To: Lincoln Planning Board Members

From: Susan Hall Mygatt, for the Lincoln Tree Preservation Study Group

Re: Report on progress to date

Date: January 9, 2025

As you know, a small group of Lincoln residents have been meeting regularly since last spring to study the issues and opportunities relating to the preservation of Lincoln's tree resources. Thank you for giving us an opportunity to let you know what we have been doing since we discussed the subject of tree preservation with you last spring.

The first goal for members of our study group has been to learn about the existing State and local laws, bylaws and regulations relating to Lincoln's tree resources, as well as the bylaws and regulations applicable in a number of neighboring towns. Among our efforts to educate ourselves, we have attended numerous presentations on the issues and opportunities for trees in Massachusetts, joined the mailing lists of regional organizations concerned about trees, and talked to local officials and community members in Bedford, Concord, Wellesley and Newton.

Our second goals are outreach and public education.

#### Outreach:

- We prepared a handout for the State of Town Meeting in December, and have launched an online survey. A copy of the handout is attached. There is a link to the survey in the handout (a QR code), and the survey can also be accessed at <a href="https://bit.ly/LincolnTreeSurvey">bit.ly/LincolnTreeSurvey</a>. We hope each member of the Planning Board will take the survey (it is short and will take only a few minutes), and we thank those of you who have already done so.
- As of January 6, we have 94 responses to the survey. We are attaching a summary of those responses, as well as a copy of the survey questions themselves.

#### **Public Education:**

- We are planning a series of talks for Lincoln residents to address the issues and opportunities facing
  trees in Massachusetts. Our first presentation will be by the Charles River Watershed Association
  (CRWA) and is scheduled for February 13. It will likely address protection of the tree canopy in the
  communities within the Charles River watershed. CRWA did a very interesting presentation on this
  subject, and I am including a PDF of the CRWA presentation with this memo. Of particular interest are
  slides 11-17.
- The other speakers we are considering are David Bloniarz and Peter Del Tredici. Dr. Bloniarz is on the UMass/Amherst faculty of the Dept. of Environmental Conservation, and Project Coordinator at the USDA Forest Service's Urban Natural Resources Institute. Dr. Del Tredici is a Senior Researcher and Botanist at Harvard. We are also in touch with Brian Kane at UMass; he co-wrote the report for MassDOT on tree protection in transportation corridors. The Lincoln Land Conservation Trust will be hosting the first of our presentations, and hopefully the ones that follow.

I am happy to answer any questions you may have, and welcome your suggestions.

Thank you.



### State of the Town Meeting, December 7, 2024

### Lincoln's Trees: What resources do we want to protect?

The Lincoln Tree Preservation Study Group wants to hear from you! Please take our survey (<a href="bit.ly/LincolnTreeSurvey">bit.ly/LincolnTreeSurvey</a>) and attend one or more of the educational events we will schedule in early 2025. The Study Group is an organization of interested Lincoln residents.



# Lincoln's 2009 Comprehensive Plan acknowledges the value of our town's rural and agricultural character.

"The fundamental quality that contributes to Lincoln's rural character is its pattern of buildings, roads, and spaces that appear unplanned or 'organic' in their organization." (p.100)

"Guiding the design of new buildings to maintain the town's existing rural aesthetic is critical." (p.107)

"Thoughtful planning has resulted in a community that retains much of its historic rural character. However, the town's desirability and the resulting development pressures are threatening this character." (p.111)

## But Lincoln's current bylaws and regulations\* have fewer protections for trees than our neighboring towns.

While trees in the public right of way and in wetlands and buffer zones have some protections, other trees in Lincoln have virtually none. For example:

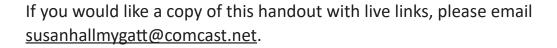
- Site plan review under Lincoln's zoning bylaw requires a 10-foot vegetated buffer along lot perimeters, unless otherwise agreed to by the Planning Board.
- The Planning Board's Site Plan Review Checklist and Stormwater Management Regulations require that trees larger than 12" in diameter be identified if they are to be removed, but there is no standard for approving the proposed removal or requiring replacement of these trees.

# Neighboring towns have taken steps to inventory, protect, and preserve their trees.

- ♦ CONCORD has a <u>Tree Preservation Bylaw</u> that requires that residential property owners preserve trees that are over six inches in diameter in a lot's setback area during major development projects.
- ♦ LEXINGTON has a <u>Tree Bylaw</u> for the purpose of preserving and protecting both public shade trees and certain trees on portions of private property, and a <u>Tree Management Manual</u>.
- ♦ WELLESLEY has a <u>Tree Bylaw</u> to encourage the preservation and protection of sizable trees on portions of private property during significant demolition and/or development activity.
- ♦ WESTON has a <u>Tree Advisory Group</u>, charged with promoting community tree health, in coordination with the Tree Warden and local and state agencies.
- ♦ BEDFORD has an <u>Arbor Resources Committee</u> and a <u>tree policy</u> and has hired a consultant to prepare an extensive inventory of their trees.
- ♦ MEDWAY has a <u>Tree Preservation Bylaw</u>, which provides for the regulation of the planting, maintenance, protection, and removal of trees within a 'tree preservation area'.
- ♦ WESTFORD has a <u>Tree and Invasive Species Inventory and Management Plan</u>, developed by a consultant in 2023 with funding from a MA Municipal Vulnerability Preparedness Action Grant.

## Should Lincoln do more for tree protection? The Tree Preservation Study Group wants to hear from you!

Please take our survey (<u>bit.ly/LincoInTreeSurvey</u>) and attend one or more of the educational events we will schedule in early 2025. The Study Group is an organization of interested Lincoln residents.





\*Bylaws and regulations relevant to Lincoln's trees: MA Scenic Roads Act and MA Public Shade Trees
Act; Lincoln's General Bylaws (Art. XVII, Scenic Roads); Zoning Bylaw (Section 17); Residential Site Plan
Review Checklist; Stormwater Management Bylaw (Art. 32 of the General Bylaws); Stormwater
Management Regulations; Wetlands Protection Bylaw; and Comprehensive Climate Action Plan.



# Lincoln Tree Preservation Survey Questions December 2024

#### Q1. What best describes how you feel about the number of trees in Lincoln?

- Lincoln has an appropriate number of trees.
- Lincoln needs more trees.
- Lincoln has too many trees.
- I have no opinion.
- Q2. Rate the following values of Lincoln's trees on a scale from 1 to 5, with 1 indicating the value(s) that are most important to you and 5 indicating the value(s) that are least important to you. Please rate each value any number 1 through 5.
  - ECOLOGICAL FUNCTION: Trees absorb and store carbon; support wildlife habitat and biodiversity; absorb stormwater, stabilize soil, and cool buildings and paved areas; improve air quality; and mitigate wind speeds.
  - TOWN CHARACTER AND AESTHETICS: Trees enhance Lincoln's rural character and sense of place.
  - MENTAL AND PHYSICAL HEALTH: Trees encourage outdoor recreation and reduce human stress.
  - ECONOMIC BENEFITS: Trees increase property values, and reduce heating/cooling needs and expenses.
- Q3. Rate the following potential threats to Lincoln's trees on a scale from 1 to 5, with 1 indicating the threat(s) that concern you most and 5 indicating the threat(s) that concern you least. Please rate each threat any number 1 through 5.
  - CHANGING CLIMATE PATTERNS, such as increasing drought, rain, temperatures extremes, strong winds and violent storms.
  - ROOT OR TRUNK DAMAGE from human activity (construction and road maintenance vehicles, equipment storage, etc.).
  - EXTENSIVE TREE REMOVAL FOR DEVELOPMENT (commercial and/or residential).
  - INVASIVE PLANT SPECIES, PESTS OR DISEASES.
  - LACK OF PUBLIC RESOURCES (staff, funding) for tree protection and care.
  - LACK OF APPROPRIATE TOWN BYLAWS to protect trees.

Q4.	How familiar are	you with	Lincoln's	rules and	l regulations	regarding	trees on	private	and
	public land?								

- Very
- Somewhat
- Not at all

### Q5. Which of these topics related to trees would you like to learn more about? (Please check all that apply.)

- Examples of tree protection/preservation regulations in other communities
- Existing tree protection/preservation regulations in Lincoln
- Challenges presented to Lincoln's tree resources by development
- Challenges presented to trees in transportation corridors (roads and rail tracks)
- Opportunities to mitigate damage to Lincoln's trees from climate change, pests, and/or disease
- Other [open response]

Q6.	Please share any additional thoughts on tree protection and preservation in Lincoln.
Q7.	Please put me on the Tree Preservation Study Group contact list. This is my preferred email (which we will keep private):
<b>Q</b> 8.	Name: (optional)



Please complete our online survey at bit.ly/LincolnTreeSurvey.



### Lincoln Tree Preservation Study Group: Survey Summary Based on 94 responses submitted as of 1/6/25

#### **KEY TAKEAWAYS**

#### Regarding # of Trees in Lincoln

**63%** of respondents think Lincoln has the **appropriate # of trees** 30% of respondents think Lincoln needs more trees 3% of respondents think Lincoln has too many trees.

#### Top 3 Values of Trees That Respondents Rated as Most Important to Them

**83.5**% identified **Ecological** functions of trees 64% identified Town Character and Aesthetics 52% identified Mental and Physical Health.

#### 4 Threats to Trees that Respondents Rated as Threats of the Highest Concern

63% identified Extensive tree removal due to development

58% identified Changing Climate patterns

58% identified Invasive species, pests, diseases

45% identified Lack of Appropriate Town Bylaws.

#### **Familiarity with Town Bylaws Related to Trees**

88% are Somewhat or Not at All familiar with Lincoln's rules and regulations regarding trees.

#### **Top 4 Areas of Interest to Learn More**

75% - Opportunities to mitigate damage to Lincoln's trees from climate change, pests, and/or disease.

66% - Existing tree protection/preservation regulations in Lincoln

62% - Challenges presented to Lincoln's tree resources by development

62% - Examples of tree protection/preservation regulations in other communities.

#### **Additional Comments from Respondents**

**Find better balance:** Between development and preservation, and between tree management on public vs private land

Minimize damage: From salt on roadways, invasives, beavers

**Campaign ideas**: Leave the leaves, label trees, plant the best trees for wildlife/eco-benefit, preserve edge/fields, healthy tree maintenance, open field and green space preservation **Better communication** of the town's vision for trees.

#### Where We Can Help: EDUCATION

75% want to learn how to mitigate damage to existing trees.

66% want to learn more about existing tree protections in Lincoln.

62% want to learn more about tree protection/preservation regulations in other communities.

62% want to learn about how development may impact our tree resources.

#### **SURVEY DATA DETAILS**

#### Question 1: What best describes how you feel about the number of trees in Lincoln?

Lincoln has the appropriate number	62.8%
Lincoln needs more trees	29.8%
Lincoln has too many trees	3.2%
No opinion	4.2%

Question 2: Rate the following values of Lincoln's trees on a scale from 1 to 5, with 1 indicating the value(s) of trees that are most important to you and 5 indicating the value(s) of trees that are least important to you.

#### **ECOLOGICAL FUNCTION**

83.5%	Most important
10.6%	2 <sup>nd</sup> most important
4.3%	3 <sup>rd</sup> most important
0.5%	4 <sup>th</sup> most important
1.1%	Least important

#### TOWN CHARACTER AND AESTHETICS

63.8%	Most important
20.2%	2 <sup>nd</sup> most important
10.6%	3 <sup>rd</sup> most important
4.3%	4 <sup>th</sup> most important
1.1%	Least important

#### MENTAL AND PHYSICAL HEALTH

52.1%	Most important
25.5%	2 <sup>nd</sup> most important
18.1%	3 <sup>rd</sup> most important
0.8%	4 <sup>th</sup> most important
3.5%	Least important

#### **ECONOMIC**

30.2%	Most important
25.6%	2 <sup>nd</sup> most important
22.1%	3 <sup>rd</sup> most important
16.3%	4 <sup>th</sup> most important
5.8%	Least important

Question 3: Rate the following potential threats to Lincoln's trees on a scale from 1 to 5, with 1 indicating the threat(s) that concern you most, 5 indicating the threat(s) that concern you least.

#### **EXTENSIVE TREE REMOVAL FOR DEVELOPMENT**

62.9%	Most concerned
13.4%	2 <sup>nd</sup> most concerned
9.3%	3 <sup>rd</sup> most concerned
11.3%	4 <sup>th</sup> most concerned
3.1%	Least concerned

#### **CHANGING CLIMATE PATTERNS**

57.7%	Most concerned
30.9%	2 <sup>nd</sup> most concerned
9.3%	3 <sup>rd</sup> most concerned
2.1%	4 <sup>th</sup> most concerned

#### INVASIVE PLANT SPECIES, PESTS OR DISEASES

57.7%	Most concerned
23.7%	2 <sup>nd</sup> most concerned
15.5%	3 <sup>rd</sup> most concerned
2.1%	4 <sup>th</sup> most concerned
1.0%	Least concerned

#### LACK OF APPROPRIATE TOWN BYLAWS

45.4%	Most concerned
14.4%	2 <sup>nd</sup> most concerned
25.8%	3 <sup>rd</sup> most concerned
4.1%	4 <sup>th</sup> most concerned
10.3%	Least concerned

#### ROOT OR TRUNK DAMAGE DUE TO HUMAN ACTIVITY

41.9%	Most concerned
22.0%	2 <sup>nd</sup> most concerned
19.8%	3 <sup>rd</sup> most concerned
9.3%	4 <sup>th</sup> most concerned
7.0%	Least concerned

#### LACK OF PUBLIC RESOURCES

30.2%	Most concerned
34.9%	2 <sup>nd</sup> most concerned
22.1%	3 <sup>rd</sup> most concerned
5.8%	4 <sup>th</sup> most concerned
7.0%	Least concerned

### Question 4: How familiar are you with Lincoln's rules and regulations regarding trees on private and public land?

#### 47.9% Somewhat

40.4% Not at all

11.7% Very

Question 5: Which of these topics related to trees would you like to learn more about? (Please check all that apply.)

- 75% Opportunities to mitigate damage to Lincoln's trees from climate change, pests, and/or disease.
- 66% Existing tree protection/preservation regulations in Lincoln
- 62% Challenges presented to Lincoln's tree resources by development
- 62% Examples of tree protection/preservation regulations in other communities
- 41% Challenges presented to trees in transportation corridors (roads and rail).

**Question 6: Other Comments** (This is a general summary of comments made by several respondents.)

#### **Finding Balance**

- Balance tree protection with HCA goals
- Find a way to do development without clearing trees from lots
- Balance tree preservation with private property rights
- Tree protection on private land should be as important as on public land.

#### **Minimize Damaging Forces**

- Find a way to minimize damage from climate, invasives, pests, and beaver damage
- Reduce or eliminate the use of salt on Lincoln roadways.

#### **Areas for Consideration**

- More roadside and public plantings
- Identify /encourage trees that help support wildlife
- Emphasize overstory hardwoods over fruit trees
- Look at field and edge habitat protections, as well as tree protections
- Campaign ideas: Leave the Leaves; Label some trees on trails
- Better communication about the town's vision regarding tree preservation
- Consider the benefit of having a paid Tree Warden.