MANAGING INVASIVE PLANTS AND OTHER UNDESIRABLE VEGETATION ENROLLED IN THE CONSERVATION RESERVE PROGRAM

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Conservation Reserve Program (CRP) policy has historically and continues to require participants to maintain/manage CRP cover throughout the life of the contract. However, often invasive and/or undesirable plants have established and threaten desirable plants that provide cover for wildlife. Contracts require that these unwanted plants are managed, but management activities are restricted so that wildlife and cover for wildlife are not disturbed during critical periods. Often these restrictions limit the effectiveness of many common management methods resulting in poor control. This can frustrate landowners and often leads to them not managing the unwanted vegetation. This has resulted in many CRP fields in Wisconsin with extensive weed populations. When the contract for these fields expires NRCS and FSA staff have found it difficult to allow for reenrollment given the level of these infestations and in some cases have cited landowners for not managing/maintaining desirable cover as stated in their contract. This has caused a great deal of frustration between all parties involved. To provide further clarification, NRCS has developed additional guidelines to assist land managers to improve and better define what weed species are of concern and what population(s) size will be considered acceptable within enrolled acreage.

NRCS has classified species of concern (see table 2) into four categories which are defined in table 1 with acceptable population levels and sizes within each category. A NRCS jobsheet will soon be available providing specific detail with regards to this information (Wisconsin jobsheet # 397 Maintenance on Established CRP).

In addition a series of factsheets to help land managers improve management of these plants under the restrictions of the CRP contract are being developed. The factsheets will focus on timely management of species under specific life histories (annuals, biennials, simple perennials, creeping perennials, and woody vegetation) and provide advice and resources to develop specific management plans for plants within each life history. They will be available winter of 2008 on the Integrated Pest and Crop Management website (http://ipcm.wisc.edu). Below are some key aspects to consider when developing a management plan for unwanted vegetation. For specific management questions please refer to the factsheets mentioned above as they will contain considerable information for landowners, agencies that work with CRP lands and companies that work on CRP lands.

Keys to successful management of unwanted vegetation enrolled in the Conservation Reserve Program.

1. **Identify the weed(s) species that are present.** Management methods that are effective are species specific, and therefore proper identification is a critical first step to managing undesirable vegetation.

2. **Learn about how and when the plant reproduces and spreads.** The key to managing any weed species involves preventing its reproductive parts from being spread. An understanding of how this occurs and at what time of the year can help in determining when to manage the species present. This also will prevent further spread.

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3. **Try to determine where the source of the infestation is.** While many of the weeds take advantage of degraded and disturbed lands, others are extremely aggressive and can invade healthy, undisturbed areas. Identifying the source of the infestation will increase awareness of when and how the weeds are being introduced. If possible try to remove sources, or at least prevent plants from reproducing as this will reduce the spread of the population and prevent introduction to other areas.

4. **Select a control method that fits your situation.** Management is specific to an area, and often several options exist. In land enrolled in CRP this can be difficult to conduct as restrictions in the timing and intensity of the management exist. Recommendations target small populations before they get large, as management/maintenance is expected annually if unwanted vegetation exists. Depending on the species, these small infestations can typically be managed within the confines of the contract with limited to no disturbance in cover. When populations increase in size it becomes difficult to manage them without disturbing cover and methods for successful management typically need to be approved by FSA.

5. **Monitor sites extensively.** The easiest stage to manage invading plant populations are when their size is small and are just establishing, therefore early detection and rapid response is the most effective management approach. Frequently monitor sites that are prone to invasion and areas adjacent to weedy areas as this will prevent plants from establishing. Monitoring should occur at least annually to ensure weed populations don't get established requiring additional control.

Table 1. Categories of invasive and/or undesirable plants within NRCS jobsheet #397.

Category	Tolerance for individual or combination of species	Comment
1. New invaders	None can be present, must attempt to eliminated	
2. Species known to be troublesome	Keep coverage <10% with no patch > 1 acre	
3. Species of concern	Keep coverage <30% with no patch > 1 acre	Should not be an issue in properly established fields
4. Woody species	Keep cover <5% with plants < 5ft tall. No patches > 1 acre	All woody species except leadplant and & New Jersey tea

Table 2. Invasive and undesirable plants listed within NRCS jobsheet 397.

Common name	Scientific name	Life history	Category
Chinese lespedeza	*Lespedeza sericea*	simple perennial	1
crown vetch	*Coronilla varia*	creeping perennial	1
cutleaf teasel	*Dipsacus laciniatus*	biennial/ monocarpic perennial	1
common teasel	*Dipsacus fullonum*	biennial/ monocarpic perennial	1
giant hogweed	*Heracleum mantegazzianum*	simple perennial	1
hill mustard	*Bunias orientalis*	simple perennial	1
Japanese knotweed	*Polygonum cuspidatum*	creeping perennial	1
multiflora rose	*Rosa multiflora*	woody species	1
poison hemlock	*Conium maculatum*	biennial	1
wild chervil	*Anthriscus sylvestris*	simple perennial	1
Canada thistle	*Cirsium arvense*	creeping perennial	2
common tansy	*Tanacetum vulgare*	creeping perennial	2
field bindweed	*Convolvulus arvensis*	creeping perennial	2
garlic mustard	*Alliaria petiolata*	biennial	2
Hawkweeds	*Hieracium spp.*	creeping perennial	2
Japanese hedge parsley	*Torilis japonica*	biennial	2
knapweed spp.	*Centaurea spp.*	simple perennial	2
marsh thistle	*Cirsium palustre*	biennial	2
musk thistle	*Carduus nutans*	biennial	2
plumeless thistle	*Carduus acanthoides*	biennial	2
purple loosestrife	*Lythrum salicaria*	simple perennial	2
reed canary grass	*Phalaris arundinacea*	creeping perennial	2
common reed grass, phragmites	*Phragmites australis*	creeping perennial	2
leafy spurge	*Euphorbia esula & cyparissias*	creeping perennial	2
Cypress spurge	*Euphorbia esula & cyparissias*	creeping perennial	2
white clover	*Melilotus alba*	biennial	2
yellow sweet clover	*Melilotus officinalis*	biennial	2
wild parsnip	*Pastinaca sativa*	biennial/ monocarpic perennial	2
Burdock	*Arctium minus*	biennial	3
Canada goldenrod	*Solidago Canadensis*	creeping perennial	3
curly dock	*Rumex crispus*	simple perennial	3
dames rocket	*Hesperis matronalis*	simple perennial	3
giant ragweed	*Ambrosia trifida*	annual	3
Queen Anne's Lace	*Daucus carota*	biennial	3