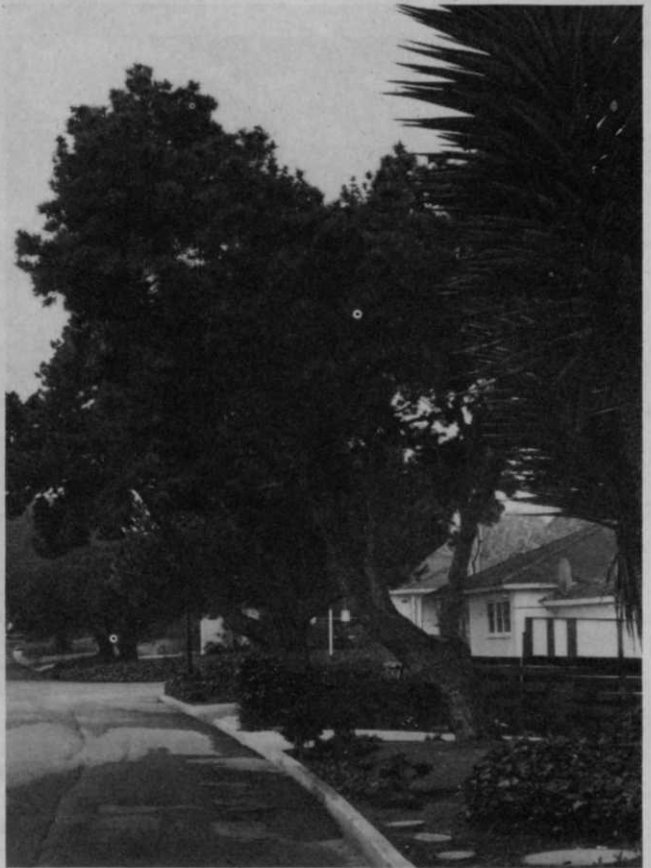


Torrance Recovers From Pine Tip Moth



A typical residential street scene in Torrance, Calif. A Monterey Pine stands in the middle foreground.

Torrance is the third largest city in Los Angeles county, outstripping in population such better known names as beautiful downtown Burbank, Pasadena, Santa Monica and Pomona.

One need only review previous census figures to see the explosive pattern of growth that has been common to the southern coastal areas of California. Torrance was incorporated in 1921 and its population was 7,280 in 1930, had risen to 22,241 in 1950, expanded dra-

matically to 100,991 in 1960, and is now estimated at 140,000.

As a city, it is an unusual mix of industrial and residential areas. There are within its boundaries a steel mill, chemical plants, and oil refineries. There is also more than a mile of beachfront and many distinguished residential districts.

Trees can do much to make any city more livable and attractive, and, as early as the 1920s, Torrance developers were planting Monterey Pines and other

beautiful conifers and some subtropical trees such as the "Bottle Tree" or Melaleuca (an Australian import). Then, at the time of its fastest growth during the '50s and '60s, the city of Torrance began an active program of planting trees on its street sides and median strips. That program is still continuing with the most common plantings being of Italian Stone Pine and Monterey Pine. Most go into the ground in 15 quart size.



Afflicted pine needles appear light color against the darker, healthy shoots. A pine tip moth infestation can cause the needles to prematurely drop off the tree, clogging the center of the tree and cluttering sidewalks and lawns.



Dean Leedham (left) and Robert Schrauben look over Monterey Pines. Schrauben, tree supervisor of the Torrance street department, works at giving tender loving care to the street-side trees.



The Monterey Pine is so thick with limbs, needles and cones that it is necessary to apply Zectran 2E under 350 to 400 psi to assure adequate penetration.



The subtropical Maleleuca or "Bottle Tree" was originally imported from Australia. It is now common to the southern California area.

Over the past quarter-century of civic expansion, Bob Schrauben, who is tree supervisor of the City of Torrance street department, has worked at giving tender loving care to the street side trees of his city. It is fair to say that he knows them all, by location and name.

Among his favorites are the 45 year old Monterey Pines *pinus radiata* that were planted by a developer in an older district of Spanish Style homes. They were relatively uncared for during the first thirty years of their life, but have now been nurtured and shaped to where they soften and frame the landscape of the quiet residential streets.

A relatively low growing, contorted tree, heavy with cones in certain years, the Monterey Pine is often planted to hold back the movement of southern California coastal dunes. It casts a massive cone of shade and is a typically dark blue green in color when healthy.

When attacked by an infestation of the pine tip moth, which is what happened a few years ago, the needles turn brown and become very unsightly. Prematurely dead needles drop off, clogging up the center of the tree and cluttering sidewalks and lawns. Afflicted trees can be severely stunted or die if the infestation is not stopped.

When it became obvious that the infestation of pine tip moth was a real problem, Schrauben consulted with entomologist Dean Leedham of Target Chemical Company, who advised him to use Zectran 2E in water as a method of control.

The applications are being made from a 600 gallon hydraulic spray rig owned by the City of Torrance street department, with instructions to the operators to thoroughly drench the affected trees from the top down. It is necessary to do this under 350 to 400 lb.

psi to make sure of adequate penetration. The Monterey Pine is so thick with limbs, needles and cones that it can effectively mask the spray if not applied at these high pressures.

Applications have been made three to six times a year, beginning in May. They have proved to be very effective and what were once brown and bedraggled trees are resuming their former healthy colors.

Since most of the street side trees are actually on front lawns, the householders have been watching the progress of the battle against the pine tip moth with great interest. They frequently come out to query Schrauben when he is making inspection trips of the area. There have been extremely few complaints about the spraying, with the great majority of the residents voicing approval of the program to save their trees.

To maintain this approval and to protect the safety of workers, Schrauben makes certain that adequate precautions are taken during each spray job. A sea breeze usually springs up each morning during the late spring and summer months at the time that spraying is under way, and the crews quit spraying when the wind reaches 5 mph, to minimize drift.

Torrance has an average rainfall of 12 plus inches and an annual mean temperature of 61° fahrenheit. The highest monthly mean temperature is in August when a peak of only 68.5° is reached. This means that it is an ideal climate for the growth of trees that flourish in moderate temperatures.

With the assistance of Bob Schrauben and his crews, Torrance will continue to be a good place to grow trees, population growth and pine tip moth notwithstanding. □