

not disagree completely, but I would ask city officials to consider these facts, who generally can get more work out of their employees because they:

- give less vacations, holidays, and sick time
- tolerate less absenteeism
- still have the ability to hire and fire
- make supervisors responsible for the job, and pay them well to get it done
- pay bottom dollar for labor intensive jobs, *but* use better equipment on capital intensive jobs and pay to get the most skilled workers; for example, according to one recent study, contract asphalt company crews earn one-third more than city asphalt crews.

In the final analysis, there is no guarantee that a private contractor will provide the work honestly

or efficiently. You can have problems in dealing with contractors just as you have with your own people. Some contractors motivated by profit faithfully perform a public service and others make a lowball bid just to get a contract and then plead difficulties and try to jack up the price. The overwhelming weight of evidence indicates that if you weed out unqualified bidders, be leery of the low bids, write good specifications, enforce them, and monitor performance, you will get a service that is better than what you are getting with your own people at a better price.

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## Abstract

LEBEN, CURT. 1985. **Sap pressure may affect decay in wounded trees.** *Am. Nurserymen* 161(7): 59-63.

When a tree trunk is wounded, two things happen. First, if the wound is not too large and the tree is growing vigorously, the wood will heal over with callus tissue. Second, the wood within the trunk directly above and below the wound will become discolored in a more-or-less cone shape. The extent of this discoloration is very important because decay proceeds only in discolored wood. This article describes results of my recent work, which has led to a new explanation of some of the conditions that limit discolored columns in functioning (sap-containing) wood vessels. If the explanation, which is stated below, continues to hold true after more experimentation, we should be better able to shape our tree-care practices to reduce losses from decay. I have proposed a new explanation why discolored wood columns are likely to be shorter when wound healing is good than when healing is poor. This explanation, called the hydrostatic explanation, is based on the sap pressure within the tree at the time of wounding and probably for an undetermined amount of time afterward. If sap pressure is negative when wounds are made, many types of microorganisms in the air and from the bark may be drawn or grow into cavitating vessels. Decay organisms may or may not be present. On the other hand, if wounds are made in spring when sap pressure is positive, cut vessels continue to function close to the wound, thus limiting the amount of wood in which decay organisms can grow.