



Clearing The Way

*A guide to New Hampshire Electric Cooperative's
Right-of-Way Maintenance Program.*

What is a Right-of-Way?

Right-of-Way (ROW) refers to the corridor or pathway an electric line follows, whether it's along the road or through the woods. ROWs provide line crews with access to lines for improvements, maintenance and repairs. They also provide an operational safety zone between the electric lines and trees, buildings, etc. On the majority of its lines, NHEC holds easements that give it the right to clear land on 15 feet from either side of the wire.

Why is ROW Maintenance Necessary?

ROWs must be periodically recleared to ensure public safety and an acceptable level of service reliability. Keeping lines clear of trees and brush also sustains a safe environment for our consumers, the general public Co-op employees and construction contractors. Keeping electric lines clear of trees and other undesirable vegetation also minimizes outages through "storm proofing" efforts and provides easy access for line maintenance and inspections.

*Many outages are the result of insufficient
ROW maintenance.*



How Are ROWs Maintained?

The Co-op's ROW maintenance program uses an integrated approach to establish and maintain a cycle of clearing. The program has two phases: mechanical clearing and selective herbicide application. Both methods are used to balance cost effectiveness and environmental impact.

A skidder bucket is used to perform trimming on off-road overhead lines (left)



An excavator with a mower head is used as another means to reclear brush in right-of-ways on and off road (right)



Mechanical

During this phase of the program NHEC uses mechanical means to clear branches over/above and alongside electric lines. Bucket trucks, excavators, skidders, mowing machines, chippers, chain saws and hand-held tools are utilized in mechanical cutting along roads, highly populated areas, agricultural lands and other sensitive areas. The results of mechanical clearing will last for about 7 to 10 years before the process should be repeated to minimize reclearing expenses.

Also using mechanical means, NHEC clears trees on the ground below electric lines including evergreens and hardwoods (e.g. maple, oak, poplar and gray birch).

The hardwood shoots that sprout from stumps following ground level cutting will again impact the lines in as little as five years and will need to be cut again before overhead aerial side clearing works needs scheduling.

Selective Herbicide Applications

The supplemental phase, which typically occurs shortly after recutting and one to two years after mechanical clearing, uses herbicides to treat hardwood sprouts. This eliminates the need to recut and reduces the amount of work to be done in the next mechanical clearing cycle. Stump treatments are applied in appropriate recut areas to prevent and retard sprouting of brush. Another type of treatment, basal treatment, focuses on cross country off-road lines. This treatment is not applied on roadside lines where growth can be easily monitored and maintained.



Sprouts on untreated stumps can grow up to five feet tall in one year.

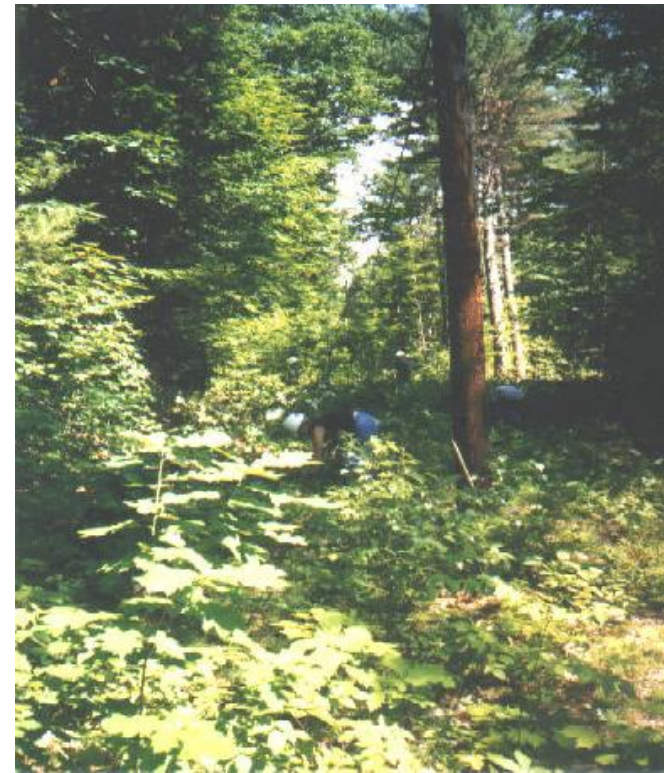
Herbicides are applied manually by one person wearing a backpack unit and spot treating appropriate hardwood species. NHEC does not apply herbicides the entire width of a ROW, nor does it treat trees or shrub species that will not impact our lines even at maturity. The application of herbicides has less of an impact on the environment than the gasoline engines, chain saws and motorized equipment that are used to clear off-road ROWs mechanically.

Does ROW maintenance affect the environment?

NHEC follows industrywide cutting and trimming practices and standards for all mechanical maintenance on ROWs.

Low growing plants and shrubs thrive in a cleared and treated right-of-way.

NHEC uses herbicides registered and approved by the Environmental Protection Agency. Herbicides are selectively applied in compliance with the New Hampshire Department of Agriculture's Division of Pesticide Control. Trained and licensed professionals use great care and respect during the manual application of herbicides. These professionals ensure application is made only to those species which have been identified as undesirable, and could potentially compromise electric service reliability and public safety.



The Co-op's Commitment to Reliability, Safety and the Environment.

The Co-op's right-of-way maintenance program balances the preservation of natural habitats against the service reliability needs of our members and the safety needs to the general public. In fact, the Co-op's ROW maintenance program can actually benefit the ecosystem and other natural environments. ROW maintenance efforts create open areas that encourage the growth of wildflowers, ferns, grasses, flowers, berries and other low growing shrubs, giving the opportunity to enjoy New Hampshire's natural beauty.