

BETTER LIVING THROUGH CHEMISTRY



Commonly Used Herbicides for Habitat Management

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QUESTIONS YOU SHOULD ASK

- ✘ Do I need a license or certification?
- ✘ Have I read and understood the label?
- ✘ Do I have the necessary PPE?
- ✘ Is the weather ok?
- ✘ Am I on time?
- ✘ What is the target?
- ✘ Calibrated? Measuring cup?



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CERTIFICATION

- ✘ Aerial/Dealers
- ✘ If you are doing it for payment
- ✘ Governmental Employees
- ✘ Farmers using RUP
- ✘ www.ncagr.gov/SPCAP/pesticides/license.htm



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LABEL

- ✘ Labels are the law.
- ✘ All the information you need on AI, Signal Word, PPE, and how to mix and use the product.
- ✘ <http://www.cdms.net/LabelsSDS/home/>



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WEATHER AND TIME

- ✘ Follow Label.
- ✘ Better results when applied to smaller plants.
- ✘ Best time for tree control is early summer before leaves harden off or in the fall when sap is going down.



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APPLICATION METHODS

- ✘ Backpacks and pumps
- ✘ -small areas and basal bark
- ✘ 25 gallon ATV sprayers
- ✘ -spot treating larger areas like field borders
- ✘ 50 + gallon
- ✘ -whole fields, woodlands
- ✘ Wick Bars
- ✘ Hack and Squirt
- ✘ MIXING – half full water, herbicides, surfactants, finish fill.



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SMALL SPRAYERS



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HERBICIDES COMMONLY USED FOR HABITAT

Chemical	Brand Name Examples	Grass	Broadleaves	Pre	Post
Triclopyr 3 or 4	Garlon, Element, Triclopyr		x		x
Glyphosate	Roundup, Ranger Pro	x	x		x
Imazapyr	Arsenal, Polaris	x	x	x	x
Imazapic	Plateau, Panoramic 2SL	x	x	x	x
2, 4-D			x		x



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SURFACTANTS

- ✘ Most labels require or recommend them
- ✘ Most glyphosates already have it
- ✘ 80/20 Nonionic
- ✘ MSO
- ✘ Penetrating (Phase, Sunrise, CideKick II, LI700)



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SPOT TREATING WOODY BRUSH

- ✘ 2 - 2.5% Triclopyr with a penetrating surfactant (.3 oz/gal)
- ✘ Spray to wet, not run off
- ✘ On wild pines, use a 5% Glyphosate and cover every needle



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BASAL BARK

- ✘ Use a backpack or handheld
- ✘ Viton seals or will leak
- ✘ Any time unless flooded
- ✘ 20 or 25% Triclopyr 4 with oil. Can also use Imazapyr.
- ✘ Pines at 4 feet



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WHOLE FIELDS

- ✘ Usually glyphosate at two quarts to the acre
- ✘ Preferably two applications before planting NWSG or forbs
- ✘ Will mix with Imazapic if planting natives at less than 12 oz/ac



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PROBLEM PLANTS

- ✘ Bermuda grass – will need multiple applications of 2.5% - 5% Glyphosate or spray in summer with 24 oz Imazapyr (Arsenal AC) with 1 qt MSO
- ✘ Pigweed resistant to ALS inhibitors (Glyphosate)
- ✘ Use 2,4-D or others
- ✘ May need to pull it by hand



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SITE PREP/MID-STORY

- ✘ 1 to 2 qts Triclopyr and 24-40 Oz Imazapyr per acre and 8 Oz surfactant /25 gallon
- ✘ Be careful to not kill fine fuels (grass) if going to Rx burn
- ✘ Skidder, helicopter, hand crews
- ✘ Get a consult



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HACK AND SQUIRT

- ✘ Labor intensive
- ✘ Use machete or hatchet to make angled cuts around the tree then use a squirt bottle to apply full strength chemical



Can buy a hypohatchet or others



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CUT STUMP

- ✘ Cut tree, spray cambium with full strength Glyphosate
- ✘ Labor intensive
- ✘ Pines smaller than 6 inches at base need sprayed.



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WICK BAR

- ✘ Use to protect ground level species
- ✘ 33-75% glyphosate mix in the tube
- ✘ Run over target in opposite directions
- ✘ Handheld to tractor mounted



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HEXAZINONE (VELPAR OR POWER PELLETS)

- ✘ Use pellets in early spring to control oaks or privet
- ✘ Based on trunk size or placed in a grid pattern
- ✘ Works on many broadleaved weeds, shrubs, and some grasses



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GENERAL NOTES

- ✘ Herbicides in the box stores are usually not the same strength as commercial providers
- ✘ 2, 4-D and Triclopyr don't work well when it gets above 90
- ✘ Get defoamer when using glyphosates or using high rate of surfactants
- ✘ Good idea to use tank cleaners between different mixes or before storage



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CLEAN IT UP!

- ✘ Do triple rinse empty jugs into your tank
- ✘ Do rinse your spray tanks out. Put rinsate where you sprayed or firebreaks
- ✘ Make sure you label any saved mixes
- ✘ Offer empties for recycling
- ✘ Coop Ext usually has a day where they will take unused herbicides
- ✘ Good idea to keep records.



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THANK YOU

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+ STAY SAFE!!

✘ Other sources: NCFS, NC Cooperative Extension, Herbicide Representatives, internet, NC Agricultural Chemicals Manual

