

## Problem: Bark Splitting Due to Frost Cracks



Plants Affected: Fruit trees, maples, lindens, willows and other thin-barked trees are most commonly affected.

**Description:** Frost cracks are often caused by severe cold followed by rapid thawing during late winter to early spring. This damage is made more likely by excessive growth in the fall which can result from warm temperatures, high humidity and more than adequate nitrogen levels late in the growing season. Frost cracks can also be caused by dry weather followed by moisture. The dry weather slows growth and the return of moisture can result in a growth spurt that can split the bark. This damage is not limited to the trunk but can also occur on branches.

**Recommendations:** Healthy trees will be able to close the cracks in time with callus tissue. However, it is possible for disease organisms to enter the tree while the crack is open and cause decay. Therefore, the speed of covering over the wound is important. It would seem that painting and sealing the crack with paint, shellac or tar would help. However, research has shown that none of these tree wound dressings help and some may slow healing. What has been found to speed closure is to remove the wood near the edge of the crack. Use a sharp knife to trace ½ to 1 inch back form the edge of the split bark all the way around the wound (if possible). Be sure to sterilize your knife with a 10% bleach/water solution or with a 70% alcohol solution between cuts. Remove the ½ to 1 inch wide bark strip from the edge of the wound. Remember to forgo wound dressings but leave the underlying wood bare. Fertilization in the spring or in the fall after leaf drop and watering during dry weather may speed healing.

## **References:**

1. Bark Splitting on Trees, Cornell University, Plant Disease Diagnostic Clinic Factsheet

Last Update: 10/27/2023

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