HERBICIDE APPLICATION AS A FOREST MANAGEMENT TOOL

Ronald C. Lemin, Jr.
Nutrien Solutions

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<table>
<thead>
<tr>
<th>Application Method</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
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<tbody>
<tr>
<td>Foliar</td>
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<td>after full leaf-out in the spring through summer until 10% leaf coloration</td>
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<td>Cut Surface</td>
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<td>avoid application during spring sap flow and when it is cold enough for spray mixture to freeze</td>
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<td>Low Volume Basal</td>
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<td>year ‘round except on wet stems or snow</td>
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Glyphosate Options are Plentiful!
Low Volume Foliar
Low-Volume Foliar

- I usually use 5-10% glyphosate. 1.3 oz=1%. Read the label!
- A site that contains low stem densities and stem heights.
- This close-range treatment helps minimize drift.
- Requires minimal equipment, herbicide and personnel.
- Get good coverage on the growing tips and terminal leader.
- If you cannot reach the top, it may require cutting and treating the stump or the following year’s sprouts.
- Spray front and back sides of the target clump to ensure adequate coverage.
- Apply the herbicide solution at a volume that wets the crown, but minimizes runoff.
Low Volume Mist Blower Application
Or Also Called Air Assisted
Glyphosate

- Commercially sold for around $18-$25 per gal depending on product
- Products containing surfactants are General Use Pesticides in Maine
- Products without surfactants (Rodeo) have an aquatic label, requiring a pesticide license to purchase
- Actually cheaper to buy products commercially than through place like Tractor Supply or Home Depot
- Surfactants are much better in the commercially purchased products.
- MadDog is Nutrien’s glyphosate product with the tallow amine surfactant safe for conifer release after hardening off.
Cut Stump Treatments with Glyphosate
Cut Surface/Stump Equipment

- Backpack with basal wand used for high number of stumps
- Heavy duty spray bottle for low densities
Cut Stump Treatments (Oil based)

- Treat cambium (outer edge of stump) and any exposed roots
- Doesn’t have to be done immediately after cut, but still a good idea
- Herbicides:
  - Pathfinder® II as a ready to use
  - 20-25% Garlon® 4 Ultra + 75-80% basal oil
  - Dye or no dye?
  - Soil active herbicides?
Cut Stump Treatment with Rodeo and Water

Cut Stump Treatment with Garlon 4 and oil
Equipment for Low Volume Basal Bark

Backpack sprayer that is designed for use with oil carriers (oil resistant gaskets and fittings).
• Use low pressure (~20 psi)
• Recommend backpacks with Viton seals and oil resistant hoses
• Wand that comes with the spray units may be used, however a better alternative is a brass tip shut off wand such as the ULV brass wand (BG42401)
• Adjustable-cone nozzles are ideal for basal applications
• Flat fan or hollow cone nozzles also work but do not allow as much flexibility as the adjustable-cone nozzles
Basal Bark Application
To Lower 12-15 Inches
PATHFINDER II

- Triclopyr 14% and basal oil 86% mix
- READY TO USE FORMULATION
- BASAL BARK AND STUMP TREATMENTS
- BEST BASAL CONTROL ON STEMS LESS THAN 6"
- YEAR ROUND APPLICATION EXCEPT WHEN SNOW PREVENTS APPLICATION TO THE GROUND
- TRICLOPYR IS TRANSPORTED THROUGH THE BARK BY THE BASAL OIL
- $43-44/gal, General Use Pesticide in Maine
Mix with Bark Oil or MSO at 20 or 25%

$80-85/gal for Garlon 4, $13/gal for bark oil.

$27-$32/gal mixed

General Use Pesticide in Maine
QUESTIONS?

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