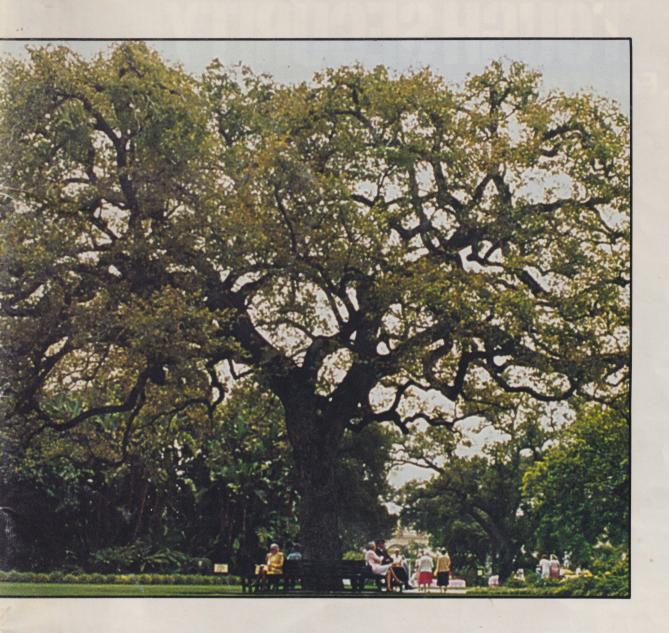
Arbor Age

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Establishing Basic Tree Values Tending Landmarks of The Landscape

by Steven Marx

n the biomass of the urban forest, certain trees stand out as individuals. Because of their age, size, beauty or historical significance, they attract exceptional attention. Climbed and commemorated, photographed and painted, threatened and rescued, they serve as links between generations and symbols of community. They are living monuments, landmark trees.

The arborists who tend landmark trees are the priests of their profession. They have the honor and the responsibility of looking after irreplaceable public treasures. Their work is always on display, either inspiring admiration or drawing the fire of criticism. This article presents the first of a series of profiles of landmark trees in the Los Angeles area and interviews with the arborists appointed to maintain them.

At the hub of one of Southern California's most famous attractions grows the Mesa Oak at the Huntington Library, Art Gallery and Botanical Gardens. No visitor to this place, whether they be one of the select "Readers" permitted to use the research facilities or one of the millions of tourists looking for the original "Blue Boy," ever forgets the experience of standing under the 136-foot wide canopy of the quercus engelmannii in the central mall. Gazing upward, one loses oneself in the twisting of its massive limbs, in the tracery of its deliquescing branches, and in the shimmer of its sun-filtering leaves.

No one is sure of the tree's age. According to Myron Kimnach, present curator of Huntington Gardens, it was already a 200 year-old landmark tree when Henry Huntington, the railroad magnate, first bought the property in 1902. He was a great tree enthusiast and situated his mansion in such a way as to bring the grand native specimens into highest prominence.

In addition to transplanting hundreds of large trees from all over the world onto his estate, Huntington was fascinated with the new science of tree surgery. He hired John Davey, its founder, to perform the first major cavity-fill in Southern California for the unheard of price of eight hundred (1906) dollars.

At this time the Mesa Oak was in extremely poor condition. Half its crown was dead, the other half in serious decline. But within two years of treatment by Davey, it had recovered vitality and was burgeoning with new growth. However, this was only the beginning of major work on the tree.

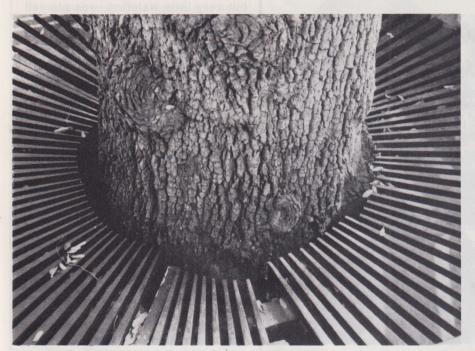
Tending Landmarks of The Landscape

"For it had been an ancient tree Sacred with many a mystery..."

Edmund Spenser, 1579



Mesa Oak at Huntington Library, Art Gallery and Botanical Gardens. The tree has a 136-foot canopy.



A dry well was constructed around the trunk to supply needed oxygen to the root crown.

In 1919, Huntington decided to construct the gallery and library building a stone's throw from the dripline of the oak. Excavations for the basement raised the grade of the surrounding area about thirty inches. So a dry well, eight feet in diameter, was constructed around the trunk to supply needed oxygen to the root crown. Today that well is covered by a wooden grill and a circular bench that serves as a favorite resting place in the Gardens.

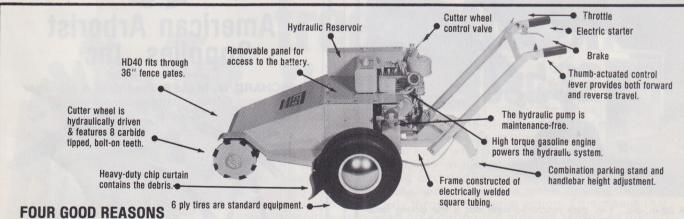
Several years later the oak once again displayed signs of leafdrop and dieback. An effort was made to regenerate the tree with one of the more bizarre arboricultural techniques fashionable at the time. Several young Engelmann oaks were transplanted under the major limbs and grafted to them in an attempt to bypass the weakened root system and send water and nutrients directly to the crown. After the tree failed to respond to this treatment, poor drainage was recognized as the cause of weakness in the roots.

Workmen were hired to dig around the outside of the dripline, down to the water table twenty-five feet underground. (Since that day, the water table has dropped to 350 feet.) The layer of hardpan was broken up with dynamite, removed, and replaced with gravel, and

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Fred Finch

Continued from page 21

the topsoil was backfilled. Pure Kentucky bluegrass, which requires shade but very little watering, was planted underneath the tree.

Once again the Mesa Oak recovered and sent out a profusion of leaf and branch growth. The arborist Seth Adams was contracted to provide steady maintenance above ground. He kept the tree open and light with extensive pruning every year. To provide additional safeguards, he installed a complex network of cabling that connected the more than one hundred limbs into a single web.

Upon Adams' retirement in 1977, the Huntington contract for maintaining its landmark trees was awarded to Mr. Fred Finch. At his company's headquarters off the busy corner of Mission and San Gabriel boulevards in Los Angeles, 3:30 P.M. is quitting time. Trucks and chippers marked "Finch Tree Surgery — Artistic Arborists" roll into the tree shaded compound where workers split and load chunks of ash firewood onto a huge pile. Behind a shed, a long-eared Nubian goat bleats on its tether. Several men run out of a garage passing a basketball and head for a backboard mounted on a pole. The sounds of laughter and

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popping cans come from a circle of people forming around an open cooler on the lawn.

Entering the modest windowless office at the back of the compound one is amiably greeted by Randy Finch, a former nuclear engineer who has recently joined his father's business. Minutes later the door opens and a trim, compact man of ruddy complexion with wavy white hair introduces himself as Fred Finch. The sparkle of his intense blue eyes radiates the confidence of a self-made businessman. In spite of the recession, during the last two years he has doubled the number of his crews. His clientele consists primarily of private customers, many of them owners of large properties in the wealthy districts of San Marino and Pasadena.

Finch's history is characteristic of many established arborists. After getting out of the Navy in 1946 he went to work for the Davey Tree Expert Company, training at their school in Belmont, Calif. He travelled throughout the state with a Davey migrant crew and then made his way up to the position of Los Angeles district representative, where he worked under the strict supervision of Keith Davey. With twenty years at Davey behind him, Finch felt ready to take the leap, and in 1968, opened his own firm. His reputation and his volume of business have been growing steadily ever since.

Fred Finch attributes much of his success to the use of clearly defined methods — both of trimming trees and of training employees. Having learned such methods at Davey, he later modified and improved them to meet his own needs. Finch hires only inexperienced people and insists on teaching them "the ropes" from scratch. His employees spend at least six months doing groundwork, learning to rake, pack brush and load chippers in the distinct Finch manner. If they show high ability, they are then taught specific techniques of climbing and cutting, some of which Finch guards as trade secrets. All of these techniques involve the traditional use of line and saddle; Finch doesn't own a single cherry picker.

Since he has recently been fitted with a pair of artificial knees, Fred Finch himself no longer climbs. But because of the effectiveness of his training routines, he has absolute confidence that the quality of his staff's work will measure up to his standards. Nevertheless, for pruning landmark trees like the centuries-old Betts Live Oak at the San Gabriel Country Club, Finch assembles a special select crew.

This same crew spends two or three days every two years trimming the Mesa Oak at the Huntington complex. They



Fred Finch and one of the landmark trees he tends.

cut out deadwood and thin new growth to ensure safety, to prevent the accumulation of excessive weight and to keep the tree's magnificent branch structure in view. They control the continuous horizontal growth of the crown by dropcrotching branches that extend beyond its present diameter, but, according to Finch, they do no cutting to reduce the tree's height. It retains its perfect umbrella-shaped outline naturally.

Considering the cultivated appearance of the tree and the widely believed story that a full-time employee works year-round to keep it in shape, one is surprised to find out how little mainte-

nance it actually requires.

This fact confirms Finch's philosophy: "Oaks thrive on neglect." Though he insists that regularly scheduled pruning is the best treatment for large trees, he expresses concern about the general tendency to overcut and to overtend in other ways. "If possible, oaks should be deadwooded and then left alone." He illustrates his point that "people and not the environment are what messes up trees," with tales of the destruction of several landmark specimens through overwatering.

One depressing example concerns the Ebel Camphor. This reknowned giant, memorialized in several books, used to grow at a private club in the city of Pomona. Some years ago it went into mysterious decline, and a number of experts were called in to offer diagnosis and cure. They attempted the same grafting technique used on the Huntington's Mesa Oak, with no more success, and as time went on section after section had to be removed.

When Finch surveyed the situation, he discovered that an old groundsman was regularly giving the camphor a heavy watering with a hose sprinkler. Finch strongly advised the management to cease this practice, but no efforts could get the groundsman to "hide his hose," and the great tree finally died of root

rot.

Finch reemphasized the importance of using restraint and of following nature when he is asked about the cabling work in the Mesa Oak. Though in some situations minimal cabling is necessary, he sees this rigging job as greatly overdone. Not only does it detract from the natural appearance of the tree, it creates more problems than it solves. As the limbs grow larger the cables lose their proper adjustment. This leads to an imbalance, whereby one limb puts dangerous pressure on others, or to an overall tightening of the cables, which results in the formation of reaction wood beyond the attachment and a weakening of the limb's own structural integrity.

Finally, once a tree is cabled, the owner often forgets the need for regular thinning and allows it to get too heavy.

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'A lot of cabling is performed to provide work for the arborist rather than benefits for the tree," says Finch with a twinkle.

Cabling also interferes with another aspect of nature's engineering design. By holding limbs rigid, it cancels the tree's own reduction of weight stress through airflow. Finch explains that even the slightest breeze moving through the leaves creates an airfoil effect that counteracts the force of gravity. Cabling prevents this natural buoyancy from coming into play and thus makes for conditions in which branches will snap off from their own

Finch discovered this connection between lack of air circulation and limb breakage back in the days when he trimmed large Eucalypti in the central valley of California. Summer temperatures there regularly reached 110-degrees, causing the trees' internal cooling system to pump heavy volumes of water through the leaves. On the occasional dog-days when atmospheric conditions halted all air movement, the stillness was repeatedly shattered by the sounds of cracking limbs. Could Finch's theory help account for the still unexplained phenomenon of Summer Branch Drop? (see R.W. Harris, Journal of Arboriculture, April 1983, 111-113)

Reflecting on the future of arboriculture, Fred Finch sees it as a healthy,



The Mesa Oak is trimmed every two years.

expanding field in which a person who is willing to work hard can make a good living. His concerns about the industry arise from the shoddy and unscrupulous treework whose evidence is obvious in our neighborhoods and city streets. "People have to learn to trim for the sake of the tree and not the wallet," he concludes. Finch sees solutions to this problem coming from two directions. First is a certification program for arborists similar to that required of building contractors. Second is a continuing campaign to educate the public about the obvious difference between butchery and proper tree care techniques.

There is a striking continuity between Finch's outlook and that of John Davey. whose book, The Tree Doctor, was first published in 1901:

... novices and pseudo-treemen, who, caught by the popular demand and looking merely to its commercial possibilities, have wrought untold damage to countless trees...A practical and wellread man said to me that no one should be allowed to prune a tree unless he held a certificate showing that he was qualified. That would be preferable to the present destruction. But the better way is to educate all the people.

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The well is covered by a wooden grill and a circular bench that serves as a favorite resting place in the Garden.

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It's not only the quality of his work, but his willingness to address these persistent concerns that make Fred Finch merit his professional title. In his attachment to the roots of arborist traditions, in the slow, steady growth of his career, and in his aspiration toward high artistic standards, the Tree Surgeon has a good deal in common with the landmark trees he tends.



A complex network of cables connected the more than 100 limbs into a single web.



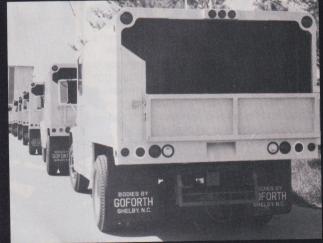


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