

# WARWICK SCENIC ROADS POLICY

February 17, 2011

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## I. BACKGROUND

In the early 1980s Warwick Town Meeting voted to reconstruct the Northfield Rd. primarily to make it safer for the school bus. A grant from the state was used to fund the reconstruction and this grant required very wide shoulders. To accomplish this most of the roadside trees were cut down. Shortly thereafter the Warwick Town Meeting voted to make all town roads, except Route 78, Scenic Roads under the provisions of MGL Chapter 40 Section 15C. This law requires the Planning Board to have a hearing and approve any cutting of trees or the destruction of any stone wall for “repair, maintenance, reconstruction, or paving” of a road designated as a scenic road. “Designation of a road as a scenic road shall not affect eligibility ...to receive [chapter 90] construction or reconstruction aid.” Since the purpose of passing the law was to allow the Highway Department to repave and reconstruct roads without having to cut down roadside trees, the Planning Board in practice did not exercise oversight over roadside tree cutting operations; and by local custom and the provisions of MGL Chapter 87 Section 3, the cutting of public shade trees was handled by the Tree Warden. The Planning Board interpreted any work within the public way as maintenance, but did require a Planning Board public hearing

for any driveway cut that required breaching a stone wall and a joint Tree Warden-Planning Board hearing for cutting down shade trees for a driveway access.

In March 2010 the Planning Board requested that cutting of brush and trees along Bass Rd cease and the request was complied with. A joint meeting of the Planning Board and the Selectboard was held on March 17, 2010 attended by 21 people to receive public comment regarding town policy for cutting along the town roads. A list of 22 itemized and detailed reasons for cutting brush and trees was presented by the Highway Department. There was a consensus that a group should be formed to develop simple policies and rules to guide the Planning Board. The need to differentiate between cutting within the public way and on private property adjacent to the public way was noted. The Selectboard voted to have a joint Planning Board/Selectboard hearing on cutting on Hockanum Road as soon as possible because a Chapter 90 paving job on that road needed be completed by June 30, and tree cutting was proposed on public and private lands.

The Scenic Roads Committee had its first meeting on March 24, 2010. The officers are Ted Cady (Planning Board) and Nick Arguimbau (Selectboard) Co-Chairs, Karro Frost Secretary, and Brad Compton Acting Secretary. The Scenic Roads Committee consists of the following attending and email members: Rick Abbott, Nick Arguimbau, Ted Cady, Jack Cadwell, Brad Compton, Jan Conover, Karro Frost, Clare Green, Tim Kilhart, Patricia Lemon, Gary Lucas, Keith Ross, Dave Shepardson, Elan Sicroff, Dana Songer, John and Mary Williamson, and David Young. The Scenic Roads Committee Goal: "Provide guidance to Tree Warden, Planning Board, Selectboard and Highway Department for cutting of vegetation within the public right-of-way on scenic roads in Warwick." It is recognized that only the Selectboard has jurisdiction outside of the public right-of-way. Later the goal was expanded to provide guidance to the Selectboard on vegetation management outside of the public way.

There have been many surveys to provide guidance to the Committee. The Open Space Surveys of 1987-1988, 2001-2002, and 2009-2010 and the Zoning Survey of 2007 identified consistent feelings of townspeople. The highest priority was to maintain the rural character of Warwick. This included an appreciation of the dirt roads. Committee members expressed concern about increasing erosion potential from cutting vegetation, encouraging invasive species by increasing sunlight reaching the ground, and cutting rare, unique, or scenic vegetation. The challenge for the Scenic Roads Committee is to balance the desire of townspeople to protect the rural character with the mission of the Highway Department. This mission includes: creating safety corridors by cutting roadside trees, reducing winter maintenance costs by cutting trees so sun and wind melt the ice and snow on roads, improving visibility especially on curves and corners, maintaining roadside drainage and culverts, reduce the danger of trees falling onto wires or into the road, reduce the danger to people living on dead end roads from being isolated by trees falling in the road.

## II. SCENIC ROAD VALUES

### *Rural character & aesthetics*

- A. Maintain rural character, preserve and enhance historic and community character.
- B. Allow passage for pedestrians walking along roads.

- C. Open up views of fields.
- D. Retain deciduous trees over coniferous trees on the south side of paved roads, except on roads designated as closed canopy. Attempts should be made to preserve deciduous trees (including saplings) near the edge of the right of way every 20 or 30 feet for future generations.
- E. Cutting brush exposes some beautiful stone walls.

*Environmental protection*

- F. Discourage invasive plants.
- G. Protect wildlife corridors.
- H. Protect wetlands.
- I. Encourage native shrubs, including mountain laurel and blueberries along roadways, as they shade out invasive plants. Minimize the removal of native shrubs beyond shoulders and ditches.
- J. Protect and encourage rare or endangered species in the right-of-way.
- K. Encourage closed canopy on some roads.
- L. Avoid soil erosion.
- M. After vegetation clearing where erosion may be a problem, the site should be seeded with conservation mix. Smaller vegetation should be encouraged unless it interferes with visibility.

*Property rights*

- N. Consider involving abutting homeowner's vegetative concerns by notifying them of proposed cutting.
- O. No cutting on private property without written permission of landowners. Where the appurtenance extends onto private property, an easement is suggested for maintenance and vegetation cutting.

*Public safety*

- P. Cutting trees and brush can improve visibility at curves and corners.
- Q. Consideration will be given to cutting any vegetation that extends over the traveled way that is less than 15 feet above the traveled way (legal truck height is 13' 6"; this gives 18" leeway).

*Road maintenance*

- R. Cutting is sometimes necessary to allow the Highway Department to maintain roadside drainage.
- S. Allowing sun onto road surface can help melt ice and snow and reduce amount of sanding and salting.
- T. Dead or diseased trees and leaners that bend into the road with snow or are a risk to power lines ("hazard trees") may be cut. However, dead, damaged, and hollow trees which do not represent a hazard should be left along secondary and dead-end roads to provide wildlife habitat and rural character.
- U. The highway department cuts trees that interfere with power and phone lines. Verizon is especially bad about taking care of trees interfering with or leaning on their wires; National Grid has been good. Cutting trees that will interfere with wires is appropriate,

but shrubs that will not grow high enough to reach wires should be left so they will suppress tree growth.

V. It's easier to mow brush where there's 5 feet for the mower deck.

### III. VEGETATION MANAGEMENT POLICY

1. **Policy application.** The Scenic Roads Vegetation Management Policy shall apply to all maintained public ways in Warwick, except Route 78, and shall apply to proposed cutting on land within the public-right-of-way and abutting private property. The Selectboard shall have jurisdiction over cutting on private property adjacent to the public way. This policy does not apply to individual hazard trees that the Tree Warden determines to be a risk to public safety, nor does it apply to emergency cleanup following a natural disaster, storm, forest fire, or other calamity.

2. **Policy goal.** The Highway Department goal should be to cut the minimum amount of vegetation needed to achieve its desired goals. This should include leaving bushes, shrubs, and ground cover such as ferns. It is recognized that this may prevent mechanized brush cutting in the area of the shrubs and could require follow-up hand cutting of material the mechanized cutting misses.

3. **Control of invasive species.** If there is to be a vegetation management program by the Highway Department, it shall include a plan for the control of invasive species. When vegetation is cut, the additional sunlight available encourages invasive species. Many of these plants spread from roadsides into surrounding woods. This is consistent with the finding by the Open Space Committee that walking along roads is a popular activity in town, so roadsides should be available for walking. Noxious weeds such as poison ivy should be controlled along with invasive species. An integrated vegetation management policy for Warwick should include control of invasive species. Invasive species control could be under either the highway department or the conservation commission and probably would require a budget for herbicide application. The town meeting vote prohibiting the policy of blanket mist blowing of herbicides along all town roads should be amended to allow spot herbicide control of invasive species and poison ivy as part of a vegetation management plan.

Exotic invasive and noxious plants cause ecological and economic harm. Once established in an area, invasive and noxious plants continue to spread, wreaking havoc on the native wildlife and plants, and causing increased roadside maintenance to keep roadways clear. The spread of poison ivy in Warwick has caused the sides of the roads to become "No Go Zones" for residents and Highway Department workers.

Methods of work which prevent the spread of noxious and exotic plants are becoming commonly known. Warwick is facing an increasing problem with roadside vegetation. By changing the way landowners and the Highway Department work in the landscape, we can stop making the problem worse, and minimize the need for use of herbicides on Town roadways.

Integrated management is required by state to maximize control with least impact. Planning and cooperation between citizens, the Highway Department, and Town Boards can address these problems cheaper than mandating more roadside maintenance work when the Highway Department budget is being level funded year after year.

For the Town to control exotic invasive plant species along roadsides with herbicides, a Vegetation Management Plan (VMP) is required under state law. This plan is reviewed by the state Rights-of-Way Advisory Panel (see 333 CMR 11.000). A five year vegetative management plan has approximately 20 pages of standardized text and includes the relevant laws in appendices. The Yearly Operating Plan (YOP) is more specific, and requires notification to abutting landowners. The management plan should include information on the location of private wells, public wells, wetlands, rare species, organic farms and any other areas where pesticides can't be used. It should also include any known populations of invasive plant species to be targeted. Each of the sensitive areas has its own setback and only certain chemicals can be used in those areas. The Town would need help in preparing the initial five year management plan, but could probably prepare the YOP itself.

Landowners may use consumer grade herbicides on their property to control invasive plant species without special permission, up to the edge of the traveled way. As some of these chemicals can be harmful to human and animal health, the labels should be carefully read before use and all precautions should be followed carefully. Licensed pesticide applicators can also be hired to apply herbicides on private lands.

The following are the primary non-native invasive and noxious plants in Warwick.

1. Glossy and European Buckthorn
2. Swallow-wort
3. Garlic Mustard
4. Japanese Knotweed
5. Poison Ivy (noxious plant)

Descriptions of invasive plants and Best Management Practices (BMPs) for the control of invasive plants are provided in Appendix A.

4. **Work on private property.** It is suggested that a deeded easement be obtained when the town does work on private property, which will ensure town access for culvert maintenance, ditch work, vegetation maintenance, or other necessary activities on the abutting private property in perpetuity. Written permission from the landowner allowing the town to work on the property is allowable and shall be kept on file. A standard format is suggested. A model easement is provided in Appendix B.

5. **Road categories.** This policy recognizes 4 categories of roads as follows:

**Numbered Highways**, which are exempt from the Scenic Roads Act.

**Main Roads** are high speed, high volume roads where public safety is a higher concern.

**Secondary Roads** are low speed, low volume roads where public safety is not as high a concern.

Note that secondary roads include some dirt roads which have a unique characteristic, which is that they are wider in wet land areas than in upland areas. Thus, when it comes to vegetation management on dirt roads this policy considers the traveled way to be the 10 to 12 feet wide strip where cars actually drive.

**Dead-end Roads** are a unique category because residents only have one end of the road they can exit onto a main road or secondary road. This suggests that from a public safety viewpoint the vegetation should be heavily cut back to prevent residents from being trapped when a tree falls and blocks the road. However, this is counter to what our sample of residents wanted. While being fully aware of the dangers of being trapped, they much prefer a policy of minimum vegetation cutting. This suggests when only one or two families live on a dead end road, their wishes should be considered prior to proposed vegetation cutting.

### **Road classes (preliminary assignments)**

#### ***Numbered highways***

Route 78

#### ***Main roads***

Athol Road

Hastings Heights Road

Hockanum Road

Northfield Road

Wendell Road

#### ***Secondary roads***

Bliss Hill Road

Chase Hill Road

Chestnut Hill Road (to Shepardson Road)

Flower Hill Road

Gale Road

Hotel Road

Leland Hill Road

Mt. Grace Ave (to Route 78)

Old Winchester Road

Quarry Road

Revere Hill Road

Richmond Road

Robbins Road

Rockwood Road

Royalston Road (to Chase Hill Rd)

Shepardson Road

White Road (to Shepardson Road)

#### ***Dead-end roads***

Bass Road

Beech Hill Road  
 Buzzell Place Road  
 Chestnut Hill Road (west from Shepardson Road)  
 East Rum Brook Rd (maintenance discontinued)  
 East Wilson Road  
 Garage Road  
 Hastings Pond Road  
 Hattie Bell Lane  
 Kirk Road  
 Mt. Grace Ave (west from Northfield Road)  
 North Holden Road  
 Paul Road  
 Pine Street  
 Royalston Road (east from Chase Hill Road)  
 Shaw Road  
 Shepardson Place Road  
 Smith Road  
 South Holden Road  
 Stevens Place Road  
 Tully Brook Road [private way, but some maintenance by town]  
 West Rum Brook Road  
 West Wilson Road  
 Wheeler Road (1st 2 lots)  
 White Road (west from Shepardson Road)

When the width of a public way is not known, the best available evidence (such as stone walls or old fence lines) will be used to determine an assumed width. If there is no adequate evidence the assumed width of the road will be two rods (33 feet) and the road will be assumed to lie in the middle of layout. It is recognized that because of changes in road layouts over the years the width of one section of a road may be different from the width of another section.

- 6. Closed canopy roads. Closed canopy roads are part of the rural New England tradition. They provide connectivity for wildlife and a peaceful ambiance, especially during the fall foliage season. Certain road sections will be designated “closed canopy roads” by the Planning Board. Cutting shall be minimized on these roads to maintain a closed canopy, and cutting plans should take this designation into account.

**7. Priorities of Scenic road values related to roadside vegetation cutting.**

	<b>Numbered highways</b>	<b>Main roads</b>	<b>Secondary roads</b>	<b>Dead-end roads</b>
<i>Rural character &amp; aesthetics</i>				
A. Maintain rural character	M	M	H	H

	<b>Numbered highways</b>	<b>Main roads</b>	<b>Secondary roads</b>	<b>Dead-end roads</b>
B. Allow passage for pedestrians	H	H	M	L
C. Open up views of fields	H	H	H	L
D. Retain deciduous trees	M	H	H	H
E. Expose stone walls	H	H	L	L
<b><i>Environmental protection</i></b>				
F. Discourage invasive plants	H	H	H	H
G. Protect wildlife corridors	L	M	H	H
H. Protect wetlands	H	H	H	H
I. Encourage native shrubs	H	H	H	H
J. Protect and encourage rare or endangered species	H	H	H	H
K. Encourage closed canopy	L	M	H	H
L. Avoid soil erosion	H	H	H	H
M. Seed exposed soil with conservation mix	H	H	H	H
<b><i>Property rights</i></b>				
N. Consider abutting private property owner's concerns	H	H	H	H
O. Obtain written permission from landowners	H	H	H	H
<b><i>Public safety</i></b>				
P. Improve visibility at corners	H	H	M	L
Q. Cutting vegetation above traveled way	H	H	M	M
<b><i>Road maintenance</i></b>				
R. Maintain roadside drainage	H	H	H	H
S. Allow sun onto road surface	H	M	M/L	L
T. Cut hazard trees	H	H	L*	L*

	<b>Numbered highways</b>	<b>Main roads</b>	<b>Secondary roads</b>	<b>Dead-end roads</b>
U. Cut trees below power and phone lines	M	M	M	M
V. Facilitate mowing	M	M	L	L

H = High importance, M = Medium importance, L = Low importance

These ratings are for guidance within a category only and are meant to give relative importance within the category. For example, the high priority of getting written landowner permission for work outside the right of way may be more important than the high priority of getting sun onto the road surface.

\*Dead, damaged, and hollow trees (which provide wildlife habitat and rural character) should be left along secondary and dead-end roads if they don't lean precipitously over the road or powerlines or otherwise present a hazard.

## IV. OPERATIONAL GUIDELINES

Operational Guidelines are meant to provide guidance to the parties involved. The goal here is to give the all parties involved a clear idea of what the ground rules should be. These will be updated based on experience.

### *Rural character & aesthetics*

- A. Closed canopy roads are part of the rural New England tradition. They provide connectivity for wildlife and a peaceful ambiance, especially during the fall foliage season. Certain road sections will be designated as "closed canopy roads" by the Planning Board. Cutting shall be minimized on these roads to maintain a closed canopy, and cutting plans should take this designation into account.
- B. Open up views of fields for aesthetic reasons by cutting brush (except for fruit and flowering shrubs) but not large trees.
- C. Preference will be given to retaining deciduous trees over coniferous trees on the south side of paved roads, except on roads designated as closed canopy. Attempts should be made to preserve deciduous trees (including saplings) near the edge of the right of way every 20 or 30 feet for future generations.

### *Environmental protection*

- D. Encourage native shrubs along roadways, including mountain laurel and blueberries. Shrubs shade out invasive plants. Minimize the removal of native shrubs beyond shoulders and ditches. Mowed vegetation should be a minimum of 6 inches in height, with one foot tall herbaceous or low woody (like lowbush blueberries) vegetation preferred. Mowing above ferns and other herbaceous vegetation will shade the soil and prevent germination of unwanted plants.

- E. In areas of vegetation clearing where erosion may be a problem, the site should be seeded with conservation mix. Smaller vegetation should be encouraged unless it interferes with visibility.
- F. If there is to be a vegetation management program by the Highway Department, it shall include a plan for the control of invasive species. When vegetation is cut, the additional sunlight available encourages invasive species. Many of these plants spread from roadsides into surrounding woods. This is consistent with the finding by the Open Space Committee that walking along roads is a popular activity in town, so roadsides should be available for walking. Noxious weeds such as poison ivy should be controlled along with invasive species. Descriptions of invasive plants and Best Management Practices (BMPs) for the control of invasive plants are listed in Appendix A.

*Property rights*

- G. No cutting on private property without written permission of landowners.

*Public safety*

- H. Dead or diseased trees (“hazard trees”) and leaners that bend into the road with snow or are a risk to power lines may be cut. (See “K” regarding special situation of secondary and dead end roads.)
- I. Cutting shall reflect the need for visibility around curves and corners; pruning may be an alternative to cutting in some cases.
- J. Consideration will be given to cutting any vegetation that extends over the traveled way that is less than 15 feet above the traveled way (legal truck height is 13’ 6”); this gives 18” leeway).
- K. The Highway Department has particular concerns about dead-end roads as a public safety issue, because they’re more easily blocked than two-way roads. However, many residents of dead-end roads want minimal roadside cutting for aesthetic reasons, and are comfortable with limited accesses under storm conditions, and are aware of potential inconvenience and risks. Therefore, the amount of cutting should be worked out with residents to balance conflicting preferences.

*Road maintenance*

- L. To allow repair and replacement of culverts and head walls, consideration will be given to cutting trees and brush 10 feet on either side of the culvert or headwall to allow swing room for the back hoe or excavator. Culverts on streams or wetlands are also under the jurisdiction of the Conservation Commission. It is recognized that a culvert at a stream may be a wildlife corridor and compromises may be necessary such as delaying cutting until culvert work is proposed.

*Open government*

- M. Roadside trees and brush to be cut should be clearly designated by grade stakes at the proposed limit of cutting. Trees larger than 6” dbh should be individually marked by the Tree Warden or his designee with flagging or non-persistent paint<sup>1</sup>;

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<sup>1</sup> If tree paint is used, it should be a type that won’t persist for more than a year or two, and marks should be small.

smaller tress may be individually marked or designated with grade stakes by the Tree Warden or his designee. Stakes and flags on private property should be a different color to distinguish them. Grade stakes and flagging must be up at least three weeks before the public hearing. “Do not cut” vegetation (including special species like shadbush, apples, blueberries, or mountain laurel) may be marked with yellow flagging by the Highway Department, Tree Warden, or by interested parties and shall be considered at the public hearing.

- N. Stakes and flags on private property should be a different color to distinguish them. Grade stakes and flagging must be up at least three weeks before the public hearing. “Do not cut” vegetation (including special species like shadbush, apples, blueberries, or mountain laurel) may be marked with yellow flagging by the Highway Department, Tree Warden, or by interested parties and shall be considered at the public hearing.
- O. Vegetation may be cut for specific reasons outside of these guidelines on a case-by-case basis, upon approval after a public hearing.
- P. It appears that some of our unpaved roads are widest where there are wetlands. This suggests that trees close to the edge of the road in wetland areas should remain even if they have plow scars, to prevent casual widening of the roads.
- Q. If the Highway Department wants to cut trees to increase the width of roads, they need specific permission from the Planning Board to do so.

## V. ANNUAL JOINT PUBLIC HEARING

The Planning Board, Tree Warden, and in cases where cutting will be on private property the Selectboard shall have an annual joint public hearing to address those roads where the Highway Department wishes to cut. It is recognized that frequently plans change so additional public hearings may be necessary. Once a vegetation cutting proposal for a particular road is approved that approval will remain in effect for 3 years.

1. The Planning Board shall develop a form [draft included as Appendix C], and the proposed cutting for each road shall be on a separate form which shall be submitted to the Planning Board, Tree Warden and Selectboard 8 weeks before the Hearing (by the end of the second full week of August for the annual hearing).
2. At least three weeks before the public hearing (by the end of the second full week of September), roadside trees and brush to be cut must be clearly designated by grade stakes at the proposed limit of cutting. Trees larger than 6” dbh should be marked by the Tree Warden or his designee with flagging or non-persistent paint. Stakes and flags on private property should be a different color to distinguish them.
3. The hearing shall be held when leaves are on the vegetation (no later than the first full week in October), to allow interested parties to more easily identify the species.
4. The Planning Board shall notify residents on each proposed road, the Conservation Commission and the Open Space Committee of the roads on which vegetation is proposed to be cut, by the end of the third full week in September.

5. Up to one week prior to the hearing interested parties may flag not-to-be-cut vegetation with yellow flagging. Vegetation to be removed may be flagged by interested parties using blue flagging. Issues involved with the flagging may be taken up at the hearing.
6. For cutting within the public way, that portion of the hearing will be chaired by a representative of the Planning Board or Tree Warden, and when there will be cutting on private land the portion of the hearing dealing with those roads shall be chaired by a representative of the Selectboard. There may be a single hearing chair by mutual agreement.
7. The Hearing may be recorded to comply with the Mullins Rule. Minutes may be taken by either the Selectboard Secretary or the Planning Board Secretary or by some other person.
8. The Planning Board and Selectboard shall make decisions on the proposed cutting within 8 weeks following the hearing. A decision may be delayed if additional information is requested and the 8 weeks shall begin when that additional information is submitted. Failure to approve, disapprove, or approve with conditions within the time frame will constitute constructive approval.
9. The decisions of the Planning Board and Selectboard will be recorded in their Minutes. They shall notify the Tree Warden, Highway Department, Selectboard, Conservation Commission, Open Space Committee and Planning Board of their decisions.

## VI. POLE HEARING POLICY

- Pole hearings are held by the Selectboard. If the power or telephone lines that will be installed could reasonably be expected to require the cutting of trees within the right-of-way of a scenic road, the hearing will be a joint hearing with the Selectboard including the Tree Warden and Planning Board under MGL 40 Section 15C and the Highway Department shall be notified and given an opportunity to be present. This will avoid the possible confusion that could result from the Selectboard having a hearing on pole placement and a separate Scenic Road hearing, where conflicting decisions might be made at the separate hearings.

It is recognized that zigzagging poles from one side of a road to another is more expensive, however, this shall be done where appropriate to avoid disturbing the crowns of shade trees. The clearances and procedures described in National Grid's NE Distribution Line Clearance Specifications dated 12/18/07, and as later amended, shall be followed.

- end -

**APPENDIX A:  
DESCRIPTIONS OF INVASIVE PLANTS AND  
BEST MANAGEMENT PRACTICES  
FOR THEIR CONTROL**

The following are the primary invasive and noxious plants in Warwick.

1. Glossy and European Buckthorn
2. Swallow-wort
3. Garlic Mustard
4. Japanese Knotweed
5. Poison Ivy (noxious plant)

This appendix includes three sections:

- A-1. Descriptions of Primary Invasive and Noxious Plants in Warwick
- A-2. Best Management Practices for Controlling Invasive Plants
- A-3. Release from Liability

## A-1. Descriptions of Primary Invasive and Noxious Plants in Warwick

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# GLOSSY BUCKTHORN

### THREATS

Glossy buckthorn, *Frangula alnus*, is a great threat to wetlands, where it can form dense stands that cause the growth of other species to be suppressed. It is readily dispersed by birds, and the extended productivity of the fruits allows it to be dispersed throughout the summer and fall.

### IMAGES



Close-up of flowers and fruits



Close-up of pinnately veined leaves



Fruit



Habit



Incursion

### DESCRIPTION

**Buckthorn**, *Frangula alnus*, is a deciduous small tree or coarse shrub that grows up to 20 feet tall. The oval leaves are 1-2.5 in. long and are arranged alternately. They are dark green (in the summer) and shining on the top surface. The leaves turn greenish-yellow to yellow in the later fall, and remain on the plant when most other species have already lost their leaves. This plant flowers from May to September. The fruit are round, changing from red to black, and are 1/4" across. They ripen from July to August. It is important to note that at any given time there can be flowers, partially ripened fruits (red) and fully ripened fruits (black) present on the same plant.

## **GLOSSY AND EUROPEAN BUCKTHORN CONTROL**

Small patches of buckthorn can be controlled by pulling up small plants.

Larger, established plants may be too large to be pulled. Herbicide is the most effective way to control these. Private landowners can spray the leaves with Round-up®, or a similar glyphosate containing product, late in the season to kill the plant. Alternatively, the plant can be cut earlier in the season and the stump sprayed with Round-up. Follow closely the directions on the container for these uses. Early season applications of herbicide may not be effective, so the stump will need to be watched to ensure it doesn't resprout. Cutting the plant without treating the stump with herbicide will only encourage the plant to send up side shoots and spread laterally.

Landowners may use Round-up® or another glyphosate containing herbicide. Read and follow all directions on the label. **DO NOT USE THIS HERBICIDE WITHIN 50 FEET OF WETLANDS!** This may be applied either on the leaves or on newly cut stems. As this is a systemic herbicide that impacts the plants ability to store nutrients in its roots, it should be applied mid to late summer or fall. It will take 1 to 2 weeks after application before the plant will show signs of yellowing or dying.

It is best to control this shrub as early as possible as it is a prolific seed producer.

# SWALLOW-WORT

## THREATS

Swallow-wort is a vine that can grow rapidly and cover native vegetation. It also has the ability to dominate the understory of woodlands. Wind-dispersed seeds allow it to disperse over long distances. When it is cut, this plant resprouts vigorously, making control difficult.

## IMAGES



Flowers of black swallow-wort



Close-up of fruit



Twining vines



Incursion



Close-up of flowers



Dehiscing seeds

## DESCRIPTION

Black Swallow-wort (*Cynanchum louiseae*) is an herbaceous, perennial vine, with no branches, that grows up to 6.5 ft. in length/height. Its dark green leaves are opposite and are smooth and shiny. The leaves are oval, 2-5" long and 0.5-2.5" wide. Clusters of 6-10 dark purple flowers are produced from June to September. The fleshy petals are shaped like equilateral triangles, with short straight, white hairs on their upper surfaces. Fruits pods are bean shaped, up to 2 1/2" long. Immature pods are green, turning brown with maturity. Pods burst open at the end of the season releasing milkweed-like seeds. Stems persist at the end of the season, frequently bearing open pods with some seeds remaining inside.

## **CONTROL OF SWALLOW-WORT**

As with all invasives, early detection and removal is the best approach. If you find a few swallow-wort plants, look for more. Stay out of patches that are actively dispersing seeds unless you are collecting seedpods to dispose of them. Equipment will easily spread seeds once the pods have opened. Herbicides are the best method of controlling this noxious weed.

### Manual

As this plant contains a tuber, or root crown, just pulling the plant will only remove the top of the plant and the root will resprout. In a small population, the complete root crown must be dug up before the seeds ripen. Any plants pulled or dug should be bagged and burned or landfilled, especially if they contain pods with seeds. The area should be monitored for at least five years as the seed bank may take this long to be depleted.

### Herbicides

Round-up®, with the active ingredient glyphosate, has been successful in control of this plant. However, the application needs to be timed correctly; it should be applied after the plant has started to flower and before pods form. At this time there is sufficient leaf surface to bring the herbicide to the roots and it will be early enough to prevent the formation of viable seed. A second application in the same year on sick plants will not do any additional damage and is a waste of herbicide and time. However, an infestation of this plant will likely need to be treated several years in a row to eliminate it from the site.

Landowners may use Round-up® or another glyphosate containing herbicide. Read and follow all directions on the label. **DO NOT USE THIS HERBICIDE WITHIN 50 FEET OF WETLANDS!** This may be applied either on the leaves or on newly cut stems. As this is a systemic herbicide that impacts the plants ability to store nutrients in its roots, it should be applied mid to late summer or fall. It will take 1 to 2 weeks after application before the plant will show signs of yellowing or dying.

Professional herbicide applicators have access to additional systemic herbicides not available to home-owners that will also help control that plant, including Garlon® and herbicides with higher concentrations of glyphosate.

# GARLIC MUSTARD

## THREATS

Garlic-mustard can out-compete native herbaceous species, depriving them of light, moisture and space. It also negatively impacts mycorrhizal fungi that are important underground symbionts for northern hardwood species, allowing it to out-compete our native trees. In other words, this plant kills trees. In some states, this plant threatens native butterfly species by out-competing their native host plants. When the butterflies lay their eggs on *Alliaria petiolata* the larvae do not seem to survive as well. The seeds of *Alliaria petiolata* usually fall just beneath the plant, but it is probably dispersed longer distances by people when seeds get attached to boots and clothing.

## IMAGES



View of plant



Late seedlings



Fruit close-up



Incursion



Inflorescence



Basal rosette

## DESCRIPTION

Garlic-mustard (*Alliaria petiolata*) is an herbaceous biennial whose flowering form can reach 3 1/2 ft. in height. The first year plants are a basal rosette of leaves that remain green throughout the winter. They develop into mature flowering plants the following spring. The lower, dark green leaves are kidney-shaped, while the stem leaves are alternate and deltoid. The basal leaf blades can be 6-10 cm (2.4-4 in.) long and wide, while the stem leaves are 3-8 cm (1.2-3.1 in.) long and wide, gradually decreasing in size as they go up the stem. The margins of the leaves are coarsely toothed. The leaves give off a strong garlic odor when crushed. The flowers of *Alliaria petiolata* have four white petals arranged in a cross shape. They appear in the early spring (April-May), and fruits are produced by May. The cylindrical, shiny, black seeds are contained in pods

called siliques. These siliques are 1-2.4 in. long and contain 10-20 seeds. By June the flowering plants are dead.

### **CONTROL OF GARLIC MUSTARD**

Hand-pull plants if the soil is loose or damp, starting in April. The white flowers become visible in late April and early May, but the leaves are evergreen and smell like garlic when crushed. It is best to start at the edge of an infestation and work towards the center.

Bag and dispose of all flowering and fruiting plants as they can produce seed if pulled and left on the ground.

An application of several inches of woodchips may be effective.

Note that these plants produce a phytotoxin that inhibits beneficial microrhizae, which most of our native plants rely on for their growth. The presence of this species therefore inhibits the growth of native plants nearby.

# JAPANESE KNOTWEED

## THREATS

Japanese Knotweed is a threat because it forms dense, persistent thickets that exclude other vegetation. Its vegetative reproduction has proved quite successful. Established populations are extremely difficult to eradicate.

## IMAGES



Incursion



Inflorescence close-up



Roadside Incursion



Roadside Incursion II

Flowers Close-up



Stems Emerging in April



## DESCRIPTION

**Japanese Knotweed** (*Polygonum cuspidatum*) is an herbaceous perennial that reaches 3-10 ft. in height. The round stems are hollow and covered with scales. The shoots grow from spreading rhizomes that can reach 65 ft. in length. The leaves are broadly oval, 3-6 in. long and 2-5 in. wide. The numerous, greenish-white flowers are located in the upper leaf joints. The inflorescences of the male flowers tend to be upright, while those of the female flowers tend to be drooping. Flowers appear from August to September. The fruit are papery and winged. These fruits contain black, smooth, shiny, 3-angled nuts. When frost hits this plant, it quickly turns brown and dies back for the year.

## CONTROL OF JAPANESE KNOTWEED

Control of this species is difficult as it will resprout from stem and root fragments as small as a half an inch. Effective treatment of this plant requires a multi-pronged and multi-treatment dedicated approach.

Control requires several years of work. Small isolated clumps can be pulled, dug up or covered. Look for regrowth within 20 to 25 feet. Clean up all plant material and bag and take to the transfer station. The cut plant fragments will resprout if left in contact with soil. However, cleaning up this material will allow an assessment of whether there are new shoots appearing.

Plants can be cut close to the ground weekly to twice a month from April to August, then once a month until frost. Keep plant 6 inches or less in height and plan to cut as soon as new leaves form. Initially cutting only stimulates the plants to send up new shoots and spread, but regular cutting at first sight of new leaves will draw down the plants reserves in the roots sufficiently to kill it.

Landowners may use Round-up® or another glyphosate containing herbicide. Read and follow all directions on the label. **DO NOT USE THIS HERBICIDE WITHIN 50 FEET OF WETLANDS!** This may be applied either on the leaves or on newly cut stems. As this is a systemic herbicide that impacts the plants ability to store nutrients in its roots, it should be applied mid to late summer or fall. It will take 1 to 2 weeks after application before the plant will show signs of yellowing or dying.

# POISON IVY

## THREATS

In Warwick, Poison Ivy inhibits people from walking or working on the roadsides, as many people have an allergic reaction to the oil of this plant. It can cause an itchy dermatitis and swelling. People can have allergic reactions to the smoke of the plant when it is burned as well. Although native, it is noxious to people.

## IMAGE



## DESCRIPTION

Upright, climbing, or trailing shrub or herb that bears small yellowish-white flower clusters and fruit; old stems, covered with fibrous roots, look hairy. Poison Ivy is extremely variable in form, occurring as ground cover along roadsides, erect shrubs (especially in sandy coastal areas) or as large hairy vines climbing on tree trunks. Red fall foliage is especially conspicuous.

## **CONTROL OF POISON IVY**

Handle poison ivy carefully if you do not know if you are allergic to it. If you find a small seedling on your property, you can dig it up, but protect yourself by wearing long sleeves and work gloves.

If the poison ivy plant is a vine growing up a tree, with a well-established root system, an herbicide treatment may be most effective in controlling it. As this plant often climbs on other plants, and you may not want to kill the other plants, it is recommended to treat a cut stem immediately after cutting it. It is important to handle a cut stem carefully as the plant sap will produce a rash in allergic individuals. The recommended herbicide is one with glyphosate, such as Round-Up®. It is important to read the label and follow all directions on it carefully. **DO NOT APPLY THIS HERBICIDE WITHIN 50 FEET OF WETLAND AREAS.**

Glyphosate is a systemic herbicide and impacts all plants treated with it. It will take 1 to 2 weeks before the treated plants will show signs of treatment through yellowing of the leaves. It is not worth re-applying this herbicide during the same growing season on sick plants. This herbicide works by interfering with the plants storage of nutrients in its roots, so works most effectively when applied mid to late summer or early fall.

## **A-2. Best Management Practices for Controlling Invasive Plants**

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These Best Management Practices (BMPs) are adapted from the State of New Hampshire and conversations with staff at the Mass Highways.

### **A. Soil Disturbance and Stabilization**

**BMP #1: Disturbed Soil.** Minimize soil disturbance whenever possible. Invasive plants readily colonize areas of disturbed soil. Stabilize disturbed soils as soon as possible by spreading compost and seeding with native species.

**BMP #2: Fill.** Materials such as fill, loam, mulch, hay, rip-rap, and gravel should **not** be brought into project areas from sites where invasive plants are known to occur. If the absence of invasive plant parts in these materials cannot be guaranteed, recent work sites should be monitored for the emergence of invasive plants after project completion.

**BMP #3: Winter Sand.** Sand for winter sanding should come from sand pits with no exotic invasives present, or be sand from our own sand pits. It may be cheaper to use our own sand than it is to deal with exotic invasives brought in with bought sand.

**BMP #4: Roadside Sweeping.** In Warwick the center of town has substantial exotic invasive populations and plowing disturbs roots, and seeds may be mixed with the sand when it is swept. In areas where there are no exotics the sand sweepings could be used for other projects, but should be monitored for exotic species growth after placement. Sweepings with exotic invasive plant fragments should be dumped where they can be treated with herbicides. Landowners accepting roadside sweepings on their property should sign a release to free the Town of liability for introducing exotic invasive plants onto their property.

**BMP #5 Movement and Maintenance of Equipment.** Locate and use staging areas that are free of invasive plants to avoid spreading seeds and other viable plant parts. Exotic invasive species in existing staging areas (stump dumps, snow plow turn-arounds, etc.) should be controlled. All rental equipment that will be disturbing soil (private contractors for example) should be cleaned prior to use on sites that do not have listed species. When equipment must be used in areas where invasive plants occur, all equipment, machinery, and hand tools should be cleaned of all visible soil and plant material before leaving the project site. Equipment should be cleaned at the site of infestation. Acceptable methods of cleaning include, but are not limited to:

- Portable wash station that contains runoff from washing equipment (containment must be in compliance with wastewater discharge regulations)
- High pressure air
- Brush, broom, or other hand tools (used without water)

**BMP #6 Working in Invasive Plant Areas.** If equipment must be used in areas containing listed plants, clear the area of exotic and noxious plants prior to the start of work, if time permits. Above ground plant material should be treated with herbicides well ahead of time, cut and properly disposed of prior to the start of work.

## **B. Mowing**

**BMP #7:** These invasive plants have the ability to sprout from stem and root fragments: purple loosestrife, *Phragmites*, and Japanese knotweed. Mowing these plants should be avoided whenever possible. Staking roadside populations of these plants as “do not mow” is one way to accomplish this. If these plants are cut, all plant material must be rendered nonviable and extra care should be taken to avoid spreading plant fragments (see BMP #11).

**BMP #8:** In areas where Glossy and European Buckthorn occurs, mowing should not occur after fruit has formed. The berries are easily spread, and cutting encourages the plant to send up new side shoots and spread.

**BMP #9:** Mowing equipment should be cleaned at least daily, as well as prior to transport (see BMP #6). This is particularly important if mowing occurs after seed maturation (after August 1st).

**BMP #10:** Mowed vegetation should be a minimum of 6 inches in height, with one foot tall herbaceous or low woody (like lowbush blueberries) vegetation preferred. Mowing above ferns and other herbaceous vegetation will shade the soil and prevent germination of unwanted plants. Low native shrubs (blueberries, mountain laurel, azalea, etc.) should be left where possible.

**BMP #11:** If exotic plants, such as the Japanese knotweed, are mown, it needs to be collected and properly disposed of so that it doesn't spread.

**BMP #12:** Deciduous trees that will provide shade to lessen the sunlight available for exotic invasive plants should not be cut. Hardwood stump sprouts inhibit ferns and woody shrubs that help reduce the need for roadside mowing. Areas where Japanese Knotweed is mown should be marked for herbicide application in late September, when the herbicides will be taken down into the roots.

**BMP #13 Removal of Exotic Invasive Plants.** In order to apply herbicides on Town roadways, the Town must file a five year Vegetation Management Plan with the state. Applicators must be licensed by the state. Townspeople need to know what is being done, why it is being done, and how it will affect them.

## **C. Disposal of Invasive Plants**

**BMP #14:** When invasive plants are cut or removed for roadside maintenance, construction, or control of plants, the spread of viable plant material must be avoided by rendering plant material nonviable. The following methods can be used to destroy plant material:

Drying/Liquefying: For large amounts of plant material or for plants with rigid stems, place the material on asphalt, tarps, or heavy plastic, and cover with tarps or heavy plastic to prevent

the material from blowing away. For smaller amounts of plant material or for plants with pliable stems, bag the material in heavy-duty (3-mil or thicker) garbage bags. Keep plant material covered or bagged for at least one month. Material is nonviable when it is partially decomposed, very slimy, or brittle. Once material is nonviable, it can be disposed of in a landfill or brush pile. (This will not kill seeds of these species).

**Recommended for:** Japanese knotweed, purple loosestrife, *Phragmites*.

Brush Piles: Plant material from most invasive plants can be piled on site to dry out. However, when piling purple loosestrife, *Phragmites*, and Japanese knotweed, care must be taken to pile stems so that cut surfaces are not in contact with the soil.

**Recommended for:** Woody shrubs, trees, and vines; spotted knapweed; large quantities of purple loosestrife, *Phragmites*, and Japanese knotweed.

**NOT recommended for:** any invasive plant with seeds or fruit attached, unless plants can be piled within the limits of the infestation.

Burying: Plant material from most invasive plants can be buried a minimum of three feet below grade. This method is best used on a job site that already has disturbed soils.

**Recommended for:** any invasive plant.

**NOT recommended for:** Japanese knotweed, unless other options are not feasible and knotweed can be buried at the site of infestation at least five feet below grade.

Goat Fodder: Plant material can be fed to goats.

Burning: Plant material should be taken to a designated burn pile. (All necessary permits must be obtained before burning.)

**Recommended for:** any invasive plant, especially purple loosestrife, *Phragmites*, Japanese knotweed.

**NOT recommended for:** Poison ivy; the smoke is toxic.

Herbicide: Herbicide applications must be carried out by a licensed applicator with a permit from the Massachusetts Department of Agriculture.

**Recommended for:** any invasive plant, especially purple loosestrife, *Phragmites*, Japanese knotweed, poison ivy, glossy and European buckthorn.

### **A-3. Release from Liability**

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## **Town of Warwick Highway Department**

**12 Athol Rd.**

**Warwick, MA. 01378**

**Phone: 978-544-6349**

**Fax: 978-544-6499**

**E-mail: [highway@town.warwick.ma.us](mailto:highway@town.warwick.ma.us)**

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The undersigned agrees to release the Town of Warwick from any liability connected with dumping roadside scrapings on their property. By signing, the property owner acknowledges that they understand that roadside scrapings may contain seeds and plant material that will introduce exotic invasive plants onto their property, and these plants may require the later use of herbicides by the landowner for their control.

Roadside scrapings in Warwick are known to contain Poison Ivy, Japanese Knotweed, Buckthorn, Garlic-mustard, and Black Swallow-wort.

I agree to these terms

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Signature

Date

October 17, 2010

APPENDIX B:  
MODEL EASEMENT AND PERMISSION LETTER  
FOR HIGHWAY DEPARTMENT  
WORK ON PRIVATE PROPERTY

Return to:  
Warwick Selectboard  
12 Athol Rd  
Warwick, MA 01378

EASEMENT

Know all men by these present that we, \_\_\_\_\_

of \_\_\_\_\_ Rd, Warwick, MA 01378 (hereinafter referred to as the "Grantors"), for less than one hundred dollars (\$100.00) grants to the Town of Warwick, 12 Athol Rd, Warwick, MA 01378, its successors and assigns forever (hereinafter referred to as the "Grantee"), with quitclaim covenants, the perpetual right and easement to construct, repair, and maintain for public convenience and safety land adjacent to the public way, including entering and reentering with people and equipment, the cutting of approved trees and brush, construction of and reconstruction of culverts and other structures and related appurtenances, over, under, across and upon the following described parcel of land:

A certain tract located on (example: the east and west sides of Winchester Rd, Warwick, MA ) and being the same premises contained in the following recorded instrument(s): A Warranty Deed from H. David Doe to Peter J. Doe, Susan H. Doe, and Peter J. Doe, Jr dated August 7, 1975 and recorded September 12, 1975 in Franklin County Registry of Deeds Book 1992, Page 239.

The exact location of said easement is as follows: (example: a strip of land thirteen (13) feet wide along the edge of the public way on the east and west side of Winchester Rd, including a radius of fourteen feet from where the culvert intersects the edge of the public way on both the east and west side of Winchester Rd.)

It is agreed that culverts and other capital improvements and appurtenances installed by the Town of Warwick, or its agents, shall be paid for by the Town of Warwick and shall remain the property of the Town of Warwick. .

Executed as a sealed instrument this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ .

\_\_\_\_\_  
Peter J. Doe

\_\_\_\_\_  
Susan H. Doe

\_\_\_\_\_  
Peter J. Doe, Jr.

# Town of Warwick Highway Department

12 Athol Rd.

Warwick, MA. 01378

Phone: 978-544-6349

Fax: 978-544-6499

E-mail: [highway@town.warwick.ma.us](mailto:highway@town.warwick.ma.us)

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July 6, 2010

[Name of property owner]

The Highway Department is planning on cutting brush along your property line. The Highway Department would like your permission to cut trees and brush that might be considered outside the Town Right-Of Way and on your private property and then to maintain the results of the agreed upon cutting. We are asking you for this permission to increase visibility and safety on the roadway, which may include drainage, improving line of sight at a curve or intersection, for ease of maintenance, maintaining culverts, removing hazard trees and so forth. The Highway Department agrees to work with the Property Owner to cut only what the Highway Superintendent and Property Owner have mutually agreed upon. All wood will be left on the side of the road and all brush will be chipped in place if possible. As Property Owner you can ask the Highway Department to stop cutting on your property at any time. The Town of Warwick shall indemnify and hold harmless the Property Owner for liability incurred as a result of this work. If at any time you have questions you can contact the Highway Superintendent, Tim Kilhart, at 978-544-6349.

The following areas are the agreed upon cutting between the Town of Warwick and the Property Owner.

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\_\_\_\_\_  
Owner  
Address  
Phone number  
Property Lot Number: \_\_\_\_\_

\_\_\_\_\_  
Tim Kilhart  
Highway Superintendent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

**APPENDIX C:  
PROPOSED CUTTING FORM**

**Application for a Joint Hearing with Tree Warden, Planning Board, Select Board  
for Road Vegetation or Herbicide Treatment Proposal on Warwick Roads, and  
Record of Result of Hearing**

If insufficient space, continue of back side of this form

1. Name of Road noting any sections that will be treated \_\_\_\_\_  
\_\_\_\_\_
2. Date of Application \_\_\_\_\_ 3. Road Layout Width \_\_\_\_\_
4. Note sections designated as Closed Canopy \_\_\_\_\_
5. Will Work be Done on Private Property (Yes, No) \_\_\_\_\_ 6. If 'Yes' is easement or  
permission attached (Yes, No, if "No" any problems or unusual situation) \_\_\_\_\_
7. Brief Description and Reason for Road Vegetation Work to be Done in ROW (if insufficient  
space continue on back side) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Brief Description and Reason for Work to be Done on Private Property \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Area Below for Planning Board Use**

Are there invasive species on this Road (Yes, No) \_\_\_\_\_ What is the plan for dealing with the  
invasive species, and does the plan comply with Best Management Practices \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date Received \_\_\_\_\_ Date of Posting and Legal Ad \_\_\_\_\_ Date of Hearing \_\_\_\_\_  
Result of Hearing (Approve, Approve with Conditions, Deny) and Date of Decision \_\_\_\_\_  
Decision by Planning Board \_\_\_\_\_  
Date of Decision by Selectboard \_\_\_\_\_  
Date of Decision by Tree Warden \_\_\_\_\_  
Date Highway Department Notified \_\_\_\_\_  
Special Conditions of Selectboard, Tree Warden, Planning Board \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Permission to proceed is good for three (3) years from date Highway Department is notified.  
Form date: October 6, 2010

## APPENDIX D: COMMENTS

Attached are comments from Highway Superintendent Tim Kilhart, and responses from the Scenic Roads Committee.

### **Highway Department Concerns with Scenic Roads Policy** **Jan. 26, 2011**

*Scenic Roads Cutting Policy Committee comments from February 10, 2011 meeting in italics*

#### IN REFERENCE TO PUBLIC SAFETY LETTER P ON PAGE 3 AND I ON PAGE 10

- The Highway Dept. needs the ability to cut trees and brush that obstruct visibility especially if we receive a complaint from the public without going through a hearing. I try to deal with these issues as soon as possible to eliminate the hazard.
- *The Scenic Roads Cutting Policy Committee (The Committee) is sensitive to the public safety and hazard tree issues. According to the tree warden cutting trees and brush as an emergency measure to improve visibility is not an issue that he has to be dealt with often. MGL Chapter 87 Section 5 “Tree Wardens may ...without a hearing, trim, cut down or remove trees less than one and a half inches in diameter one foot above the ground, and bushes, standing in the public way; and if ordered by the ...Selectmen...shall trim or cut down trees and bushes, if the same shall be deemed to obstruct, endanger, hinder or incommode persons traveling thereon... . Section 3 states that any cutting of a shade tree requires a public hearing. The Scenic Road Act comes into play when there is “maintenance cutting.” The joint hearing with the Tree Warden, Selectboard and Planning Board deals with this issue under the Mass General Laws and also because the Highway Dept works for the Selectboard, so the authority is both legal and supervisory. There is a fine line between cutting trees and bushes as a hazard under the tree warden and as a maintenance cutting requiring a hearing. The Committee’s position is that when there is doubt a hearing should be discussed with the Tree Warden and Planning Board. At this point a majority of the Committee feel this can best be worked out as a matter of policy because of the good working relationship between the Highway Dept and the other parties rather than as a bylaw.*

#### IN REFERENCE TO PUBLIC SAFETY LETTER Q ON PAGE 3 AND J ON PAGE 10

- The Highway Dept. needs the ability to cut hanging branches that interfere with travel of any type of vehicle especially when they are weighted down with snow and/or ice immediately without going through a hearing.
- *This issue recently came up in regards to Gale Rd, and it is the Committee’s position that because the branches were normal growth weighted down by snow and not broken as in an ice storm, and because brush, dead trees, and hazard trees were going to be cut along what may have been a mile of road that the operation was a maintenance cutting that*

*required a hearing. As noted above, when the Selectboard orders a cutting, the tree warden may do it without a hearing under Section 5 of MGL Chap 87. If the cutting might be viewed as maintenance cutting (as with Gale Rd) it requires a hearing.*

**In reference to Road Maintenance letter T on page 3 and Public Safety letter H and K on page 10**

- The Highway Dept. needs the ability to cut all dead, damaged or diseased trees that are a threat to falling on all roadways in cooperation with the Tree Warden. A hazardous tree falls under the Tree Warden's jurisdiction relating to MGL Chapter 87 Section 5. I realize some residents are not concerned with downed trees preventing access to their homes. I am concerned that during a large-scale incident like the Dec. 2008 ice storm the Highway Dept. would be overwhelmed with the amount of damage that could occur if preventable measures are taken to limit the potential problems. We need to be proactive not reactive.
- *The Committee is delighted that the Highway Dept. wants to spend some of its budget on cutting all dead, damaged or diseased trees that are inclined to fall onto a road as a proactive measure. This is a far larger undertaking than the Tree Warden's budget allows. The proposed policy allows this.*

**In reference to Control of Invasive Species number 3 on page 4 and Environmental Protection letter F on page 9**

- The Highway Dept. has no plans to develop or institute a vegetation management program. We do not have the budget or expertise to deal with this issue. Also it could cause further spreading of invasive species if we transported them somewhere spreading seeds and spores along other roadways. The best solution to this problem would be to develop a budget and hire a private contractor to deal with any and all invasive species in town if that is what the residents want. At this time the Conservation Commission does not want to take on this project either.
- *The Committee could not come up with a management solution for invasive species and plans to recommend to the Selectboard that an Invasive Species Committee be formed to try and find a solution. We agree that the Highway Dept. has declined to take on this added duty. At this time the Conservation Commission has not made a decision as to whether to take on the management of invasive species. There could be an Invasive Species Subcommittee of the Conservation Commission to take this on; otherwise, the Selectboard could appoint an Invasive Species Committee.*

**In Dealing with Plowing and Sanding of Roadways**

- During the winter plowing and sanding operations we have problems with low hanging branches, trees and brush that lean into the roadway. This causes damage to vehicles, which can be costly not to mention put a vehicle out of service. You need to realize that our trucks are much larger than the average car and when plowing we are on the edge of the road pushing back the snow. Most vehicles tend to drive along the center of the road unless they meet oncoming traffic.
- *The isolated problem tree, tree branch, or bush should be taken care of through the Tree Warden.*

## General Concerns

- I am seriously concerned that too many rules and regulations are being developed that will make it nearly impossible for us to do our work. I sometimes feel that it might be easier and much less stress on me to just stop cutting brush except when complaints are received and to also discontinue roadside brush mowing to eliminate further spreading of invasive species. This goes against all of my beliefs as to what should be done but I am having a hard time fighting this battle every time we cut. I know this sounds drastic but I feel like we need someone to be assigned to work with us any time we want to go out cutting.
- *In Warwick roadside cutting must comply with the Shade Tree Law and the Scenic Roads Act for all roads (except Rt 78 which is exempt from the Scenic Roads Act). The Committee is trying to make this a smooth workable arrangement while recognizing residents' concerns to maintain the rural character of the town and the Highway Department's goals of improving our roads. While residents of some towns want the trees cleared back from the roads, the situation in Warwick is far more complex, as the 29 people who showed up at a Selectboard Meeting concerning cutting on Gale Rd illustrate. Hopefully when this policy is adopted it will smooth things out for everyone.*
- If anyone would like to speak with me about my concerns please feel free to contact me anytime.

Tim Kilhart  
Warwick Hwy. Supt.

## APPENDIX E: APPLICABLE LAWS

*Source: Massachusetts Tree Wardens' & Foresters' Association 8<sup>th</sup> Edition Handbook*

### **Chapter 40: Section 15C. Designation and improvement of scenic roads.**

Section 15C. Upon recommendation or request of the planning board, conservation commission or historical commission of any city or town, such city or town may designate any road in said city or town, other than a numbered route or state highway as a scenic road; provided, however, that a numbered route may be designated by a city or town as a scenic road if its entire length is contained within the boundaries of said city or town, and no part of said route is owned or maintained by the commonwealth.

After a road has been designated as a scenic road any repair, maintenance, reconstruction, or paving work done with respect thereto shall not involve or include the cutting or removal of trees, or the tearing down or destruction of stone walls, or portions thereof, except with the prior written consent of the planning board, or if there is no planning board, the selectmen of a town, or the city council of a city, after a public hearing duly advertised twice in a newspaper of general circulation in the area, as to time, date, place and purpose, the last publication to occur at least seven days prior to such hearing; provided, however, that when a public hearing must be held under the provisions of this section and under section three of chapter eighty-seven prior to the cutting or removal of a tree, such hearings shall be consolidated into a single public hearing before the tree warden and the planning board, or if there is no planning board, the selectmen of a town, or the city council of a city, and notice of such consolidated public hearing shall be given by the tree warden or his deputy as provided in said section three of chapter eighty-seven. Any city or town making said scenic road designation may make an ordinance or by-law establishing that a violation of this paragraph shall be punished by a fine not to exceed three hundred dollars.

Designation of a road as a scenic road shall not affect the eligibility of a city or town to receive construction or reconstruction aid for such road pursuant to the provisions of chapter ninety. (Added in 1973; last amended in 1989)

## **CHAPTER 41. OFFICERS AND EMPLOYEES OF CITIES, TOWNS AND DISTRICTS.**

### **Chapter 41: Section 1. Officers to be elected; tenure.**

Section 1. Every town at its annual meeting shall in every year when the term of office of any incumbent expires, and except when other provision is made by law or by charter, choose by ballot from its registered voters the following town officers for the following terms of office:

[thirteenth] A tree warden for the term of one or more years, unless the town by vote or by-law provides that he shall be appointed. (Added in 1785; last amended in 1984)

*Editorial notes: Towns may elect a tree warden and thereby confer full care and control of the public shade trees. Wright v. City of Chelsea, 207 Mass. 460 (1911)*

*The act requires every town, at its town meeting, to elect a tree warden. For regular appointment of a tree warden, please see Ch. 41, Sections 40 and 106; for temporary appointment of a tree warden, please see Chapter 41, Section 11; for replacement of a tree warden, please see Ch. 41, Section 69C-E or G; and for restoration of replaced tree warden office, please see Ch. 41, Section 69F.*

## **CHAPTER 87. SHADE TREES**

### **Chapter 87: Section 1. Public shade trees; definition.**

Section 1. All trees within a public way or on the boundaries thereof including trees planted in accordance with the provisions of Section 7 shall be public shade trees; and when it appears in any proceeding in which the ownership of or rights in a tree are material to the issue, that, from length of time or otherwise, the boundaries of the highway cannot be made certain by records or monuments, and that for that reason it is doubtful whether the tree is within the highway, it shall be taken to be within the highway and to be public property until the contrary is shown. (Added in 1899; last amended in 1998)

*Editorial notes: Underlined language added in 1998.*

*Please see G.L. c.86, Section 1 (trees within highway boundaries).*

*The definition of a public shade tree is statutory and the discretion and judgment of an officer appointed by a local authority controls wholly their care, preservation and removal. Donahue v. City of Newburyport, 211 Mass. 561 (1912)*

*Public shade trees are trees within public way, other than those on a state highway. City of Medford v. Metropolitan District Commission, 303 Mass. 537 (1939).*

*Local officers, rather than cities and towns, have control of public shade trees [on state highways] within cities and towns. City of Medford v. Metropolitan District Commission, 303 Mass. 537 (1939).*

*Evidence that public shade trees have suffered to stand more than 20 years where they were planted raises the presumption that they were planted under lawful authority. Bliss v. Ball, 99 Mass. 597 (1868)*

## **Chapter 87: Section 2. Powers of tree wardens.**

Section 2. The tree warden of a town may appoint and remove deputy tree wardens. He and they shall receive such compensation as the town determines or, in default thereof, as the selectmen allow. He shall have the care and control of all public shade trees, shrubs and growths in the town, except those within a state highway, and those in public parks or open places under the jurisdiction of the park commissioners, and shall have care and control of the latter, if so requested in writing by the park commissioners, and shall enforce all the provisions of law for the preservation of such trees, shrubs and growths. He shall expend all money appropriated for the setting out and maintenance of such trees, shrubs and growths, and no tree shall be planted within a public way without the approval of the tree warden, and in towns until a location therefor has been obtained from the selectmen or road commissioners. He may make regulations for the care and preservation of public shade trees and establish fines and forfeitures of not more than twenty dollars in any one case for violation thereof; which, when posted in one or more public places, and, in towns, when approved by the selectmen, shall have the effect of town by-laws. (Added in 1896; last amended in 1915)

*Editorial notes: Please see G.L. Chapter 132, Section 25 (foliage pests); Chapter 41, Section 1 (election); Chapter 92, Section 33 (parks commissions); Chapter 41, Sections 21, 23 and 106 (selectman appoint).*

*Municipal tree wardens appointed under Chapters 363, 53 (Sections 12 and 13) and 296 (Sections 2 and 3) are public officers and not "servants" or "agents" within Chapter 171, Section 2, Chapter 375 (which authorizes recovery for negligent death caused by a person or corporation or their "agents" or "servants." Donahue v. Town of Newburyport, 211 Mass. 561 (1912).*

*These two sections (Sections 1 and 2 of this chapter) confer upon the tree warden absolute power respecting the setting out, care, maintenance and removal of shade trees and the enforcement of all provisions of law for their preservation, with the exception of trees under the jurisdiction of park commissioners, but of those also on request of the park commissioners, and with the further exception that no shade trees shall be planted within the public way without license from the Selectman or road commissioners where such authority has been vested in them. These sections define the power and authority of the tree warden respecting shade trees. They leave substantially nothing in*

*this regard for the municipal action of such cities and towns as have no special charter provision touching the subject. Donahue v. City of Newburyport, 211 Mass. 561 (1912).*

**Chapter 87: Section 3. Cutting of public shade trees; public hearing; damages to fee owner.**

Section 3. Except as provided by section five, public shade trees shall not be cut, trimmed or removed, in whole or in part, by any person other than the tree warden or his deputy, even if he be the owner of the fee in the land on which such tree is situated, except upon a permit in writing from said tree warden, nor shall they be cut down or removed by the tree warden or his deputy or other person without a public hearing and said tree warden or his deputy shall cause a notice of the time and place of such hearing thereof, which shall identify the size, type and location of the shade tree or trees to be cut down or removed, to be posted in two or more public places in the town and upon the tree at least seven days before such hearing and published in a newspaper of general circulation in the city or town once in each of two successive weeks, the first publication to be not less than seven days before the day of the hearing or if no such local newspaper exists then in accordance with the provisions of section six of chapter four; provided, however, that when a public hearing must be held under the provisions of this section and under section fifteen C of chapter forty prior to the cutting or removal of a tree, such hearings shall be consolidated into a single public hearing before the tree warden and the planning board, or if there is no planning board, the selectmen of a town or the city council of a city, and notice of such consolidated public hearing shall be given by the tree warden or his deputy as provided herein. Any person injured in his property by the action of the officers in charge of the public shade trees as to the trimming, cutting, removal or retention of any such tree, or as to the amount awarded to him for the same, may recover the damages, if any, which he has sustained, from the town under chapter seventy-nine. (Added in 1867; last amended in 1978)

*Editorial notes: Public shade trees may generally be removed only by the tree warden, and not by him without a public hearing, and not by him without approval by the selectman or mayor if written objection has been made. City of Medford v. Metropolitan District Commission, 303 Mass. 537 (1939).*

*[The tree wardens] power to remove a public shade tree is somewhat limited and prescribed by the provisions of Chapter 87, Section 3, requiring a public hearing before he acts or authorizes action in the matter. Jones v. Inhabitants of the Town of Great Barrington, 273 Mass. 483 (1931).*

*Recovery of damages resulting from public shade tree falling upon dwelling cannot be predicated upon town's negligent failure to keep public way in repair. Jones v. Inhabitants of the Town of Great Barrington, 273 Mass. 483 (1931).*

*Liability of town as owner of or in control of the public streets for failure to remove decayed public shade tree constituting nuisance to adjoining land owner does not*

*rest upon "negligence." Jones v. Inhabitants of the Town of Great Barrington, 273 Mass. 483 (1931).*

*Liability of town for failure to remove decayed public shade tree from public highway rests upon facts showing maintenance of such trees constitutes nuisance to such adjacent landowners. Jones v. Inhabitants of the Town of Great Barrington, 273 Mass. 483 (1931).*

*City officer was not negligent in not removing tree from street, in absence of showing that decay was visible. Cody v. City of North Adams, 265 Mass. 54 (1928).*

#### **Chapter 87: Section 4. Cutting down or removal of public shade trees, approval of selectmen or mayor.**

Section 4. Tree wardens shall not cut down or remove or grant a permit for the cutting down or removal of a public shade tree if, at or before a public hearing as provided in the preceding section, objection in writing is made by one or more persons, unless such cutting or removal or permit to cut or remove is approved by the selectmen or by the mayor. (Added in 1915; no amendments since that time)

*Editorial notes: Please See G..L. Chapter 87, Section 6 (penalty); and Chapter 40, Section 15C (scenic roads).*

*Public shade trees may generally be removed only by the tree warden, and not by him without a public hearing, and not by him without approval by the selectman or mayor if written objection has been made. City of Medford v. Metropolitan District Commission, 303 Mass. 537 (1939).*

#### **Chapter 87: Section 5. Cutting down, trimming or removing bushes and small trees**

Section 5. Tree wardens and their deputies, but no other person, may, without a hearing, trim, cut down or remove trees, less than one and one half inches in diameter one foot from the ground, and bushes, standing in public ways; and, if ordered by the mayor, selectmen, road commissioners or highway surveyor, shall trim or cut down trees and bushes, if the same shall be deemed to obstruct, endanger, hinder or incommode persons traveling thereon or to obstruct buildings being moved pursuant to the provisions of section eighteen of chapter eighty-five. Nothing contained in this chapter shall prevent the trimming, cutting or removal of any tree which endangers persons traveling on a highway, or the removal of any tree, if so ordered by the proper officers for the purpose of widening the highway and nothing herein contained shall interfere with the suppression of pests declared to be public nuisances by section eleven of chapter one hundred and thirty-two, including the Dutch elm disease. (Added in 1915; last amended in 1941)

*Editorial notes: Please see G.L. Chapter 87, Sections 3 (cutting) and 6 (penalty); and Chapter 40, Section 15C (scenic roads).*

*An officer having charge of trees belonging to a municipality may, and if required by surveyors or road commissioners shall, trim trees, except public shade trees in towns, and bushes standing in ways, etc., does not authorize a tree warden to cut down trees on private lands nor to cut off parts of such trees extending over the street. Commonwealth v. Byard, 200 Mass. 175 (1908).*

*Designated town officials without notice or hearing were bound to order warden to trim or remove trees dangerous to public travel. Jones v. Inhabitants of the Town of Great Barrington, 273 Mass. 483 (1931).*

*If a shade tree endangers travelers on a public way, it may be trimmed, cut or removed by a tree warden or his deputy without notice and hearing; no other person is authorized to so act. The power of selectman, mayor and alderman, road commissioners and highway surveyor is limited to ordering removal of a tree by the tree warden.. Valvoline Oil Co. v. Town of Winthrop, 235 Mass. 515 (1920).*

*Where the limb of a tree over a highway grew so low as to obstruct public travel, it was the duty of some official [selectman, mayor and alderman, road commissioners and highway surveyor] to order the tree trimmed or removed by the tree warden or deputy and in the meantime, the town was required to do what it reasonable could protect travelers. Valvoline Oil Co. v. Town of Winthrop, 235 Mass. 515 (1920).*

*Failure of the town officials named in Chapter 87, Section 5 to cause the tree warden to remove a tree within the public highway or the limbs of such a tree, which tree or limbs obstruct, endanger, hinder or incommode travelers, will render the town liable in an action of tort for such failure. Jones v. Inhabitants of the Town of Great Barrington, 273 Mass. 483 (1931).*

### **Chapter 87: Section 6. Penalty for violation of secs. 3, 4 and 5.**

Section 6. Violations of any provision of the three preceding sections shall be punished by forfeiture of not more than five hundred dollars to the use of the city or town. (Added in 1915; no amendments enacted since that time)

### **Chapter 87: Section 7. Planting of shade trees.**

Section 7. Cities and towns may appropriate money for the purpose of acquiring and planting shade trees in public ways. The tree warden, or a private organization acting with the written consent of the tree warden, may plant shade trees acquired with public or private funds in a public way, or if he deems it expedient, upon adjoining land at a distance not exceeding 20 feet from the layout of such public way for the purpose of improving, protecting, shading or ornamenting the same; provided, however, that the written consent of the owner of such adjoining land shall first be obtained. (Added in 1915; last amended in 1998)

*Editorial note: This provision was modified in 1998 to expand the ability of a tree warden and municipality to effectuate the planting of trees to benefit the public and public spaces. The prior language required the tree warden to purchase and plant the tree while the new language allows for private organizations to purchase and plant trees with the written permission of the tree warden.*

*Please see C.L. Chapter 40, Section 5, paragraph 10 (appropriations); Chapter 180, Section 4, paragraph 1(charitable corporations); and Chapter 167D (shade tree accounts).*

### **Chapter 87: Section 8. Trees on state highways**

Section 8. The department of highways, in this chapter called the department, shall have the care and control of all trees, shrubs and growths within state highways, and may trim, cut or remove such trees, shrubs and growths, or license the trimming, cutting or removal thereof. No such tree, shrub or other growth shall be trimmed, cut or removed by any person other than an agent or employee of the department, even if he be the owner of the fee in the land on which such tree, shrub or growth is situated, except upon a permit in writing from the department. Any person injured in his property by the action of the department as to the trimming, cutting, removal or retention of any such tree, shrub or other growth, may recover the damages, if any, which he has sustained, from the commonwealth under chapter seventy-nine. (Added in 1905; last amended in 1991).