

Salvaging the Bradford Pear

Bradford pear (<u>Pyrus calleryana</u> var. "Bradford") trees, as the name implies, are a variety of Callery pear. This particular variety of pear has graced or plagued, depending upon your perspective, our communities for more than 40 years. While these trees were genetically selected for their perfect

"lollypop" shaped crown, it is that shape that is responsible for a shortened life span. The limited life of these trees is a function of structural failure, not "natural causes." Their rounded crown results from a branching pattern that produces multiple branches issued from a short trunk span. As these branches grow in diameter, they crowd each other off the trunk, weakening branch attachments and developing growth patterns in a way that is unsustainable over an expected tree life. As a



result, Bradford pears have a propensity for splitting apart, sometimes losing as much as one half their tree crown and trunk diameter in one incident.

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Trees fail for many different structural reasons and under all varieties of weather conditions.



Bradford pears sometimes fail when no recent wind incident has occurred. Fortunately, telltale cracks in the trunk bark can sometimes be detected prior to catastrophic failure. While this imminent failure might be detectable, the implications for a mature tree may still lead to tree removal. When one branch tears from the side of the parent trunk, it usually damages the trunk tissue to the extent that it renders the remainder of the tree a weakened structure and a significant risk. Once this occurs the options are usually two: living with it or removing the tree. Living with it means accepting the risk and the likelihood of a

second failure. Removing the tree eliminates the risk and provides an opportunity to replace the tree with a more acceptable selection.

Reducing the chance of failure

It is unlikely that a tree more than 10 years old can be correctively pruned to eliminate structural failure. The key to risk reduction is the development of scaffold branches. Scaffold branches should be arranged around the trunk so that there is at least 12 inches of vertical distance between branches. This helps insure a stronger branch attachment. The problem is that this usually prohibits the development of the characteristic "lollypop" shaped crown. Topping the tree actually creates more growth and weight on the branches over time. Other varieties of Callery pear have a more sustainable branching pattern and fewer structural issues than the Bradford, and are better selections for the long term landscape.

Image source: Joseph LaForest, University of Georgia, Bugwood.org