

February 2004

Conservation Practice Job Sheet (647)

Conservation Reserve Program (CRP) policy requires newly enrolled participants, starting with Signup 26, to do some type of “disturbance” to certain CRP practices during the life of the contract. Indiana Exhibit 9 of 2-CRP (Revision 4) lists general mid-contract management activities that are available to producers. This job sheet describes that guidance in more detail.



Normally, mid-contract management activities are conducted between the 4th and 7th year of the contract. However, on land with existing cover, disturbance activities can begin as soon as technically feasible.

STRIP DISKING

Once established, grassland fields need to be managed so that the grasses do not crowd out the forbs and/or legumes over time. In the absence of disturbance, the composition of grassland communities will change over several years through normal plant succession. The vegetative structure changes as annual forbs and legumes are replaced by perennial forbs, grasses, and eventually, woody plants. Changes also occur structurally, as bare ground declines, litter accumulates, and vegetation density increases. These changes lead to a decline in wildlife benefits.

The purpose of mid-contract management activities is to enhance the wildlife habitat value of the enrolled acres by increasing the amount of bare soil and by encouraging a diverse forb/legume community. Forbs (any broadleaf plant) and legumes in

grasslands are beneficial to birds, insects such as butterflies, and other wildlife. Strip disking is an efficient and cost-effective disturbance tool that can be utilized where vegetation has become too thick to benefit the target species. Reduced plant residue and bare ground are critical for young chick mobility in grassland areas.

Disturbance is especially helpful for maintaining brood-rearing habitat for bobwhite quail, wild turkey, ring-necked pheasant and other early successional grassland wildlife species. The insects associated with annual weed communities provide critical nutrients, including protein, and essential amino acids for

growing nestlings and chicks. The structural diversity that results from disking also improves habitat for a variety of



grassland songbirds, including dickcissels, bobolinks and savannah sparrows. Many of these species have experienced population declines over the last several decades. Disking enhances habitat quality because it inhibits woody growth, promotes favored seed producing plants, reduces plant residue, increases bare ground, and increases insect abundance.

SPECIFICATIONS

The following are specifications for strip disking on CRP acreage:

- The disking operations will result in strips having 40% – 70% bare soil, equally distributed throughout the area of disturbance. Multiple passes may be required to achieve this level of bare soil.
- A maximum of 1/3 of the field can be disturbed during any year unless a waiver is received from the Farm Services Agency, or is specified in the conservation plan.

- Grassland fields must be established for a minimum of three years before initiating strip disking, and strips will not be disked more than once in a two-year period.
- Disked fieldstrips will be a maximum of 50 feet wide. Alternate the disked strips with undisturbed strips 2-4 times the width of the disturbed areas. Duplicate this pattern across the field.
- Disking operations will not be performed from March 1 through July 15, the primary nesting period for grassland bird species. It is highly recommended, but is not required, that disking be delayed until after August 15, reducing the chance of harming fledgling birds and other young wildlife.
- Designated filter strips will be left adjacent to all water bodies to maintain water quality. See NRCS Field Office Technical Guide (FOTG) Standard 393 - *Filter Strip* for additional guidance.
- Strip disking operations will be performed along field contours, or across the slope, when practical. Strips will parallel brushy or woody escape cover when feasible.
- Erosion will not exceed tolerable limits.
- Disking of filter strips, riparian buffers, grassed waterways, contour buffers or areas planted to trees and/or shrubs is not allowed.

CONSIDERATIONS

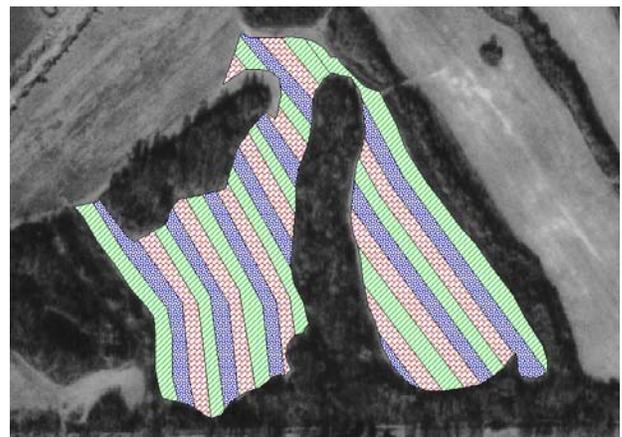
- Strip disking should be planned for the least erosive parts of fields and not in places where gully formation is a problem. CAUTION: Disking in the late fall on highly erosive sites may cause erosion to occur over the winter months. Consider broadcasting ½ bushel of winter wheat per acre to reduce erosion potential.
- Consider spot spraying or mowing areas where noxious weeds, such as Canada thistle and Johnsongrass, or other invasive species, such as Reed Canarygrass, exist. This will reduce the potential for unintentional establishment of these species by disking.
- Consider the habitat needs of the target wildlife species. Areas disked in late summer or early fall will tend to stimulate the production of hard-seeded plants such as common ragweed. These species provide excellent brood-rearing cover and winter food for quail and pheasants.

- Disking in low, wet areas should be avoided because these areas often develop sedge communities, adding additional plant diversity to the site.
- Consider seeding areas that have been disked to a mixture of forbs and legumes. See NRCS CRP Job Sheet *Mid-Contract Management: Interseeding* for guidance on forb and legume selection.
- Where the existing vegetation is extremely thick, tall, or rank, consider first using prescribed burns, herbicides, or mowing on those areas where disking will be performed.
- Landowners should be wary of tile blowholes, groundhog holes, fallen tree limbs, and other hazards that may have developed since they were last in the field.

EXAMPLE: 3-Year Rotation

Divide the field into adjacent plots that are 90 to 150 feet wide. Within each plot, mark three strips of land that are 30 to 50 feet wide.

1. In fall of the first year of disturbance, within each plot, disk the first strip of land and leave the second and third strip "undisked."
2. In fall of the second year, disk the second strip, leaving the first (disked during previous year) and third strip undisked.
3. In fall of the third year, disk the third strip, leaving the first and second strips undisked.
4. In the fourth year, begin the rotation again, as indicated in the conservation plan.



REFERENCE

Natural Resources Conservation Service, Watershed Science Institute, *Light Disking to Enhance Wildlife Habitat in Grasslands and Oldfields*.

Strip Disking - Specifications Sheet

NAME: _____ FIELD NUMBER: _____
COUNTY: _____ DATE: _____
TRACT NUMBER: _____ ASSISTED BY: _____
CONCURRENCE OF IDNR DISTRICT BIOLOGIST (recommended): _____

Specific Recommendations

Wildlife species benefited: _____

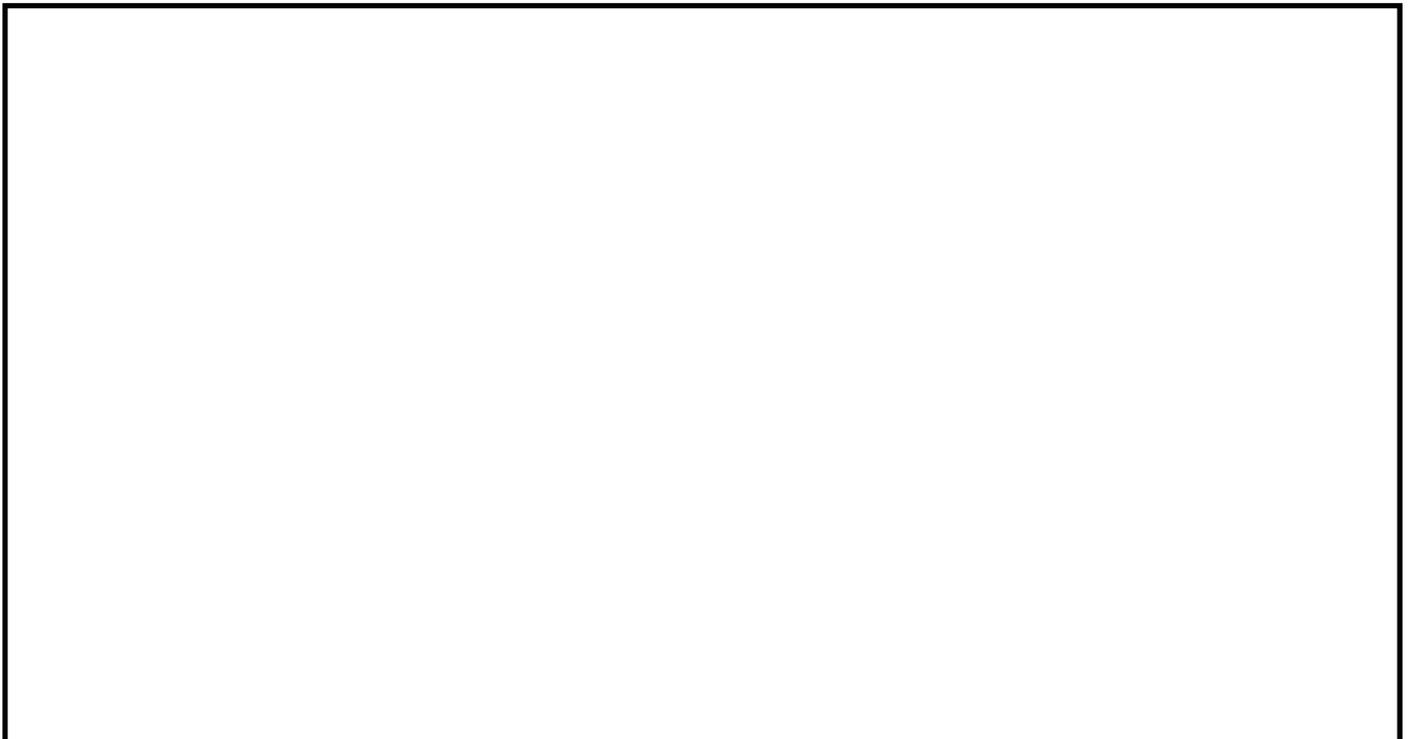
Purpose of Strip Disking: _____

Date range (i.e. disking window): _____

Number of recommended passes per strip: _____

Additional considerations:

Site/Sketch Map



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