Hazard Tree Monitoring Program

excerpted from

Stewardship Handbook
for Natural Lands in Southeastern Pennsylvania

David B. Steckel
Holly M. Harper

Editor and Contributor
Roger Latham, Ph.D.

Editors
Susan Charkes, Ann F. Rhoads, Ph.D.

Contributors
Dan Barringer, Tim Burris, Drew Gilchrist,
Darin Groff, David Harper, Andy Pitz,
Jim Thorne, Nathan Walker

Natural Lands Trust

October 2008

HAZARD TREE MONITORING PROGRAM

All landowners are required to make a reasonable effort to prevent trees within their property from causing injury or property damage (real or pretended ignorance does not diminish your responsibility or liability). This is best accomplished through a regular program of monitoring areas of high use such as public roads, adjacent properties with structures, and sites used for recreational (play areas, benches, boardwalk, bird blind, sleeping platforms, cabins) or educational (pavilion, bleachers, rustic amphitheater) activities. These areas should be monitored at least once each year and after major storm events. Ideally, the landowner should hire a certified arborist (list available from the International Society of Arboriculture, *see* **Resources**, *page 211 for contact information)* to perform the inspection. Private landowners who cannot afford an arborist or who wish to augment this annual inspection with their own

Holly Harper

A hazard tree situation

NATURAL LANDS TRUST HAZARD TREE PROGRAM

Policy

The Natural Lands Trust will make a reasonable effort to minimize the potential for injury and property damage associated with hazard trees on the properties it owns and manages. It is our understanding that as a landowner we are responsible for the maintenance of trees outside the public right-of-way. The Trust will strive to eliminate, in a timely fashion, any tree deemed hazardous. Because the Trust has extensive land holdings and limited fiscal and staff resources, each year we will address the most hazardous trees to the limit of our dedicated resources.

Implementation

All NLT properties will be inspected on a periodic basis using standardized criteria for identifying hazard trees. The standard for rating the potential risk of a tree will be the hazard evaluation system used by the National Park Service. The Trust's Arborist will administer this program and have final judgment concerning the mitigation measures to be taken to address any tree identified as a hazard. All trees identified as a hazard will be treated (monitored, pruned, removed) according to the degree of hazard and their value to the Trust and the local community. The degree of hazard is a function of the likelihood of tree failure and the presence of people or built resources (targets) near each tree. Trees along trails will be evaluated according to different criteria than trees along public roads and other high target areas (including next to trail structures). Because of the Trust's desire to provide wildlife habitat and the relatively low frequency of use of the trails, only those trees that have failed and are either obstructing the trail or hanging over the trail will be removed, if reasonably possible.

Type of Area	*Implementation Strategy*
Public road borders Property borders adjacent to structures and lawns NLT estate and programmatic areas Internal roads, parking lots, and trails to buildings	Monitor on foot every 12 months (1st quarter of each year) Monitor after major storms* Remove hazard trees
Trails and trail structures (bridges, benches, signage)	Monitor as part of trail inspection program Monitor after major storms* Remove hazard trees

* *Because storm events can be very localized, the preserve manager will need to make a reasonable determination of the need for hazardous tree assessment on a preserve by preserve basis. For the purpose of this policy, a "major storm" is one that results in downed trees or large (> 4-inch diameter) limbs in the surrounding area.*

Documentation

For each tree that shows some degree of hazard the monitor will complete a hazard tree form that catalogs its size, location, current condition, degree of hazard, and recommended course of action. The completed forms for each property will be sent to the Trust's Arborist who will coordinate the appropriate action (further review by Trust Arborist, monitoring, pruning, or removal) for each tree. A sheet will be completed for each preserve that summarizes all related activities. A master summary of all hazard tree activities on Trust preserves will be completed each year by the Trust's Arborist.

ongoing monitoring can attend workshops on hazard trees. Morris Arboretum *(see* **Resources**, *page 211 for contact information)* holds workshops on hazard trees on a regular basis. Public landowners could also consider training one or more staff members in the identification of hazard trees to reduce monitoring costs.

Of course, once a hazard tree is identified the landowner should make a reasonable effort to address the hazard as soon as possible. The first course of action is to make sure that the tree is within your property boundary. Along public roads, trees within the public right-of-way (for this purpose it is the base of the tree that matters) are usually the responsibility of the municipality or state. Contact your municipality to determine the width of the right-of-way along your property. If the tree is completely within the right-of-way, notify the municipality or state of the hazard tree. Although it may be technically their responsibility (hazard tree law is still evolving), often municipalities will not address the hazard tree due to lack of resources or other priorities. In this case you will need to weigh the cost of removing the tree against the possibility of being sued, along with the municipality, if injury or damage occurs. If the tree is outside the right-of-way the landowner should engage a qualified contractor to eliminate the hazard through pruning or felling the tree.

For trees along a common boundary, if any part of the base is within your property you are jointly responsible for the tree; a tree with its base entirely within your property is, of course, your sole responsibility.

Often, when a landowner initiates a hazard tree program, a large number of trees are identified as hazards. This reflects the maturing of the forests in our region and the fact that few landowners are aware of their responsibility and as a result have not addressed hazard trees in the past. Unless your resources are unlimited, you or your contractor will need to prioritize your actions in addressing hazard trees, removing the most hazardous trees first.

Regular monitoring followed by reasonable action will not only prevent potential injury or damage, it will help to significantly reduce the landowners liability if a tree does cause injury or damage.

Regular monitoring followed by reasonable action will not only prevent potential injury or damage, it will help to significantly reduce the landowner's liability if a tree does cause injury or damage. Although the landowner is responsible for any injury or damage regardless of the actions taken, showing that you have made a reasonable effort to identify and address hazard trees will help preclude any charge of negligence.

The final key to an effective hazard tree program is documentation. All activities related to the program should be cataloged, including monitoring (when, where, and by whom) and actions taken and by whom. This will be the proof that the landowner made a reasonable effort to identify and address hazard trees in the unfortunate occurrence of injury or damage.

On the previous page is the hazard tree program used by Natural Lands Trust on its 42-property preserve system in southeastern Pennsylvania and southern New Jersey.

Native Alternatives to Common Invasive Plants
Neversink Mountain Preserve

	Invasive plant species	Native alternatives
Trees	NORWAY MAPLE TREE-OF-HEAVEN	Sugar maple Red ash Oak species - white, red, black American beech
Shrubs	WINGED EUONYMUS MULTIFLORA ROSE SHRUB HONEYSUCKLE JAPANESE BARBERRY PRIVET	Red chokeberry Highbush blueberry (wetland) Winterberry holly (wetland) Black-haw Spicebush Witch-hazel Southern Arrow-wood Maple-leaved viburnum Black huckleberry Raspberry/Blackberry (in open areas)
Vines	ORIENTAL BITTERSWEET PORCELAIN-BERRY WISTERIA JAPANESE HONEYSUCKLE GRAPE VINE	Trumpet honeysuckle* Virginia creeper
Groundcover	JAPANESE STILTGRASS (grass)	Pennsylvania sedge
	GARLIC MUSTARD (forb)	Wild ginger*

*not currently documented on the Preserve