

UMass Extension Mass. Water Resources Research Center Mass.Agricultural Experiment Station UMass Research and Education Farms

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# **Project Title: Urban Forestry**

## **Project Leader: Rick Harper**

## **Project Overview**

With over 1.2 million street trees, Massachusetts features a substantial % of urban tree canopy (UTC) cover in its three largest cities (Boston 29%, Worcester 37%, and Springfield 33%), with plans to increase urban tree populations and existing canopy cover through various greening and urban tree-planting initiatives. The value of trees planted in residential settings has been well-documented, and citizens are often passionate about maintaining urban trees and community green space. Community trees, however, are frequently presented with very challenging growing conditions and there is very little scientific data related to their survival and growth in urban environments.

The Urban and Community Forestry initiative is a collaborative partnership supported by the University of Massachusetts Department of Environmental Conservation, and the Center for Agriculture Food and the Environment (CAFE) at UMass Amherst. It is dedicated to furthering our understanding related to the conditions that community trees are experiencing in the urban environment, and disseminating best management practices to professionals, policy-makers and citizens. The Urban and Community Forestry initiative also seeks to create partnerships among the various groups and associations who have a shared stake in creating programs of applied research and public outreach focused on the sound management of our community trees and urban green spaces.

## Activity Summary 2019

- Publications (12)
- Member Western MA Tree Warden Chapter (3)
- Member New England International Society of Arboriculture (NE ISA) (40)
- News 22 Interview Fall Leaf Change (3)
- Worcester Tree Initiative (WTI) Tree Steward Training (2)
- MA DCR Tree Steward Training (Guest Lecture) (1)
- MA Tree Warden Statewide Meetings (3)
- Urban Forestry Invited Talks (10)
- Urban Forestry web-site (1)
- Monthly 'Urban Forestry Today' Noonhour webcasts for professionals (12)



|                                     | Adult    |
|-------------------------------------|----------|
|                                     | Contacts |
| Direct Contacts                     | 1400     |
| Indirect Contacts (Print, Web, etc) | 448534   |

## **Narrative Summary and Impact**

The primary focus of the UMass Extension Urban Forestry Program has been continuing to initiate and expand integrated research and extension activities in support of the management of community forests and urban landscapes. Key activities for the past year focused on conducting outreach via web-based (i.e. 'Urban Forestry Today Webcasts'), in-person guest-lectures and other media-based outlets (i.e., newspapers, television) to inform large audiences of stakeholders and the general public about issues of importance to urban & community forests. A foundation for sustained collaboration was with large numbers of urban forest managers and tree care professionals through professional associations such as the Massachusetts Tree Wardens and Foresters Association and the New England Chapter of the International Society of Arboriculture. Increasingly, targeted efforts were also focused on collaborating directly with key individuals in various communities throughout Massachusetts through professional association outreach activities. Through these activities, significant progress was made towards the fundamental goals of the project, which includes working with stakeholders to disseminate and increase public knowledge regarding the importance of urban and community forests and their associated benefits. A program of applied research featuring several integrated research-extension initiatives serves as the foundation for many of these activities, which is conducted in a manner that advances scholarship in the field of urban forestry while also generating knowledge and results with immediate application by local stakeholders in support of urban tree health. Research activities for the past year focused on measuring the growth responses of trees in the urban environment and on developing pest-resistant tree species suitable for establishment in the urban landscape. Work with trees in populated environments is often a multi-year effort, yet our work is beginning to understand and to measure how the these educational efforts can translate into decisions made and actions taken by key stakeholders (e.g. Tree Wardens, urban tree committee volunteers) in their management of urban forest resources, which will inevitably effect the vitality of urban forests in communities throughout Massachusetts.

### **Collaborating Organizations**

- Massachusetts Tree Wardens and Foresters Association
- Worcester Tree Initiative
- New England International Society of Arboriculture