

Herbaceous Weed Control

Iowa Job Sheet

Natural Resources Conservation Service (NRCS)
Des Moines, Iowa

Iowa Conservation Practice 315
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Definition

Herbaceous weed management includes the removal or control of undesirable herbaceous (non-woody) plants including invasive, noxious and prohibited species.

Invasive species are a species of plant that has been introduced or moved by human activities to a location where they did not naturally occur. Invasive species may pose economic, environmental or human health concerns.

Purpose

This activity will encourage the control of herbaceous plants including those that are invasive and noxious in non-cropland areas, including grazing lands and pastures. Controlling these plants will enhance accessibility, quantity and quality of forage and/or browse, restore or release native or desired plant communities and wildlife habitats, protect soil and control erosion and protect property from wildfires.

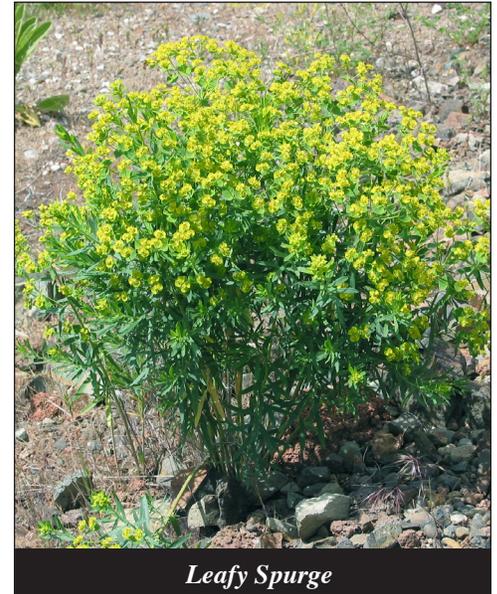
Conditions Where Practice Applies

Use this activity on all non-cropland areas where removal or control of herbaceous plants is desired.

General Specifications

The management or prevention of herbaceous weeds establishment may be accomplished through mechanical, chemical, biological, manual (pulling by hand), prescribed burning or a combination of all of these methods. Control methods will be designed to protect and encourage the growth of desirable plant species. Control of an herbaceous weed will be considered to have been accomplished when the objectives of the management plan have been met.

When chemical treatments are used, environmental hazards and site-specific application criteria listed on pesticide labels and contained in extension service or other approved pest management references must be followed.



Herbaceous weed control will include post treatment measures as needed to achieve resource management objectives.

Livestock and human access will be controlled based on management methods applied and restrictions as listed on the chemical labels.

Manage and/or dispose of treated weed species in a manner that will prevent the spread of herbaceous weeds to new sites.

If needed, additional treatments and practices will be applied to protect soils and prevent erosion.

Criteria to Enhance Accessibility, Quantity, and Quality of Forage and/or Browse

Herbaceous weed control will be applied in a manner that will minimize negative impact to forage and/or other non targeted plants. Timing and sequence of control shall be planned in coordination with a Prescribed Grazing plan.

Criteria to Restore or Release Native or Create Desired Plant Communities and Wildlife

Habitats Consistent with the Ecological Site

Apply herbaceous weed control in a manner to protect the health and vigor of the desired plant species and, maintain or enhance important wildlife habitat requirements.

Treatments will be conducted during periods of the year when weed species are most vulnerable and will promote restoration of the native or desired plant species or communities.

Treatments will be conducted during periods of the year that accommodate reproduction and other life-cycle requirements of target wildlife and pollinator species.

Apply treatments that maintain or enhance plant community composition and structure to meet the requirements of target wildlife species.

Criteria to Reduce Fine-Fuels Fire Hazard and Improve Air Quality

Treat weed species in a manner that creates a native or desired plant community which reduces the potential for accumulating excessive fuel loads and increased wildfire hazards.

Apply treatment methods in a manner that minimize the potential for unintended impacts to air resources, e.g., smoke, chemical drift etc.

Operation

Areas where control measures have been taken will be monitored annually to determine if re-introduction of the species into the site. Any re-growth of the targeted undesirable species into the treated area(s) will be controlled with follow-up treatments.

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. The National Pesticide Information Center (NPIC) telephone number in Corvallis, Oregon, may also be given for non-emergency information: **1-800-858-7384**

Monday to Friday

6:30 a.m. to 4:30 p.m. Pacific Time

The national Chemical Transportation Emergency Center (CHEMTRAC) telephone number is: 1-800-424-9300.

- » 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/>.
- » Calibrate application equipment according to recommendations before each seasonal use and with each major chemical and site change.
- » Replace worn nozzle tips, cracked hoses, and faulty gauges on spray equipment.
- » 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.

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 herbicide chemicals.

Specifications

Site-specific requirements are listed on the specifications sheet. Additional provisions are entered on the job sketch sheet. Specifications are prepared in accordance with the NRCS Field Office Technical Guide and the Herbaceous Weed Control practice standard (315).

Prepare plans and specifications for each field or treatment unit according to the criteria included in this standard. At a minimum, a herbaceous weed control practice plan shall include:

1. Goals and objectives statement.
2. Plan map and soil map for the site.
3. Pre-treatment cover or density of the target plant(s) and the planned post-treatment cover or density and desired efficacy.
4. Maps, drawings, and/or narratives detailing or identifying areas to be treated, pattern of treatment (if applicable), and areas that will not be disturbed.
5. A monitoring plan that identifies what shall be measured (including timing and frequency) and the changes in the plant community (compare with objectives) that will be achieved.

Mechanical Treatment Methods

Plans and specifications will include items 1 through 5 above, plus the following:

- » Type of equipment to use for management.
- » Dates of treatment for effective management.
- » Operating instructions (if applicable).
- » Techniques and procedures to be followed.

Chemical Treatment Methods

Plans and specifications will include items 1 through 5, above, plus the following:

- » Acceptable chemical treatment references for containment and management of target species.
- » Document techniques to be used, planned dates and rates of application.
- » Evaluation and interpretation of herbicide risks associated with the selected treatment(s) using WIN-PST or other approved tools.
- » Any special mitigation, timing considerations or other factors (such as soil texture and organic matter content) that must be considered to ensure the safest, most effective application of the herbicide.
- » Reference to product label instructions.

Biological Treatment Methods

Plans and specifications will include items 1 through 5, above, plus the following:

- » Acceptable biological treatment references for the selected biological agent used to contain and manage the target species.
- » Document release date, kind, and number of agents.
- » Timing, frequency, duration and intensity of grazing or browsing.
- » Desired degree of grazing or browsing use for effective management of target species.
- » Maximum allowable degree of use on desirable non-target species.
- » Special mitigation, precautions, or requirements associated with the selected treatment(s).

Herbaceous Weed Control (315)

Landowner _____

Field Number _____

Goals and Objectives

Undesirable Herbaceous Species	Pre-treatment Density of Undesired Species	Treatment Method and Date (Mechanical, Chemical/Herbicides, Biological, Prescribed Burn)	Post-treatment Density of Undesired Species
Species #1			
Species #2			
Species #3			
Species #4			
Species #5			
Species #6			

Operation and Maintenance (including Monitoring Plan)

*** Attach a Conservation Plan Map and Soil Map with areas to be treated, pattern of treatment (if applicable) and areas that will not be treated.**

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