

Karen Edwards

From: John Parry <dccparry@gmail.com>
Sent: Tuesday, July 24, 2018 4:41 PM
To: Michael Behrendt; Karen Edwards
Subject: Letter to Planning Board Regarding Tree Trimming & Removal
Attachments: Utility Line Trimming.pdf

5 Denbow, Durham NH, 03824
July 24, 2018

Dear Durham Planning Board:

I am writing concerning the proposed tree trimming and tree removal on Durham Point/Bay Road, Bennett Road, and Packers Falls Road. I am writing as a resident of Durham, but I have worked for 40 years in forestry, the past 30 working in urban forestry. I do not have experience in utility forestry, but am a Certified Arborist and Qualified in Tree Risk Assessment.

I drove these roads a couple of times, but had a hard time finding many of the trees flagged for removal. I was able to find only about 8 trees. The flagged trees I saw did seem like reasonable candidates for removal due to tree decline, significant defects and undesirable species.

I am assuming that the tree trimming work proposed will use the same trimming methods that have been used on other roads in Durham in recent years. I am most familiar with it in my neighborhood (around Denbow, Frost, Pinecrest, Sunnyside, etc.) which was done 2 – 3 years ago. It could be that the practice has been improved since then, but I have some concerns and questions about this method used.

I know Eversource has a tough job in maintaining the utility lines, and I appreciate their work. I agree that trimming is needed periodically to maintain the lines and reduce power outages. However, based on what I see in my neighborhood, I feel that this trimming method is too aggressive, and there needs to be a better balance between maintaining good tree health and providing adequate clearance for the utility lines.

The newer, expanded approach seems to be to cut a large number of limbs in hopes of removing the small number of branches that may fail in the future. Cutting more and more limbs has a diminishing return and at some point it is doing more harm than good - I think we are past that point. In the short term the trimming may reduce power outages, but there are negatives to this approach that may increase tree problems for the Town in the long term.

To me, a few of the more important concerns/questions to answer are (see attached document/pictures for more detail);

The approach removes too much foliage at one time, having a negative impact on tree growth & health.

It creates a large number of cuts and wounds which can lead to decay spots. Decay can spread over time (more in some species than others) and lead to tree or branch failure later in life.

Many trees re-sprout prolifically after trimming - the sprouts are weakly attached, and are prone to failure as they get larger.

The removal of many lower limbs changes the shape and balance of the tree crown, and can make some trees more prone to damage in high winds.

The tree loses its natural shape, and many would say it looks unattractive and un-natural.

I support the need for tree trimming on roads and along utility lines, but I feel the Town should consider a more conservative approach (especially on Scenic Roads) that balances good tree health and utility line maintenance. One option is to remove branches in a smaller area above and below utility lines. Outside of that box, remove only a limited number of branches that have a high likelihood of failure. Branches that are more likely to fail have certain traits, that can be identified, and certain tree species are more prone to branch failure. Well trained arborists can identify a large percentage of tree branches that may ultimately fail, and they can focus on removing just those limbs.

This more conservative technique would reduce the amount of cutting done, the cost to the utility company, the impact on the long-term tree health, and maintain the scenic value of our rural Roads.

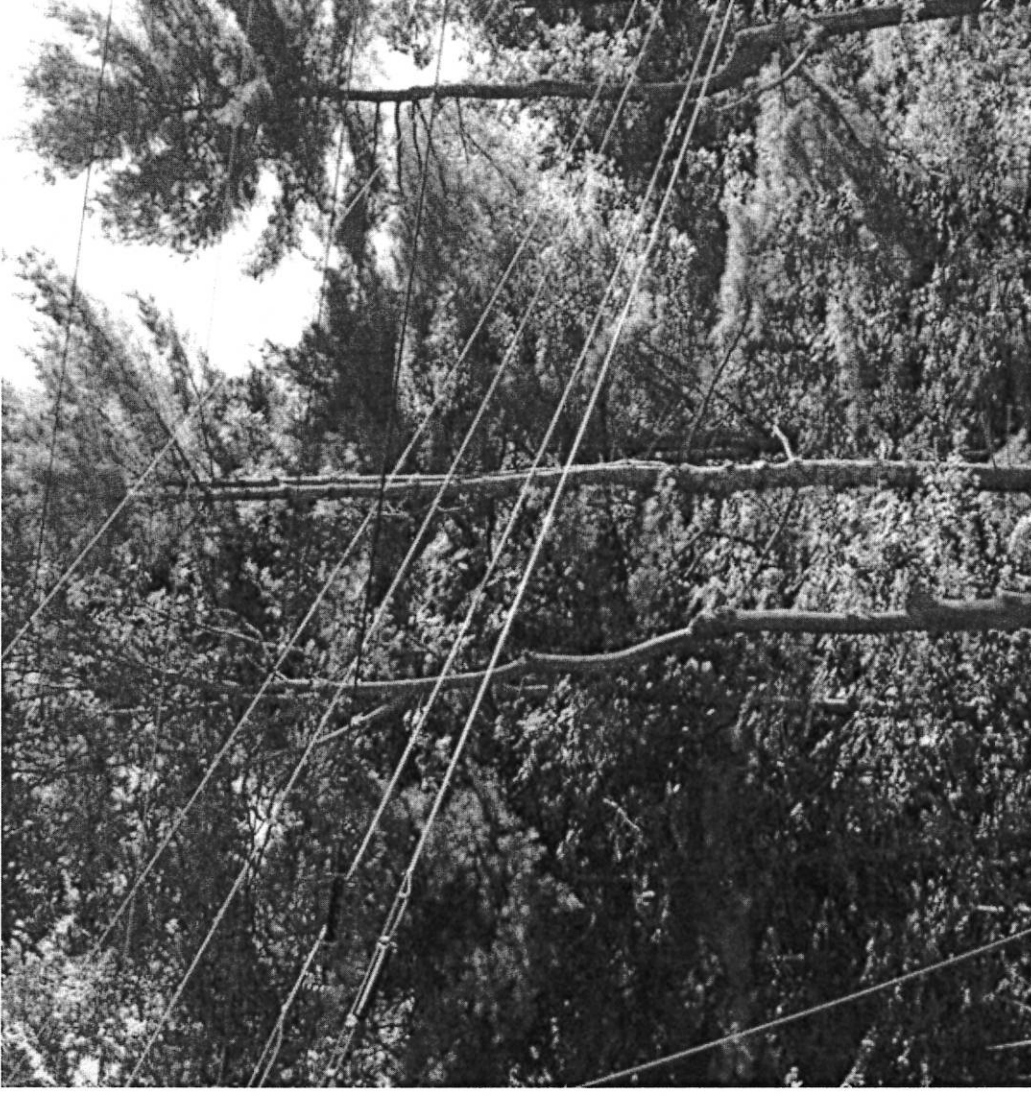
Thanks for your consideration.

John Parry

Issues to Consider When Trimming Trees

Removal of Large Percentage of the Tree Crown and Foliage

Through photosynthesis, leaves form sugars which provide energy for all tree functions. Loss of too much foliage at one time, impacts energy reserves, and has a negative effect on the trees ability to support new growth of roots, stems and leaves, and affects it's ability to defend against disease and insects, wounds and other stress factors. Healthy trees may eventually overcome this loss, but some trees will gradually decline, especially if heavy trimming is repeated periodically.

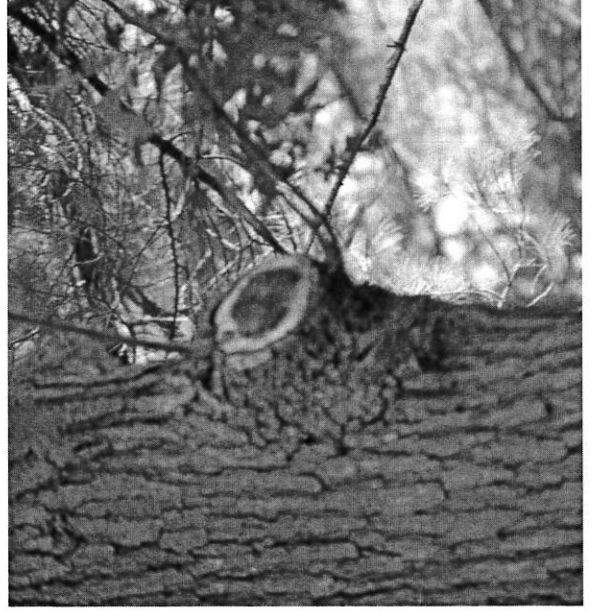
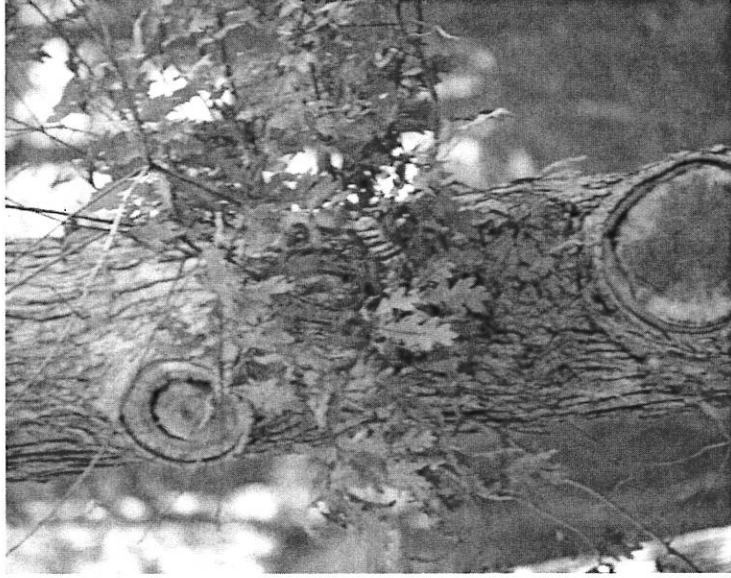


Sprouting

Removal of limbs encourages sprouting of new stems. Most conifer trees (evergreens) don't sprout much, if any. Hardwood do put out sprouts, some species sprout prolifically. These sprouts start from buds just under the bark, so they are not well attached. As they get larger they are more prone to failure.

Trimming of a large number of branches is likely removing many branches that are well attached and not a threat. These branches are then replaced by many sprouts, that are weakly attached and are more likely to fail in the future.

It is a bit like the old story of fishermen, who would catch star fish in their fishing nets. Thinking that the Starfish competed with desirable fish, they would cut up the Starfish to kill them, and throw them overboard. In reality some limbs could re-generate into a new Starfish – actually having a negative impact on the commercial fish population.



Sprouting

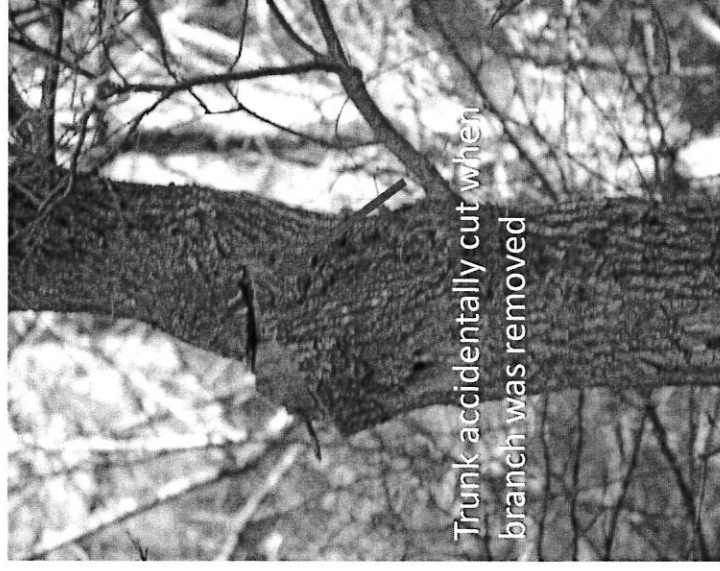
Resprouting at cuts. These wounds may eventually have some decay.
Sprouts will grow quickly and have weak attachment to the tree.



Wounds

The trimming creates thousands of wounds, some small and some large. The tree will try to grow over these wounds over a period of years, but some decay will start. Depending on tree health and species, the tree may compartmentalize these wounds, but in many trees, especially when the wounds are large, the decay becomes extensive over time. This can result in failure of branches and entire trees years later.

With a large amount of trimming, un-intentional cuts are hard to avoid. Accidental cuts into the trunk create additional wounds, and potentially decay and tree failure in the future



Trimming Changes Wind Forces Affecting the Tree

More research has been done in recent years on how pruning and removing a large portion of the crown, changes how high winds affect trees.

Trimming usually removes more of the lower portion of the crown, and raises the center of pressure on the tree.

This is comparable to using a pry bar. If you pull on the end of a pry bar you exert more pressure, with less effort, than if you pull in the middle.

Also, though there is less crown to catch the wind, the center of pressure has moved up the trunk, where wood strength may be less (especially if there are defects near that point).

