

RESEARCH LABORATORY TECHNICAL REPORT



Tree and Shrub Fertilization Near Waterways

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Maintaining healthy trees near streams and lakes have many benefits to the waterway and adjacent property. Tree and shrub roots hold banks in place during floods and heavy rains. Leaves of trees and shrubs intercept rain, reducing soil compaction and runoff, which can lead to soil erosion and silt accumulation. Shade is important for wildlife nesting and seeds for food. Mature trees greatly increase the value of waterfront property.

A key component of any tree and shrub maintenance program is the management of soil nutrients. When nutrient levels are low, plant vitality is reduced, resulting in poor growth and increased susceptibility to pests.

To correct low nutrient levels, the Bartlett Tree Research Laboratories has developed a slow release fertilizer, BOOST™, and subsurface application

Figure 1: Buckeye needing a subsurface application of fertilizer



techniques that place the nutrients directly in the root zone of the tree. This fertilizer and application technique provide important benefits to sensitive waterfront areas. First, since the material is applied below the soil surface, there is virtually no runoff even during hard rains. Second, this source of nitrogen does not move readily in the soil. It is slowly released by soil microbes making it available to plant roots. Third, the preferred BOOST™ blend to use near water does not contain phosphorus. These features greatly reduce the potential negative impacts to waterways.

With proper fertilizer selection and application techniques, fertilization of shoreline and sensitive area trees and shrubs will not only benefit the plants, but will also aid in protecting the waterway and enhance property values.



Founded in 1926, The Bartlett Tree Research Laboratories is the research wing of Bartlett Tree Experts. Scientists here develop guidelines for all of the Company's services. The Lab also houses a state-of-the-art plant diagnostic clinic and provides vital technical support to Bartlett arborists and field staff for the benefit of our clients.