United States Department of Agriculture
Natural Resources Conservation Service

Herbaceous Weed Control

Controlling invasive and/or noxious herbaceous weeds

Lifespan of Practice: **Annual**

Tennessee Implementation Requirements No. TN-315

DEFINITION

Herbaceous weed control will encourage the control of herbaceous plants including those that are invasive and noxious in non-cropland areas.

INSTALLING THE PRACTICE

NRCS will not develop biological or chemical treatment recommendations (e.g. NRCS will not recommend herbicides) except for biological control utilizing grazing animals. Prescribed Grazing (528) is used to ensure desired results are achieved and maintained. A Grazing Management Plan will be required. If herbicides are used, label instructions must be followed.

NRCS shall only provide clients with acceptable and current biological and/or chemical control references that achieve desired management objectives. References include:

- Weed Control Manual for Tennessee, UT Extension PB1580
- Weed Management in Pastures and Hay Crops, UT Extension PB1801
- Native Grass Manual, UT Extension PB1752
- A Guide to Successful Wildlife Food Plots UT Extension PB1769
- Center for Invasive Species and Ecosystem Health, www.invasive.org

Data published from research conducted in Tennessee show using imazapic preemergence when establishing bluestems, indiangrass, and sideoats grama helps ensure adequate weed control for the most common warm-season weeds in TN, including crabgrass, johnsongrass, and broadleaf signalgrass. Furthermore, the data clearly show labeled native grasses and forbs are able to establish following labeled applications and rates[1]. Its use will be required unless waived by the NRCS area biologist.

Many herbicide environmental hazard ratings have been evaluated in WINPST. Appendix A includes a list of very low or low environmental hazard ratings for common herbicides used in Tennessee. If a herbicide is not included in Appendix A, WINPST shall be run based on site-specific conditions.

OPERATION AND MAINTENANCE

The operator will develop a safety plan for individuals exposed to chemicals, include telephone numbers and addresses of emergency treatment centers, and the telephone number for the nearest poison control center. The National Pesticide Telecommunications Network (NPTN) has non-emergency information: 1-800-858-7378, 7 days, 6:30 am to 4:30 pm Pacific Time.

For assistance with agrichemical spills, contact National 24-hour CHEMTRAC at 1-800-424-9300. The National Response Center (NRC) is 1-800-424-8802.

[1]REFERENCES

Harper, C.A., G.D. Morgan, and C.E. Dixon. 2003. Establishing native warm-season grasses using conventional and no-till technology with various applications of Plateau herbicide. Proceedings Eastern Native Grass Symposium 3:63-70.

Harper, C.A., G.E. Bates, M.P. Hansbrough, M.J. Gudlin, J.P. Gruchy, and P.D. Keyser. 2007. Native warm-season grasses: Identification, establishment, and management for wildlife and forage production in the Mid-South. UT Extension, PB 1752. Knoxville, TN. 189 pages. ISBN 978-0-9795165-0-4.

Harper, C.A. and J.P. Gruchy. 2009. Conservation practices to promote quality early successional wildlife habitat. In, Burger Jr., L.W. and K.O. Evans (eds.), Managing working lands for northern bobwhite: The USDA NRCS Bobwhite Restoration Project. Washington, D.C.

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Landowner:_____ Farm/Tract #:_____

1. **Goals and Objectives:** (eg. establish native grass for forage and wildlife)

2. **Pre-treatment cover or density of the target species and the planned post-treatment cover or density and desired effects from the planned treat.** (e.g. existing cover is tall fescue, horseweed, johnsongrass, pigweed, horsenettle; desired effect is <10% weeds with little to no shading of native grass with a plant spacing of 1 plant per 2.5 ft^2.)

3. **Monitoring that identifies what shall be measured (including timing and frequency) and the changes in the plant community (compare with objectives) to achieve.** (e.g. plan to evaluate monthly during first year to be sure natives are not shaded by undesirable vegetation; plant to spray or mow when 50% light is intercepted by competing vegetation.)

☐ Plan Map and Soil Map attached.

☐ Maps, drawings, and/or narratives detailing or identifying areas to be treated, pattern of treatment (if applicable), and areas that will not be disturbed attached. Identify sensitive areas for avoidance.

☐ Grazing Plan attached, if required.

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*Herbicides and rates in tooltip/"mouse hover" recommended in the *Native Grass Manual, UT Extension PB1752*.

Pre - Treatment Information:									
Field	Target Species to Treat with **Herbicide**	Treatment Area in Acres	1st Treatment Date	Planned Herbicide	Application Method	Win-PST Rating	Mitigation, Application Timing, Other Comments	Rate of Application	Follow-up Scouting Date

Field	Target Species to Treat **Mechanically**	Treatment Area in Acres	1st Treatment Date	Type of Equipment	Operating Instructions	Follow-up Scouting Date

Field	Target Species to Treat **Biologically**	Treatment Area in Acres	1st Treatment Date	Type of Biological Agent	Timing, Frequency, Duration, & Intensity of Grazing or Browsing	Desired Degree of Management (including Maximum allowable degree of use on non-target species).	Follow-up Scouting Date

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*Herbicides and rates in tooltip/"mouse hover" recommended in the *Native Grass Manual, UT Extension PB1752*.

Post - Treatment Information:							
Target Species Treated	Treatment Area in Acres	1st Treatment Date	Treatment Type	Meets Practice Standard?	Additional Treatment Necessary?	Next Application Date	Next Scouting Date

Additional Notes:

Landowner Signature:_____ Date:_____

Conservation Planner:_____ Date:_____

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APPENDIX A: Toxicity Ratings of Common Herbicides.

Commonly Used Pesticides In Tennessee For Herbaceous Weed Control With Low Or Very Low Toxicity Ratings
If any pesticide is used that is not listed WINPST must be run.

Pesticide Type	Active Ingredient	Reg Num	Human Tox	Fish Exposure Tox	Fish Sediment Tox
COMBINATION HERBICIDES	Metsulfuron-methyl, 2,4-D, dimethylamine salt & Dicamba, dimethylamine salt	See individual product	VERY LOW LOW VERY LOW	VERY LOW VERY LOW VERY LOW	VERY LOW VERY LOW VERY LOW
COMBINATION HERBICIDES	Imazapic & Glyphostate	See individual product	VERY LOW VERY LOW	VERY LOW LOW	VERY LOW VERY LOW
COMBINATION HERBICIDES	2,4-D, dimethylamine salt & Dicamba, dimethylamine salt	See individual product	LOW VERY LOW	VERY LOW VERY LOW	VERY LOW VERY LOW
COMBINATION HERBICIDES	Dicamba,dimethylamine salt & Diflufenzopyr	See individual product	VERY LOW VERY LOW	VERY LOW VERY LOW	VERY LOW VERY LOW
HERBICIDES	2,4-D, dimethylamine salt	04275000021	LOW	VERY LOW	VERY LOW
HERBICIDES	2,4-DB, dimethylamine salt	06633000256	LOW	VERY LOW	VERY LOW
HERBICIDES	Imazapyr	00024100299	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Dicamba, dimethylamine salt	00796900131	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Sodium bentazon	00796900045	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Imazapyr	00024100296		VERY LOW	VERY LOW
HERBICIDES	Dicamba, diglycoamine salt	00796900137	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Metsulfuron-methyl	00035200439	VERY LOW	VERY LOW	VERY LOW

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APPENDIX A: Toxicity Ratings of Common Herbicides. (continued)

Pesticide Type	Active Ingredient	Reg Num	Human Tox	Fish Exposure Tox	Fish Sediment Tox
HERBICIDES	Thifensulfuron methyl	00035200446	LOW	VERY LOW	VERY LOW
HERBICIDES	Triethylamine triclopyr	06271900037	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt	06271900182	LOW	VERY LOW	VERY LOW
HERBICIDES	Picloram, triisopropanolamine salt	06271900182	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Aminopyralid	06271900572	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Triethylamine triclopyr	06271900572	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	sulfometuron methyl	00035200601	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	sulfosulfuron		VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Halosulfuron-methyl	08188000002	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Imazapic, ammounium salt	00024100365	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Sethoxydim	00796900088	VERY LOW	LOW	LOW
HERBICIDES	Imazethapyr, ammonium salt	00024100350	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Clopyralid	06271900337	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Triethylamine triclopyr	06271900337	VERY LOW	VERY LOW	VERY LOW
HERBICIDES	Glyphosate, isopropylamine salt	00052400512	VERY LOW	LOW	VERY LOW
HERBICIDES	Clethodim	05963900003	LOW	VERY LOW	VERY LOW

For more information or questions contact the State Biologist.