

# We're partnering to preserve and expand Newton's

tree canopy.



### What harms trees?

#### **Development/Construction Activity**

Newton loses private trees to development as developers tear down smaller homes and replace them with bigger homes (see for example <a href="Tree Story #5">Tree Story #5</a>). Many developers see trees as a nuisance and prefer clear-cutting rather than working around them. Trucks and equipment can also cause soil compaction. A driveway too close to a tree can compact soil, affect site drainage and soil quality, and kill tree roots.

#### What you can do to be a Tree Protector:

Plan a design with architects and contractors to protect mature trees. For
inspiration, see examples from <u>Dwell</u> and <u>Trendir</u>. Closer to home, note how the
owners of this Newton home altered their driveway to preserve the public shade

tree on the berm:

 Have conversations with your neighbors and local businesses encouraging them to preserve trees. Be alert to changes in your neighborhood property ownership that might put trees at risk of being cut



- down. Talk with new owners proactively.
- Review <u>Newton's Tree Preservation Ordinance</u> for guidelines on protecting trees and share information with neighbors. Note these answers from the City's <u>FAQs</u>:
  - Trees were removed from a property recently. Did this property have permission to remove these trees?
    - The removal of all trees on private property in the City requires a permit from the Tree Warden/City Forester. To find out if a specific property was issues a tree permit please go to the City's online permit portal https://newtonma.viewpointcloud.com/search. From here you can search an address for many different permits, including tree permits. If you can not find the permit information or believe trees were removed without a permit please email <a href="mailto:urbanforestry@newtonma.gov">urbanforestry@newtonma.gov</a>
  - There is construction activity taking place on the lot next to my property and I am afraid the work will damage trees on my property. Is this allowed?
    - City ordinance requires that trees be protected during construction. Specifically all construction activity within the Tree Save Area must have a protection plan created by a certified arborist. The Tree Save Area is the area within a radius around the tree trunk of 1.5 feet for every inch of trunk diameter or the drip line edge whichever is greater. If constructions is taking place that you feel is harming trees on your property please email urbanforestry@newtonma.gov to report your concerns.

#### **Physical Threats**

Aggressive pruning or lawn mowers and trimmers damage bark and leave wounds that open the tree to pests and diseases.

#### What you can do to be a Tree Protector:

- Consult a tree care profession to ensure better care and appropriate pruning.
- Use tree guards to protect the base of trees from trimmers and other equipment.
- Use small tools or remove weeds around trees by hand.

#### **Extreme** weather

Drought, flooding, and extreme heat and cold can damage trees and make them more susceptible to disease, insects, and high winds.

#### What you can do to be a Tree Protector:

- Provide your trees with proper care and regular maintenance. Healthy trees are more resilient to threats such as extreme weather and pests.
- Regular pruning of dead branches from otherwise healthy trees reduces the possibility that branches will come down in a storm.

#### **Road Salt**

Road salt can dehydrate trees, making them lose their ability to absorb water and nutrients. Salt replaces nutrients such as calcium, magnesium, and potassium in the soil, damaging the roots and slowing tree growth. Chloride ions from salt build up in the leaves of plants, disrupting photosynthesis.

#### What you can do to be a Tree Protector:

- Choose de-icers for your walkways and driveways, such as calcium chloride or calcium magnesium acetate (CMA), that are less corrosive than road salt.
- To save a salt-damaged tree, deep root fertilization can help get nutrients back to the roots.

#### **Mulch Volcanoes**

A mulch volcano is a thick mound of mulch piled up around the trunk of a tree. It can cause root rot, bark breakdown, disease, harmful fungi, and decay. It can lead to root circling or girdling and cause trees to become structurally unstable.

#### What you can do to be a Tree Protector:

- Learn the proper way to mulch trees. Clear mulch from the base of the tree.
   Mulch should be no more than 2 or 3 inches deep and should not touch the bark.
   See <u>Mulch Volcanoes Kill Trees</u>.
- Urge your landscaping contractor and city contractors to stop creating mulch volcanoes.

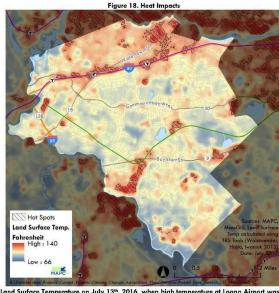
#### **Heat Islands**

As the number of days over 90°F increases with climate change, tree equity is more

important than ever. The City of Newton has documented heat islands located primarilynorth of the Pike (Auburndale, Nonantum, Newtonville, West Newton) as well as in Upper Falls. There are additional hot spots across the City. See this map, figure 18 from the City's 2018 Climate Vulnerability Assessment and Adaptation and Resiliency Action Plan.

#### What you can do to be a Tree Protector:

 Plant trees on your property. Talk with neighbors about preserving the exiting trees in your neighborhood and planting more.



Land Surface Temperature on July 13th, 2016, when high temperature at Logan Airport was 92 degrees Fahrenheit.

Ask the City to plant a tree in front of your home: Apply for <u>Newton's Tree</u>
 <u>Conservancy</u> tree planting program.

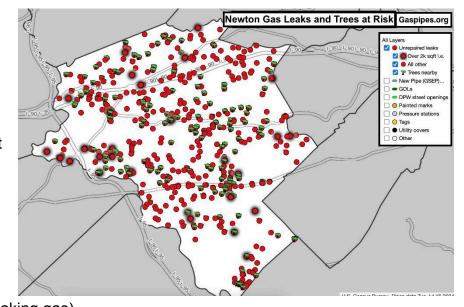
#### **Gas Leaks**

Gas leaks kill trees. This map shows gas leaks documented by <a>Gaspipes.org</a> (red dots)

and the trees (green dots) at risk from those leaks:

## What you can do to be a Tree Protector:

Look for sick or dead street trees. Are there bare branches when other trees are blooming and full of leaves? Are there mushrooms feeding on dying wood (they eat the leaking gas).



Do you smell gas (rotten eggs)? Report gas leaks, odors and emergencies (24 hours a day): 911 or 1-800-231-5325

 Report trees that are damaged by gas leaks to the Newton Forestry Department 617-796-1500, urbanforestry@newtodnma.gov.

#### **Pesticides**

Trees can absorb herbicides through their roots from runoff or drift from pesticide applications on nearby property. Signs of chemical injury or damage include curled or cupped leaves, stunted growth, discolored foliage (yellowing, browning, or unusual color variations), leaf distortion or twisting, leaf scorch (brown edges), leaf drop, distorted or stunted branch growth, and in severe cases, branch dieback, or tree death.

#### What you can do to be a Tree Protector:

- Hire a landscaper who practices organic landscaping and gardening. See Green Newton's <u>recommended lawn care providers</u>.
- Learn about safe organic landscaping and pest control. Here are some readings that can help:
  - What to Know Before You Hire a Landscaper or Pest Control Professional
    by Ellie Goldberg. This brief article gives tips for hiring and also
    information on how to do your own pesticide-free yard care.
  - Introduction to Organic Lawns and Yards by Sarah Little, Ph.D. The PDF
    of this booklet offers a simple explanation of organic land care practices
    and principles which is perfect for the homeowner. The checklists offer
    easy examples of how to have an eco-friendly yard.