

United States Department of Agriculture
NRCS Natural Resources Conservation Service

HERBACEOUS WEED CONTROL

Alabama Job Sheet No. AL315



DEFINITION

The removal or control of herbaceous weeds including invasive, noxious and prohibited plants.

PURPOSE

- Enhance accessibility, quantity, and quality of forage and/or browse.
- Restore or release native or create desired plant communities and wildlife habitats consistent with the ecological site.
- Protect soils and control erosion
- Reduce fine-fuels fire hazard and improve air quality

CONDITIONS WHERE PRACTICE APPLIES

On all lands except active cropland where removal reduction, or manipulation of herbaceous vegetation is desired.

This practice does not apply to removal of herbaceous vegetation by prescribed fire or removal of herbaceous vegetation to facilitate a land use change.

For all methods, properly dispose of invasive species materials after treatment to prevent reseeding or spread to new areas.

Chemical: When using chemical control, spot treatment methods should be used whenever feasible to apply herbicides. Apply herbicides at the correct rate, under favorable weather and recommended plant conditions. Refer to extension systems recommendations. Also, see ACES recommendations:

<http://www.aces.edu/pubs/docs/A/ANR-0500-A/> or
<http://www.aces.edu/pubs/docs/A/ANR-0500-B/>.

Herbicides must be handled and applied in accordance with the product label and any federal, state, or local regulations.

Manual and Mechanical: Manually or mechanically suppressing (mowing) herbaceous plant species can be successful if done repeatedly over the growing season and over multiple years. However, hand pulling, chopping or hoeing may actually kill the offending plants.

Prescribed Fire: Prescribed fire can be an effective tool in controlling some plants, suppressing undesirable species and removing thatch layers. Refer to the Prescribed Burning (338) standard and job sheet.

Biological: Grazing with livestock can be an effective tool to manage undesirable herbaceous species in conjunction with other treatments. It may take multiple efforts to fully manage unwanted species.

Small ruminants (especially goats) may be used to control or eliminate many types of herbaceous or other noxious plants.

Grazing management plans will include the type of grazing animal, the timing and duration of grazing or browsing as well as any protections needed for threatened or endangered species. The Prescribed Grazing (528) standard will be followed.

Approved biological agents may be used. Plans will identify the agent to be used and any special precautions or requirements when using biological agents.

By itself, any one of the above biological control methods may not completely eradicate targeted plants. When multiple methods are used together, eradication may be possible and may be less expensive.

OPERATION AND MAINTENANCE

Operation: Herbaceous weed control practices shall be applied using approved materials and procedures. Operations will comply with all local, state, and federal laws and ordinances. Refer to extension system recommendations. Alabama Cooperative Extension System recommendations may be found at the following links:

- <http://www.aces.edu/pubs/docs/A/ANR-0500-A/>
- <http://www.aces.edu/pubs/docs/A/ANR-0500-B/>.

Success of the practice shall be determined by evaluating regrowth or reoccurrence of target species after sufficient time has passed to monitor the situation and gather reliable data. Length of evaluation periods will depend on the herbaceous weeds species being monitored, proximity of propagules (seeds, plant materials and roots) to the site, transport mode of seeds (wind or animals) and methods and materials used.

Maintenance: Following initial application, some regrowth, resprouting, or reoccurrence of herbaceous weeds may be expected. Spot treatment of individual plants or areas needing re-treatment should be completed as needed when weed vegetation is most vulnerable to desired treatment procedures.

Review and update the plan periodically in order to incorporate new IPM technology; response to grazing management and complex weed population changes; and, avoid the development of weed resistance to herbicides.

Additional O&M when chemical control is used:

WIN-PST will be used to evaluate potential risk of the pesticide(s) being used. Appropriate mitigation conservation practices and activities will be implemented as needed.

The operator will develop a safety plan for individuals exposed to chemicals, including telephone numbers and addresses of emergency treatment centers and the telephone number for the nearest poison control center.

In Alabama contact:

- **Alabama Poison Control Center**
Tuscaloosa, Alabama **1-800-222-1222**
- **Regional Poison Control Center**
Birmingham, Alabama **1-800-222-1222**

The National Pesticide Information Center (NPIC) telephone number in Corvallis, Oregon, may be contacted for non-emergency information: **1-800-858-7378**, Monday through Friday, 6:30 a.m. to 4:30 p.m. Pacific Time.

For advice and assistance with **emergency spills that involve agrichemicals**, the national 24-hour CHEMTREC telephone number is **1-800-262-8200**.

The Federal Worker Protection Standards (WPS) covers pesticides used in the production of agricultural plants on farms, forests, nurseries, and greenhouses. The WPS requires producers to reduce risk to employees by providing the following: safety training, safety poster, access to label information, exclude workers from treated areas by following restricted-entry intervals (REIs). Those producers who "hire" workers must follow WPS. The County Extension office has training materials available.

- Follow **label requirements** for mixing/loading setbacks from wells, intermittent streams and rivers, natural or impounded ponds and lakes, and reservoirs.
- Post signs, according to label directions and/or federal, state, tribal, and local laws, around fields that have been treated. Follow restricted entry intervals.
- Dispose of herbicide and herbicide containers in accordance with label directions and adhere to federal, state, tribal, and local regulations.
- Read and follow **label directions** and maintain appropriate Material Safety Data Sheets (MSDS). MSDS and herbicide labels may be accessed on the Internet at: <http://www.greenbook.net/>
- Maintain records of plant management for at least two years. Herbicide application records shall be in accordance with USDA Agricultural Marketing Service's Pesticide Recordkeeping Program and state-specific requirements.

To minimize negative impacts of pesticides on water quality, aquatic organisms, vertebrates and invertebrates, incorporate the following, commonly used mitigation strategies into pesticide application activities:

- Delay application when significant rainfall events are forecast that could produce substantial leaching or runoff which can reduce pesticide transport to ground and surface water.
- Select appropriate nozzles and operating pressure for the application, with an emphasis on higher volume spray nozzles run at lower pressures, that will produce larger droplets and a narrower droplet size distribution, which reduces spray drift. Maintain proper nozzle spacing, boom height, and boom suspension, along with frequent calibration and replacement of worn nozzles and leaking tubing.

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- Apply pesticides when wind speed is optimal to reduce pesticide drift. Optimal spray conditions for reducing drift occur when the air is slightly unstable with a very mild steady wind between 2 and 9mph.
- Sanitize equipment before leaving treatment areas to prevent spread of weeds, particularly invasive weeds. A list of plants considered to be the top ten most invasive plants in Alabama may be found at the following web site:
<http://www.se-eppc.org/alabama/>

Additional mitigation strategies for consideration include:

- Spray during cooler temperatures (e.g. early morning, evening or at night) to reduce drift losses. Avoid spraying in temperatures above 90° F. Spraying when there is higher relative humidity reduces evaporation of water from spray droplets thus reducing drift losses.
- Use specific pesticide formulations and/or adjuvants to increase efficacy and allow lower application rates or use drift retardant adjuvants are used to reduce pesticide spray drift.
- Reduce the total amount of pesticide applied because applications are based on monitoring that determines when a pest population exceeds a previously determined economic threshold.
- One or more applications a pesticide may be replaced by an alternative cultural, mechanical, biological or chemical pest suppression technique reducing the typical application amounts of the pesticide that poses a hazard to a natural resource. Note, alternative pesticides must be approved by Extension Specialist and MUST be client-selected as NRCS does NOT make pesticide recommendations.

- Use a 30' - 100' setback from the edge of the field. Do not apply pesticides within 30' - 100' of the downslope or downwind edge(s) of the field.
- Apply pesticides when pollinators are least active (e.g. at night or when temperatures are low.) Note that dewy nights may cause an insecticide to remain wet on the foliage and still be active the following morning, so exercise caution.
- Apply pesticides when crops are not in bloom to discourage pollinators from venturing into the crop.
- Keep weeds from flowering to discourage pollinators from venturing into the crop around the time of pesticide applications.
- Use liquid or granular formulations instead of dusts and fine powders that may become trapped in the pollen collecting hairs of bees and consequently fed to developing larvae.

Additional Operation and Maintenance requirements specific to this Plan:

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To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250 or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

Producer Name: _____

Designed By: _____

Date: _____

Job Title: _____

Purpose:

(Check appropriate purpose)

- Enhance accessibility, quantity, and quality of forage and/or browse
- Restore or release native or create desired plant communities and wildlife habitats
- Protect soils and control erosion
- Reduce fine-fuels fire hazard and improve air quality

Goals and Objectives for this practice:

Target plants:

Pre-treatment conditions/target plant density:

Desired post-treatment conditions:

Tract/Field	Acres to be Treated	Planned Treatment Date	Method of Control	Date Practice Certified Complete	Certified By

Additional Specifications for the completion of this Practice, including grazing plan, mechanical equipment techniques, mitigating practices or activities or chemical information as applicable:

Refer to attached Conservation Plan Map(s) for location of area(s) to be treated.

Additional notes/comments: