LOCATING HYDRAULIC TUBE LEAKS

J. Douglas Rothwell

The Royal Ottawa Golf Club

A common spring startup problem associated with automatic irrigation systems is, locating hydraulic tubing leaks. My Assistant, Rheal Ladouceur, devised a simple device to locate these leaks, that proved very successful last spring, saving time and labour.

The widget (see diagram) is essentially a reservoir that holds red food dye coupled at one end to a portable compressed air tank (40-60 psi) and at the other to the hydraulic tubing. 'We found leaks within several minutes and from as far away as 100 feet or so. In some cases it was necessary to refill the reservoir. The undiluted red dye was readily visible at the grass surface.

List of Materials and Assembly

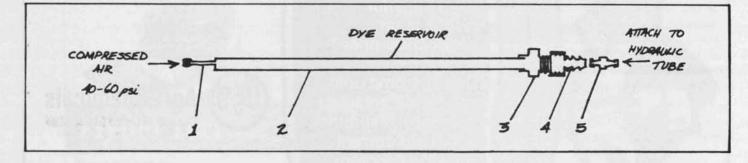
Air valve stem - solder to copper pipe
 ½ inch copper pipe

- Brass adaptor (½ in. slip x 1 in. thread)
 solder to copper pipe
- 4. Brass hose adaptor 1 in.
- Hydraulic tube connector fit and solder to hose adaptor.

To Operate

Unscrew at hose adaptor, add dye and reattach. Couple air valve stem to compressed air tank and hydraulic tube connector to hydraulic tubing and pump dye to locate leak.

Credit: "Greenmaster" - 4/84



Control Tent Caterpillars Now

James A. Fizzell, Sr. Ext. Adviser Horticulture

Tent caterpillars, are insects that eat the leaves off of crabapple and other trees in the spring. They have just hatched and now is the time to control them before major damage occurs.

Eastern tent caterpillars, **Malacosoma americana**, hatch early in the spring as the new leaves emerge. They form silken tents in the twig crotches where the colony of two or three hundred caterpillars stay during the night and on cloudy, rainy days.

On sunny days, they climb all over the tree and eat the young leaves. Depending on the number of caterpillars present, these insects are capable of eating all of the leaves off of the tree.

Infestations are most common on crabapple, apple, and cherry, although ash, birch, willow, maple, oak, poplar,

hawthorne, and plum are also attacked.

The caterpillars or larvae are black when young, but soon develop a yellow stripe down the back that turns whitish with age. By the end of May, they are 2-3 inches long and come out of the tree to look for a place to form their cocoons.

A couple of weeks later they emerge as brown moths. After mating, the females lay 150-300 eggs in dark brown ½ inch long masses around small twigs. These eggs don't hatch until the following spring.

Spraying the trees with **Bacillus thuringiensis** (Dipel, Thuricide), malathion, or carbaryl (Sevin) is also effective. If the tree is in bloom, do not use malathion or carbaryl so that honey bees visiting the flowers will not be killed.

Rubbing the egg masses off of the branches between June and March will eliminate next spring's infestation.

