

I wrote this editorial on September 25, 2014 in my e-newsletter Nature News from Jake Sigg

Expect accusations that I wrote this editorial because I don't like eucalyptus trees. I have been writing about my long love affair with eucalyptus off and on since 1979. On my 1977 visit to Australia (primarily to learn more about eucalyptus) I came back with about 20 books on the subject, most of which I subsequently donated to the Helen Crocker Russell Library of Horticulture. My most recent article was for the Miraloma Park Improvement Club, and can be found in Miraloma Life (February 2014 issue), the Club's newsletter. It is also posted on <http://naturenewssf.blogspot.com/>

EDITORIAL

Acute fire danger in San Francisco, by Jake Sigg

Everyone loves to plant trees, and we don't like to see them cut down. But what was considered civic improvement a hundred years ago now appears a bad dream as unanticipated problems surface. The hundreds of Tasmanian blue gums (*Eucalyptus globulus*) we planted in the city have been proliferating into the thousands and silently putting on bulk and weight for decade after decade, so that what was hundreds of pounds of biomass became hundreds of tons, then tens of thousands of tons. Enter an extended drought, to which the tree--from year-round-rainfall in Tasmania--is unaccustomed.

The tree's performance until recent years seemed convincing evidence that the blue gum was adapted to our climate. However, the 150 years it has been in California is insufficient time for nature to pronounce judgment on its suitability for local conditions. The freezes of 1932, 1972, and 1990 gave warning that it is unlikely to endure the test of time, as the tree sustained heavy damage in those freezes, while native vegetation survived unharmed. Now we are experiencing drought, which seems bad but is actually mild compared to others California has seen--some lasting decades or centuries. Indigenous plants have it in their genetic memory to survive the dry periods (as opposed to higher temperatures, a different subject).

A good place to view the tree's drought problems is along O'Shaughnessy Boulevard in Glen Canyon. Tree crowns are thinning or dying and leaves are discolored and shedding-- and they were exhibiting these symptoms even in the spring growing season! The presence of juvenile coppice shoots all along the trunk is a signal that the tree is in trouble. (Just what causes coppice shoots to form in response to stress is not clear.) Some of the trees are dead, others will be dying this year, but most will be dying in the next two to three years, a delayed reaction to the concealed internal damage

What we have is a crisis, but one not recognized as such. Large groves of dead and dying trees present a problem to city government. If a fire were to start in, say,

Glen Canyon, the potential is there for it to develop into a crown fire, where flames reach the topmost canopy. Long strips of annually-shed bark have been documented carrying fire 12 miles. Should the groves catch fire--especially if aided by the dry winds commonly experienced from the northeast in October-November (remember Oakland, October 1991.)--the flames and embers could be carried all over the city and even to the East Bay.

Is this too dramatic a scenario? Set the whole city afire--a General Alarm fire? All the elements are present and all it takes is the right combination to produce a perfect storm. Perfect storms do happen. Are we willing to gamble on their not happening?

The stress on the trees of Mt Sutro and Mt Davidson is a little less because of copious fog drip and smothering blankets of ivy and blackberry with relatively high moisture content. However, even here the situation cannot be ignored for long. We may be lucky and get to the rainy season without a calamity, but the problem of thousands of dead and dying trees is still there. The City will eventually be compelled to act. There are several hundred trees each in the Glen Canyon grove and Bayview Hill, several large groves in McLaren Park, plus smaller groves scattered around the city under various ownerships. All told, it's well into the thousands (there are 11,000 on Mt Davidson alone).

How can San Francisco come up with the

money? Situations like this is what the Federal Emergency Management Agency was created for. But FEMA doesn't mail checks on request. The City must first develop a plan and funds must be applied for. There is no plan, and none proposed, because the problem is not recognized. The trees aren't waiting while San Francisco develops a proposal.

I confidently predict that nothing will be done, because a) City government doesn't understand the peril or the problem, and b) it doesn't like controversies. Another thing: If there is widespread devastation, it won't be anyone's fault.

Keep fingering those amulets and rosary beads.