A HOW-TO GUIDE FOR HARDWOOD STEM INJECTION

"HACK-AND-SQUIRT"

Early successional habitat is comprised of forbs and grasses that are preferred by many wildlife species. In forests, forb and grass growth is inhibited by dense hardwood midstories that shade out the ground. Typically, midstory trees are not merchantable and would be expensive to remove mechanically. Further, simply cutting down a tree will often stimulate root sprouting, thus prolonging and compounding the problem.

A viable option for landowners is the hardwood stem injection, or "hack-and-squirt" method. Herbicide is selectively applied to undesirable trees without damaging surrounding stems or causing site disturbance. Following treatment, trees will die, decompose, and fall down, creating the desired openings. Following tree removal, early successional habitat can be maintained with a regular prescribed fire or other disturbance regime (such as disking).

Trees should be injected in early fall to late winter (late August–February) with an imazapyr product*. Imazapyr will control common, problematic species such as sweetgum, Chinese tallowtree, and Chinese privet.

*examples of 4 lb. products are Arsensal AC or Polaris AC

Injection Method

1.
Mix a 25% solution of Imazapyr (4 lb. product*) in a regular spray bottle (e.g., 1 qt. spray bottle = 8 oz. of Imazapyr and 24 oz. of water)

2.
Cut into tree cambium layer with a hatchet or machete

3.
Spray 1 milliliter (mL) into the cut (one trigger pull is normally 1 mL)

4.
Spray 1 mL of solution per 3 inches of tree diameter

5.
It is helpful to mark the injected trees with paint or flagging to reduce duplicate injections and to evaluate results

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Timber stand with dense midstory shading out the ground.

Cut into the cambium layer with a hatchet or machete.

Spray 1mL of solution into cut.

Forest opening created with stem injection.