but have rather short stalks. Round seedheads dangle on stout string-like stalks. The fall foliage color is drab yellow-brown, but the exfoliating patchy bark mottles the trunks handsomely, especially in severe winter cold.

54 **DIGGER PINE** (*Pinus Sabiniana*)

Head southwest of the flagpole, above Odegaard Library, and marvel at two Digger or Gray-needle Pines, their coarse-barked, candelabrum trunks sporting a loose light garb of long gray needles, and large, squat, cantaloupe-sized cones, dark against the branches. Like Bigcone pine (#10), these are Californians, where they stand out as ghostly pale pines in the foothills. Their cones contain big edible "pine nut" seeds, which were an important food for Indians, whom were derogatorily called diggers (as, for bulbs and roots) by white settlers. Gray pine is an apt, descriptive name, but little used. The specific scientific name commemorates Joseph Sabine (1770–1837), secretary of the Horticultural Society of London, an attorney, naturalist, and patron of David Douglas (of Douglas fir fame).

55 **EASTERN WHITE PINE** (*Pinus Strobus*)

West of the flagpole are two Eastern White Pines with two red oaks (#29). This species was eastern North America's most important forest tree, and is the State Tree of Maine and Michigan. Its towering height, abundance, valuable wood, and graceful beauty made it stand out. The wood was used from mighty ship masts to lowly matches. The name white pine contrasts it with black and red pines, which have darker foliage and heavier, pitchier wood, and whose needles are borne in clusters of 2 or 3 instead of fives like white pines. The cones are usually 4–8" long, banana like.

56 **WESTERN WHITE PINE** (*Pinus monticola*)

East of the flagpole are two Western White Pines, two additional Eastern white pines, and an Austrian black pine. How do you tell who's who? The Austrian stands out with squat cones and dark blackish-green foliage. Western white pine, compared to its eastern cousin, is narrower, darker, has chunkier bark, larger cones, and stiffer needles, more blue-green in color. Also, the twigs are usually stouter and always hairier as you peer

Northern Catalpa
Catalpa speciosa
Bignoniaceae

between the needle clusters to look. As lumber providers, both species are equally prized; as ornamentals the eastern has an edge, since it is less dense, therefore less prone to being blown over in storms. Most large white pines seen on campus are eastern, although the western is native here.

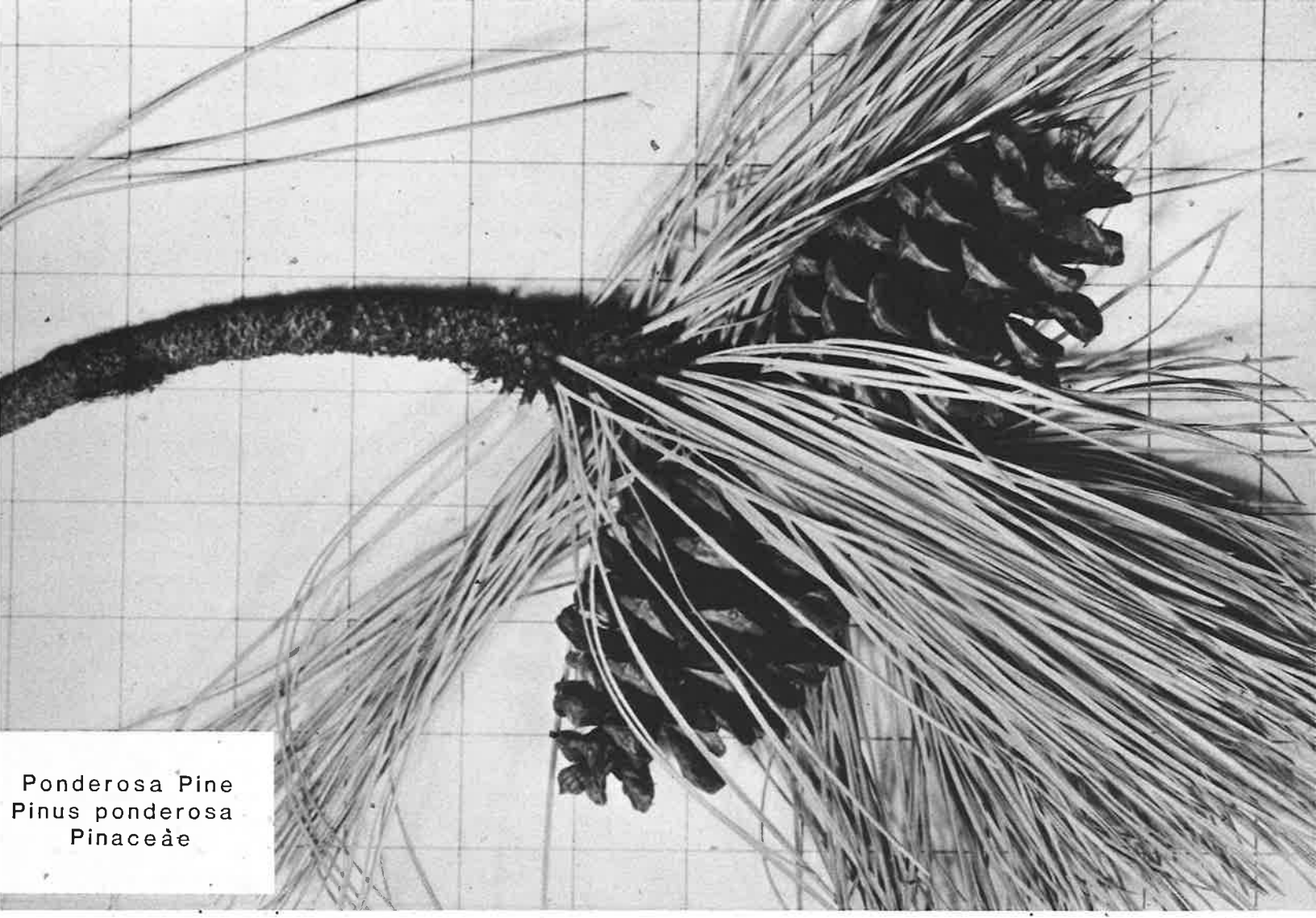
57 **PURPLELEAF PLUM** (*Prunus cerasifera* 'Pissardii')
Four Purpleleaf Plum trees between Savery and Gowen Halls are in rectangular planting beds full of St. John's-wort. Their soft pink flowers precede the Quad's yoshino cherries (#41) in bloom, then they wear a robe of purple foliage until fall. In between, the trees ripen deep red plums no larger than huge cherries, which are a sour treat. A variant of the typical cherry plum (#24) first arose in Persia as the original purpleleaf plum. Now, over 100 years later, fifty additional named varieties are on record; as a group they're also called flowering or ornamental plums, names which don't preclude delicious fruit on some.

58 **NORWAY MAPLE** (*Acer platanoides*)
Four Norway Maples by Kane Hall face Suzzallo Library. Few species are more widely planted as troublefree, urban street-trees; every major temperate city where the climate allows, has Norway maples in its downtown core. Norway maple combines the requisite size, strength, thriftiness and ease of propagation to an admirable degree. It also varies usefully, so we have mushroom-shaped dwarfs, columnar sentries, ovals, purpleleaved freaks, and even cutleaved varieties. No, it isn't as stirring in silhouetted beauty or as enchanting in fall color as sugar maple, but it is a better choice for *difficult* sites. The trunk is quite similar to that of Seattle's native bigleaf maple (#48), but the leaf is not as large or deeply cut, and the seeds spread their wings wider and have no bristly hairs.

59 **SHUMARD RED OAK** (*Quercus Shumardii*)
Shumard Red Oaks stand like six guards facing Red Square in front of the Administration building. Named for Benjamin Franklin Shumard (1820–1869), State geologist of Texas in 1860, this species is a southern U.S. dweller of wetlands, remarkable for its exceeding energy of growth, and retention of the leaves very late into fall. Unlike regular red oak (#29), its acorns and leaves are modest sized, but ultimately it grows just as large. The bark is rougher, and the undersides of the leaves have conspicuous scattered tufts of tawny hairs.

60 **HISAKURA CHERRY** (*Prunus serrulata* 'Choshu-hisakura')
A double row of nine Hisakura cherry trees introduces Rainier Vista, between Suzzallo Library and the Administration building. Across Grant Lane are six kwanzan cherries (#12) for comparison. Hisakura is an extremely rare Japanese flowering cherry that differs from common kwanzan in blooming earlier, not having pompom-weight flowers, growing broader, staying smaller and more dense, and in having narrower leaves less fringed on the edges. In a word, it is a *restrained* kwanzan. Its chief virtues are its earlier bloom and lesser space requirements. These are the only campus specimens, and the variety is not available at nurseries.

61 **NORTHERN CATALPA** (*Catalpa speciosa*)
Proceed right on Grant Lane, and just before you reach Stevens Way, on your left is a bold Northern Catalpa. It has enormous leaves (often over a foot long), big flowers, and pods 1–2 feet long. Every June, well before the the other kinds of catalpa bloom, the bright apple-green of its foliage sets off the white flowers. This species, like other catalpas, turns dingy yellow in



Ponderosa Pine
Pinus ponderosa
Pinaceàe

autumn. It's native in the Mississippi Valley region, but has become naturalized over a more extensive territory, since it was widely planted both for ornament and because its rot resistant wood was used for posts, railroad ties and such.

**62 SHORE PINE** (*Pinus contorta*)

Both below Meany Hall, and across Stevens Way by Architecture Hall, are bushy Shore Pines. Besides being fairly compact and shrub-like in crown, shore pine bears 1–3" needles in pairs, and small prickly cones. Native in Seattle, this species is planted where "cast iron" hardiness is needed: plants that tolerate dry, exposed sites and wretched soil. Given good conditions, however, shore pine grows 100 feet tall, forming a rich green tree of beautiful form. Its mountain kindred the lodgepole pine is slender, thin-barked, with enough similarity in needles and cones to be considered a montane version of the same species.

**63 PONDEROSA PINE** (*Pinus ponderosa*)

At Guthrie Annex 4, right up against Stevens Way, is a prominent Ponderosa Pine. The tree is precariously close to paving, a road, a birch, and a building, and doubtless is stunted somewhat, yet still has a handsome, symmetric crown of long needles. This pine is the most common of all *Pinus* in western North America, having a vast range from Canada into Mexico. Bull pine and western yellow pine are other names of it. "Ponderosa" is in reference to its large size, heavy trunks, and wood. The needles, 5–10" long, are borne in clusters of three. It is fortunate that the prickly cones, fairly large, weigh so little—being above pedestrians and vehicles.

**64 BRISTLECONE PINE** (*Pinus aristata*)

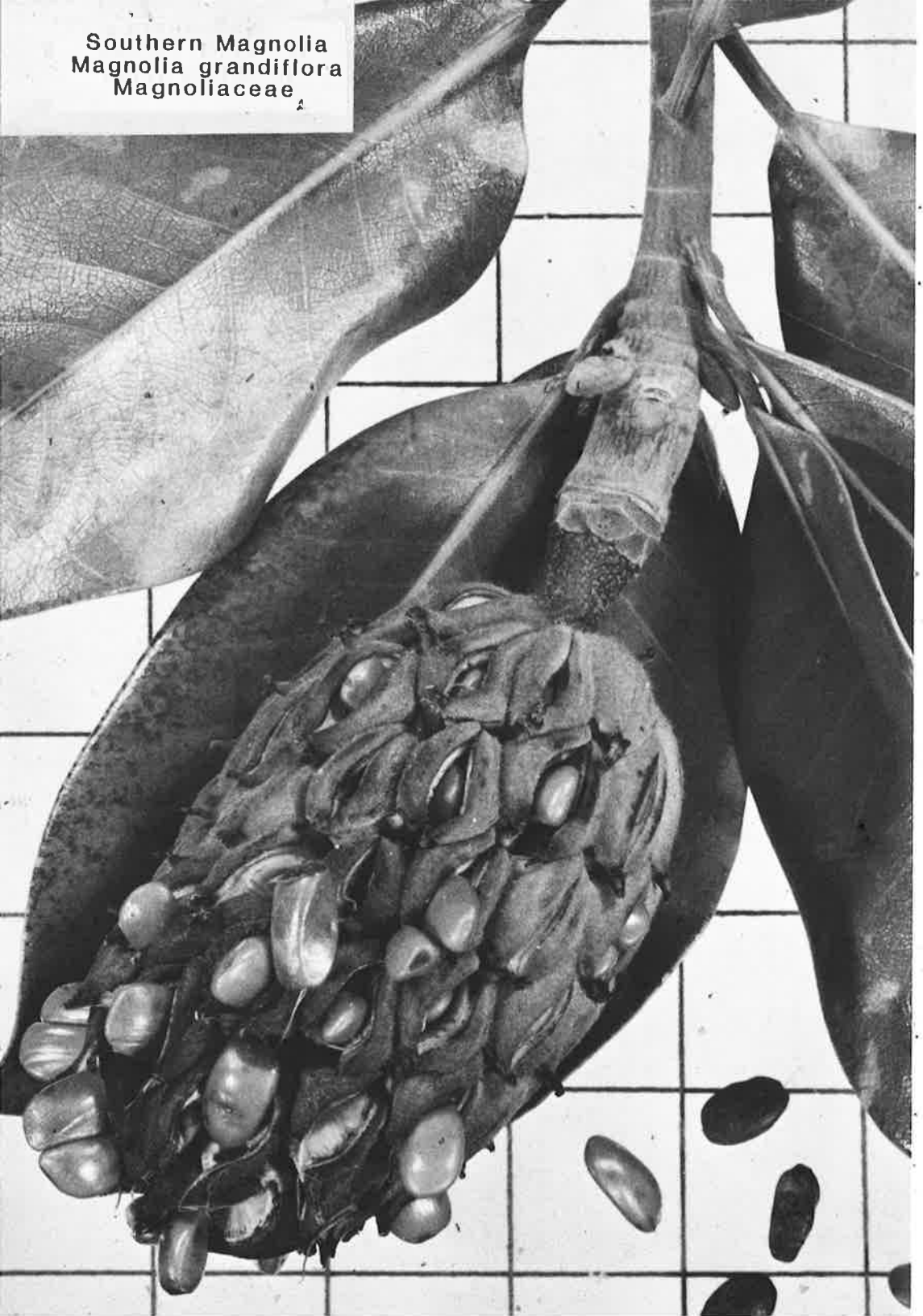
Ten Bristlecone pines are north of Architecture Hall, with six shore pines. Unique among pines, the needles are frosted with tiny white pitch droplets. In other respects, the tree is like various southwestern "foxtail pines," dense in growth, the shoots set with dark, short needles, five per bundle. The cones which occasion its names are indeed tipped by slender spines or bristles. Looks aside, bristlecone pine is famous because in its arid mountain home of Colorado, New Mexico and Arizona, it can live for thousands of years. In cultivation it proves slow, bushy, dark and enduring of difficult sites.

**65 LOMBARDY POPLAR** (*Populus nigra* 'Italica')

Along Stevens Way, in front of both Architecture and Cunningham Halls, are Lombardy Poplars. These are towering columnar trees whose burly trunks date from the 1909 Alaska-Yukon-Pacific Exposition, and whose leaves have fluttered annually ever since. Since the clone combines memorable form of growth with constitutional power, and is readily reproduced by suckers, it has become a common, well known tree in many parts of the world. It originated as a chance mutation in Italy in the late 1600s or early 1700s. Western Washington suits it better than about anywhere else in the U.S., so we have a large number of old, landmark specimens.

**66 CARMINE CRABAPPLE** (*Malus* x *atrosanguinea*)

In front of Architecture Hall are 5 Carmine Crabapple trees and 3 Japanese flowering crabs (*M. floribunda*); south of Cunningham Hall are three more carmine crabs with one Japanese. These are broad, low, twisty-


Southern Magnolia
Magnolia grandiflora
Magnoliaceae

trunked little trees. In April their deep red buds open to carmine-pink flowers (white in the Japanese); in autumn tiny fruits await hungry birds. The carmine crab is a hybrid that arose at the Arnold Arboretum near Boston before 1889; Japanese crab was introduced to the U.S. in 1862. Even in summer the two trees can be told apart: the carmine has darker, larger, sleeker leaves, less hairy and more coarsely toothed and lobed. Overall, carmine crabs are smaller, less dense, far less often planted.

67 **EVERGREEN MAGNOLIA** (*Magnolia grandiflora*)

An Evergreen Magnolia enjoys the hot, sunny southwest corner of the Atmospheric Sciences building. One of earth's internationally famous ornamental trees, this species is native in the Deep South, where it grows large enough, fast enough, to be a commercially valuable lumber tree. Large, glossy evergreen leaves make it look like a gigantic houseplant. From May until winter it opens a succession of fragrant white blossoms, as much as a foot wide. The name magnolia commemorates Pierre Magnol (1638–1715) a French professor of botany at Montpelier.

68 **EUROPEAN CHESTNUT** (*Castanea sativa*)

Near a collection of fire hydrants north of Bagley Hall is a European Chestnut tree, its trunk about 1½' thick. Recall the Skagit Lane horse chestnuts (#39), and note that this has different leaves, flowers and nuts. Each leaf is prominently ribbed with straight veins ending in pointy teeth. The flowers are narrow spikes, heavy smelling, creamy-white in late June or July. Needles completely cover the nut husks. Most of the nuts are hollow, small duds; good ones are plump and quite like the kind offered for sale. Raw they are puckery; roasted they're a delicacy.

69 **HYBRID HOLLY** (*Ilex* x *altaclerensis* 'Camelliifolia')

As you proceed through the rose planting by Drumheller Fountain, on your left, against Johnson and Physics Halls, three Hybrid Hollies stand out with their dark, evergreen foliage. Unlike regular English hollies (#42), these have larger, less spiny leaves, and bigger berries.

70 **TREE OF HEAVEN** (*Ailanthus altissima*)

Three tropical-looking Trees of Heaven are at the corner of the Physics building, with red cedar and white birch. The name notwithstanding, this species is actually a Chinese native, which has achieved legendary status for its ability to thrive exuberantly in cities of the eastern and central U.S. Thus the nicknames Tree of Brooklyn, and Ghetto Palm. Each tree is usually male or female. Males have showy whitish but obnoxious-smelling flowers in June or July; females make colorful winged seeds in quantities. The trees before you are males.

71 **DAWN REDWOOD** (*Metasequoia glyptostroboides*)

Continue on Thurston Lane to Guggenheim Hall, and note the Dawn Redwood, growing with western white pine, vine maple, and Douglas firs. You cannot help noticing it, for several features make it striking. Even in winter its swollen, reddish, buttressed trunk is unique. The summer foliage is delicate green, then turns orange or brown in fall. This native of China's eastern Szechuan and NW Hupeh is the only non-extinct deciduous redwood, and is famous for that reason, as well as for being an ornamental conifer wherever room allows—it grows 200 feet tall with trunks of corresponding thickness. *This* example probably dates from 1948.

Cucumbertree
agnolia acuminata
Magnoliaceae

72 **CRAB APPLE TREES** (*Malus* species and hybrids)

Crab apple trees of 18 different kinds beautify Drumheller Fountain and the rose garden. We can't single out and describe each here, nor can they be ignored wholly. First to bloom each spring is Manchurian (*M. baccata* var. *mandshurica*), with fragrant snow white blossoms against rich green leaves. Last to leaf-out (looking dead for a while) and flower is *Malus yunnanensis* var. *Veitchii*, with creamy white flowers of unpleasant odor. In fall, the showiest, most persistent fruit are the bright red ones of the large cherry crabs (*M.* x *robusta*). Except for the sweet garland crab (*M. coronaria*), all are Asian—including varieties of American origin whose parents were Asian species.

73 **CUCUMBER TREE** (*Magnolia acuminata*)

Head south towards Rainier Vista, but veer off on the path into the woods. As you enter the forest, left is a Pacific dogwood (#2), right is its cousin, the Old World *Cornus sanguinea*. The forest is soon replaced by the Medicinal Herb Garden, where over on the Rainier Vista side are some giant Cucumber Trees above the bench. This species is a magnolia from eastern North America that grows as a forest tree. Its unripe seed-cones resemble small cucumbers. Its huge leaves are out when it begins opening its greenish-yellow flowers in May. The red seed-cones of autumn are pretty against the yellow leaves. No magnolia fall color is any better.

74 **SWEET BAY MAGNOLIA** (*Magnolia virginiana*)

Walk through the bluish-green, fragrant rosemary divider and see, on your left, three Sweet Bay Magnolias, slender and multitrunked. These are also from the eastern U.S., yet make narrow, semi-evergreen leaves, dark and glossy on top, pale silvery beneath. White, rose-scented flowers appear from June into early fall.

75 **HAWTHORN TREES** (*Cratægus* spp.)

Five different Hawthorns are the garden's street-trees. From Rainier Vista to the west: a common hawthorn (*C. monogyna*), from Europe and now naturalized here; 2 cockspur hawthorns (*C. crus-galli*), broad, thorny and glossy; a native black-fruited hawthorn (*C. Douglasii*), suckering; 3 scarlet hawthorns (*C. coccinea*), of tight, upright form; a frosted hawthorn (*C. pruinosa*), by the vent.

Related to crab apple trees, hawthorns in general are thorny little trees with much less showy, less variable flowers. Comparatively few are cultivated for either beauty or their fruit. Some are valued for the tough wood's specialized uses. They bloom from April into early June. The fruit is most showy in October and early November.

76 **SIERRA REDWOOD** (*Sequoiadendron giganteum*)

With its trunk 5½' thick, this mighty tree is among the most asked about on campus. You've met coast redwood (#9, across the street) and dawn redwood (#71). This one is larger than either, and fittingly also called bigtree or giant sequoia. It grows in the mountains of California, being common in Yosemite. A billowing mass of blue-green foliage soars to a neat, spired top. It almost looks sheared compared to coast or dawn redwoods. This specimen may date from the turn of the century, thus shows how fast it grows.

Oregon White Oak
Quercus garryana
Fagaceae

77 **CRAPE MYRTLE** (*Lagerstræmia indica*)

Among the smaller trees on this tour is Washington's largest Crape Myrtle, just over 30 feet tall. It is on your right as you finish walking the length of the garden's section D. Its trunk is ravishing, in smooth, almost animal-like ripples covered with peeling bark. The crown of leaves is light and shiny. From about mid-August to mid-October, varying yearly, the tree has spectacular bright pink flowers. Though Chinese, this tree is known to most of us as a common ornamental in the South and California. It grows fine in Seattle, too, but blooms well only when placed in hot sites.

78 **IRISH YEW** (*Taxus baccata* 'Fastigiata')

Cross into the *old* part of the Medicinal Herb Garden, and meet four Irish Yews that separate sections A and B. The two in the middle are golden, the others regular green. Irish yew originated before 1760 in the mountains above Florence Court, Co. Fermanagh, Ireland. It was simply a narrow sport of the common yew of Eurasia. Its shape, perfect for formal designs and tight places, led to it being planted abundantly. It is especially common in old neighborhoods and cemeteries. Yew is poisonous, so don't eat the slimy red berries. Its wood is very hard, heavy, dark, fine, lovely and useful. The invaluable *taxol* alkaloid in the bark of our native Pacific Coast species generated lively publicity about yews in recent years.

79 **CHINESE JUNIPER** (*Juniperus chinensis*)

When you descend into the garden's section A, to the corner by your right is a 40' tall Chinese Juniper, with big, pale blue berries. It is pollinated by a 50' tall male of the same species further along the path leading to Benson Hall. So many of us think of junipers as shrubs that it is good to see they can be real trees. Chinese juniper is about as important as any juniper in forestry or ornamental horticulture. It has weaker odor than many, and can be either prickly or smooth in its foliage. Another kind of juniper, called by the French "genièvre," had its berries used to flavor the beverage that became known as gin.

80 **OREGON WHITE OAK** (*Quercus Garryana*)

Against Benson Hall's south-facing concrete patio, by the bicycle rack, is an Oregon White Oak, with a birch and an Alaska yellow cedar. It is the only oak tree (thank heavens poison oak is no *tree*) native in Washington. The example before you is not as luxuriantly leafy as are many, and should be considered an inferior specimen, not the norm. It is called Garry Oak in B.C., after Nicholas Garry (1781–1856), secretary and later deputy governor of the Hudson Bay Co.

Among oaks it is characterized by stout twigs bearing large hairy buds, with *deep* dark green leaves, *rounded* in their lobes unlike the red oaks (#29, 59), and acorns which grow rather big in shallow cups. The rugged, broad branching habit of aged trees is inspiring, but though the wood is strong, it does break, and Indians learned the hard way not to camp underneath these trees. Today we plant more colorful, faster-growing oaks more than our native. The foreign species are also usually less prone to unsightly galls and leaf scorching.

NOTES

ACKNOWLEDGEMENTS

The C. Frank Brockman Memorial Tree Tour is but one element of a larger public artwork conceived and created by visual artists Suzanne Hellmuth and Jock Reynolds. The two wooden bus shelters on Stevens Way, set amidst the Deodar Cedars growing at the entrance ways to the College of Forest Resources and the Medicinal Herb Garden, were also designed by Hellmuth and Reynolds, collaborating with Hollinger Architecture, Inc. and artist Kurt Kiefer. The construction of the shelters was carried out by Fabrications Specialties, Inc. of Seattle, Washington. Complementing the bus shelters, as yet another element in Hellmuth's and Reynolds' project, is the nearby and Friends of the Medicinal Herb Garden Volunteer and Information Center, a structure also designed and built by the team listed above.

It is the artists' hope that these new campus amenities will be enjoyed by many students, faculty, and staff members of the University, as well as by public visitors and returning alumni. This brochure, and a similar one that maps the outdoor specimen rooms of the Medicinal Herb Garden, are intended to increase personal and public appreciation of two extraordinary living botanical collections. The C. Frank Brockman Memorial Tree Tour will reward a committed stroller with some good exercise and a solid overview of the many tree specimens flourishing on the campus of the University of Washington. A quiet stroll through the Medicinal Herb Garden will provide one with restorative time for contemplation and a chance to learn from one of the largest thriving public herb collections extant in the Western Hemisphere.

These fine botanical resources and others exist on the UW campus due to the commitment of the University and the hard work of many generous volunteers. Proceeds from the sale of this book will be used to underwrite future editions of the publication. Should you wish to help sustain the C. Frank Brockman Memorial Tree Tour in perpetuity, your donation would be welcomed by mail or in person at the Development Office, Anderson Hall, AR–10, College of Forest Resources, University of Washington, Seattle, WA 98195.

Suzanne Hellmuth and Jock Reynolds wish to thank the following individuals and entities who have helped bring their public artwork to life: Sally Abugov, Richard Andrews, Steve Archie. The Atlas Construction Specialty Co., Inc., John Chmelik, Dr. Dale Cole, Lee Copeland, Doug Ewing, Jan Gagnon, Dr. Stan Gessel, Beth Herman, Karin Hirschfeld, Brandt Hollinger, Jon Hooper, Arthur Lee Jacobson, Kurt Kiefer, David Marberg. Gerald McGuinness, Robert Murase, Carla Okigwe, George Rolfe, Robert Shrosbree, Simpson Strong Ties, William Talley, Larry Tate, Dr. David B. Thorud, the University of Washington Public Art Committee, Michael Williams, and Olivia Yang.

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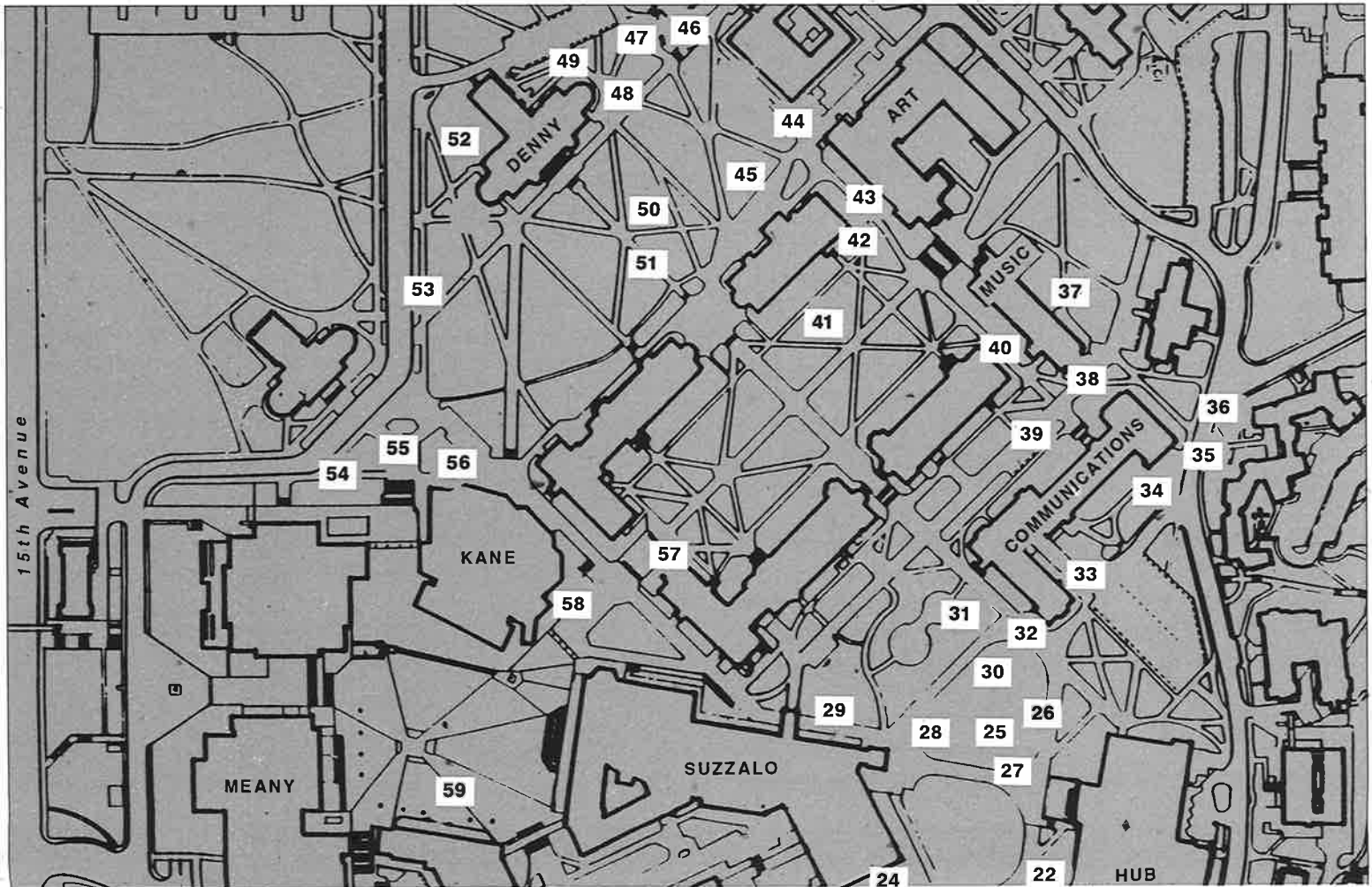
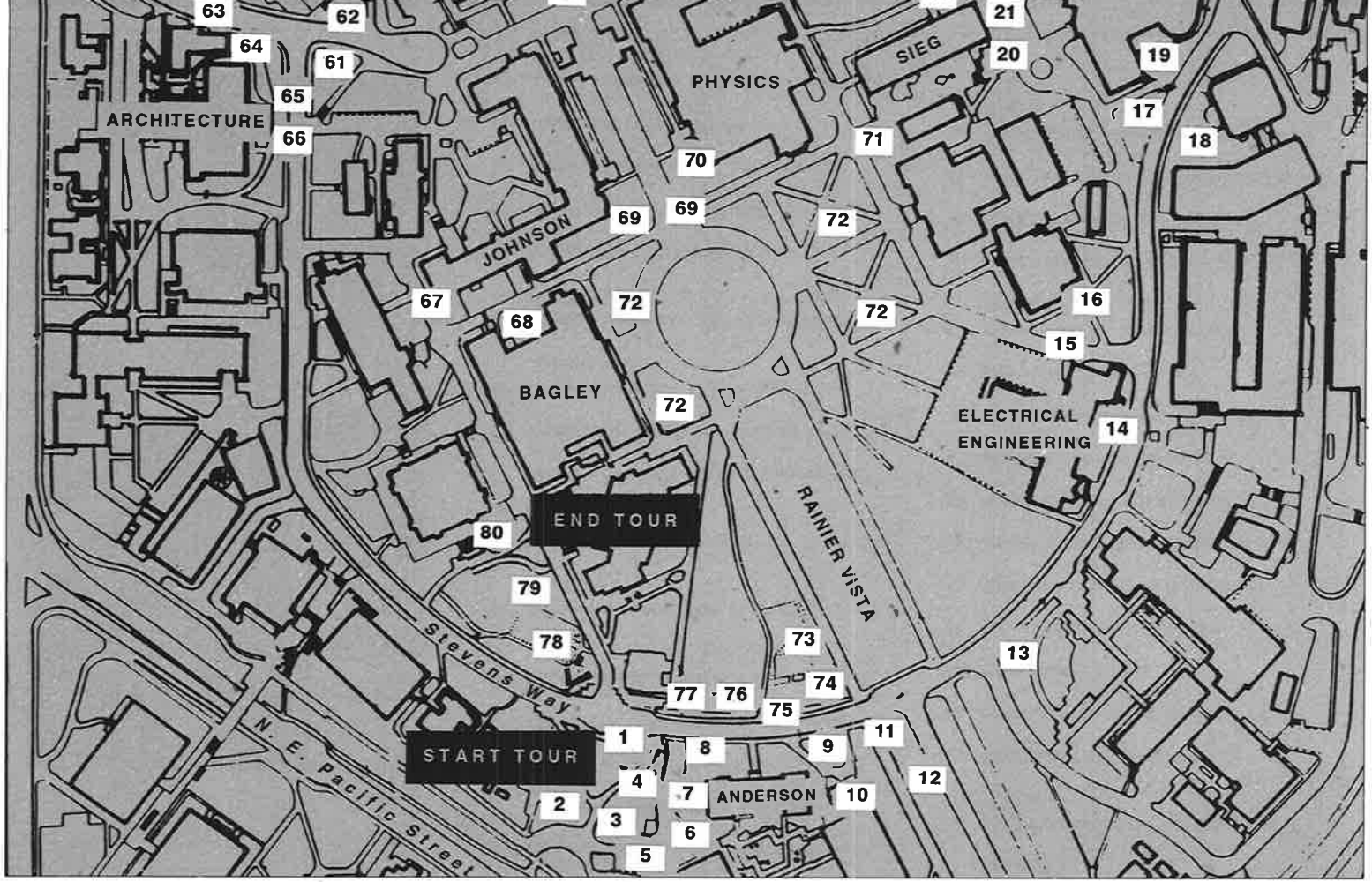
Conceptual design: Suzanne Hellmuth and Jock Reynolds
Tree tour text: Arthur Lee Jacobson
Editing: Dr. Dale Cole, Dr. Stan Gessel, William Talley
Photography: C. Frank Brockman
Book design: Sally Abugov

# THE C. FRANK BROCKMAN MEMORIAL TREE TOUR






THE UNIVERSITY OF WASHINGTON

## LIST OF TREES


1 DEODAR CEDAR (*Cedrus Deodara*)

2 PACIFIC DOGWOOD (*Cornus Nuttallii*)

3 MONTEREY PINE (*Pinus radiata*)

4 EUROPEAN LARCH (*Larix decidua*)

5 CHINA-FIR (*Cunninghamia lanceolata*)

6 YELLOWWOOD (*Cladrastis kentukea* a.k.a. *C. lutea*)

7 CARRIÈRE HAWTHORN (*Cratægus* x *Lavallei*)

8 JAPANESE SNOWBELL TREE (*Styrax japonicus*)

9 COAST REDWOOD (*Sequoia sempervirens*)

10 BIGCONE PINE (*Pinus Coulteri*)

11 LAWSON CYPRESS (*Chamæcyparis Lawsoniana*)

12 KWANZAN CHERRY (*Prunus serrulata* 'Kwanzan')

13 ENGLISH ELM (*Ulmus procera*)

14 PIN OAK (*Quercus palustris*)

15 EASTERN DOGWOOD (*Cornus florida*)

16 GINKGO (*Ginkgo biloba*)

17 AMERICAN WHITE ELM (*Ulmus americana*)

18 HONEY LOCUST (*Gleditsia triacanthos* f. *inermis*)

19 GLOBE HORNBEAM (*Carpinus Betulus* 'Globosa')

20 SILK TREE (*Albizia Julibrissin*)

21 PINDROW FIR (*Abies Pindrow*)

22 CORK OAK (*Quercus Suber*)

23 BAY LAUREL (*Laurus nobilis*)

24 CHERRY PLUM (*Prunus cerasifera*)

25 DOUGLAS FIR (*Pseudotsuga Menziesii*)

26 WESTERN RED CEDAR (*Thuja plicata*)

27 NORWAY SPRUCE (*Picea Abies*)

28 ATLAS CEDAR (*Cedrus atlantica*)

29 RED OAK (*Quercus rubra*)

30 COPPER BEECH (*Fagus sylvatica* f. *purpurea*)

31 SUGAR MAPLE (*Acer saccharum*)

32 PAPER BIRCH (*Betula papyrifera*)

33 SWEDISH WHITEBEAM (*Sorbus intermedia*)

34 PINK BEAUTY CRABAPPLE (*Malus* 'Pink Beauty')

35 KATSURA (*Gercidiphyllum japonicum*)

36 SCOTS PINE (*Pinus sylvestris*)

37 WEEPING EUROPEAN WHITE BIRCH (*Betula pendula* 'Tristis')

38 ENGLISH MAPLE (*Acer campestre*)

39 HORSE CHESTNUT (*Æsculus Hippocastanum*)

40 JAPANESE MAPLE (*Acer palmatum*)

41 YOSHINO CHERRY (*Prunus* x *yedoensis*)

42 ENGLISH HOLLY (*Ilex Aquifolium*)

43 CEDAR OF LEBANON (*Cedrus libani*)

44 SWEETGUM (*Liquidambar Styraciflua*)

45 YELLOW BIRCH (*Betula alleghaniensis* = *B. lutea*)

46 JAPANESE RED PINE (*Pinus densiflora*)

47 WATER OAK (*Quercus nigra*)

48 BIGLEAF MAPLE (*Acer macrophyllum*)

49 RED HICKORY (*Carya ovalis*)

50 MONKEY PUZZLE (*Araucaria araucana*)

51 BLACK WALNUT (*Juglans nigra*)

52 BUR OAK (*Quercus macrocarpa*)

53 HYBRID PLANETREES / SYCAMORE (*Platanus* x *hybrida*)

54 DIGGER PINE (*Pinus Sabiniana*)

55 EASTERN WHITE PINE (*Pinus Strobus*)

56 WESTERN WHITE PINE (*Pinus monticola*)

57 PURPLELEAF PLUM (*Prunus cerasifera* 'Pissardii')

58 NORWAY MAPLE (*Acer platanoides*)

59 SHUMARD RED OAK (*Quercus Shumardii*)

60 HISAKURA CHERRY (*Prunus serrulata* 'Choshu-hisakura')

61 NORTHERN CATALPA (*Catalpa speciosa*)

62 SHORE PINE (*Pinus contorta*)

63 PONDEROSA PINE (*Pinus ponderosa*)

64 BRISTLECONE PINE (*Pinus aristata*)

65 LOMBARDY POPLAR (*Populus nigra* 'Italica')

66 CARMINE CRABAPPLE (*Malus* x *atrosan guinea*)

67 EVERGREEN MAGNOLIA (*Magnolia grandi flora*)

68 EUROPEAN CHESTNUT (*Castanea sativa*)

69 HYBRID HOLLY (*Ilex* x *altaclerensis* 'Camelliifolia')

70 TREE OF HEAVEN (*Ailanthus altissima*)

71 DAWN REDWOOD (*Metasequoia glyp tostroboides*)

72 CRAB APPLE TREES (*Malus* species and hybrids)

73 CUCUMBER TREE (*Magnolia acuminata*)

74 SWEET BAY MAGNOLIA (*Magnolia virginiana*)

75 HAWTHORN TREES (*Crataegus* spp.)

76 SIERRA REDWOOD (*Sequoiadendron giganteum*)

77 CRAPE MYRTLE (*Lagerstræmia indica*)

78 IRISH YEW (*Taxus baccata* 'Fastigiata')

79 CHINESE JUNIPER (*Juniperus chinensis*)

80 OREGON WHITE OAK (*Quercus Garryana*)