



Natural Resources Conservation Service
 P.O. Box 1458
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February 22, 2012

TECHNICAL GUIDE NOTICE ND-131

This notice announces the following revisions to the Field Office Technical Guide (FOTG):

Section I

- The *Wildlife Habitat Evaluation Guide (WHEG)* rating tool has been updated or changed for the habitat elements. Also, a block was added on the worksheet for the planner’s initials. The WHEG is located in Section I – Reference Subjects – Biology.
- *Herbaceous Vegetation Establishment Guide (HVEG)* contains changes to “5. Seed Requirements” on page 7 and in Table 2 on page 18 as shown below:
 - Origin of non-varietal ('common') alfalfa types **and introduced legumes** is limited to North Dakota, South Dakota, Minnesota, Montana, Alberta, Saskatchewan, and Manitoba.

Introduced Legumes – Table 2		
		Origin of non-varietal ('common') alfalfa types and introduced legumes is limited to ND, SD, MN, MT, Alberta, Saskatchewan and Manitoba

Section III

- “Table 1 - *National and State Resource Concerns and Quality Criteria*” has been revised as follows:
 - Sealing of abandoned wells has been added as a requirement to meet Resource Management System criteria for the resource concerns **“Water Quality – Excessive Nutrients and Organics in Groundwater and Water Quality – Harmful Levels of Pathogens in Groundwater”**.
 - **For the resource concern Water Quality – Harmful Levels of Pathogens in Surface Water, the requirement to seal abandoned wells has been dropped.**
- *Conservation Systems Guides (CSG’s)* were developed and implemented to provide an information system that would enable planners to (1) document the resource concerns being address in conservation plans, (2) streamline the formulate alternative steps in planning, (3) capture effects from planned and applied systems, and (4) capture the natural resource planning expertise of NRCS in a database. While these objectives were well-intended, the CSG concept as implemented has failed to meet these identified business needs; therefore the CSG application and supporting database will be decommissioned in mid to late February 2012. When the decommissioning is complete, the ND links to CSG’s will be removed.

Section IV

The following changes/revisions have been made in Section IV:

Standards have been updated for:

- Heavy Use Area Protection – 561 **Standard**
- Tree/Shrub Pruning – 660 **Standard**

Conservation Practice 342 - Critical Area Planting has been updated as follows:

- Critical Area Planting – 342 **Specification** changes include:
 - Section 2. Selecting species and varieties:
 - Bullet 1 - Native species should be selected, especially within or adjacent to native plant communities. **Reed canarygrass and creeping foxtail will not be used due to their tendency to form monocultures.**
 - Bullet 3 - The seeding rate for this practice, **either drilled or broadcast**, shall be **150%** of a full rate based on the Herbaceous Vegetation Establishment Guide, Table 1.
 - Adapted Species Guide table
Meadow bromegrass and Green wheatgrass have been added to the, Under Bunchgrass, Tame:

Species	Site Adaptation ¹					
	Sandy	Loamy	Clayey	Imperfectly Drained	Poorly Drained	Moderately Saline
Bunchgrass, Tame						
Meadow bromegrass	F	G	G	-	-	-
Green wheatgrass ²	F	G	G	F	-	G

Conservation Practice 393 – Filter Strip has been revised as follows:

- Filter Strip **Specification** - 393 has changes to the “Filter Strip Mixtures and Rates for Grassed Filter Strips” on page 2 as listed below:

Species	Full seeding rate PLS lb/ac ²	Growth characteristics	Plant type (cool- or warm-season)
Alfalfa (< 20% of the mix)	10.00	Bunch	cool
Maximilian Sunflower (< 5% of the mix) ¹	1.00	Rhizomatous	warm
Switchgrass	7.00	Rhizomatous	warm
Big bluestem	11.00	Rhizomatous	warm
Western wheatgrass	15.00	Rhizomatous	cool
Slender wheatgrass (< 20% of the mix) ¹	8.00	Bunch	cool
Prairie cordgrass	11.00	Rhizomatous	warm
Canada wildrye	11.00	Bunch	cool
Tall wheatgrass	20.00	Bunch	cool
Pubescent/Intermediate wheatgrass	15.00	Rhizomatous	cool

Conservation Practice 512 – Forage and Biomass Planting has been revised as follows:

- Forage and Biomass Planting – 512 **Specification:**
 - The “NewHy hybrid wheatgrass” has been removed from all the MLRA’s in the Species list in Table 2, and replaced with “green wheatgrass.”

Conservation Practice 338 – Prescribed Burning has been updated as follows:

- Prescribed Burning – 338 – Plans and **Specifications** section now includes the following statement:
 - Relative humidity will be between 30 and 60 percent for fine herbaceous fuels averaging 20 inches or less in height; 45 to 65 percent for course herbaceous fuels averaging greater than 20 inches in height.
 - Air temperature will be between 32 and 80 degrees Fahrenheit for fine herbaceous fuels averaging 20 inches or less in height; 25 to 80 degrees for course herbaceous fuels averaging greater than 20 inches in height.
- Prescribed Burning **Fact Sheet** – 338:
 - 1) **Fuel** – Primary fuel for most prescribed burns in North Dakota will be fine to coarse herbaceous materials (grasses and forbs). For planning purposes, fuel loads can be divided into two general categories:
 - A. Fine herbaceous fuels averaging less than 20 inches in height (i.e. mixed grass prairie)
 - B. Coarse herbaceous fuels averaging greater than 20 inches in height (i.e. tall grass prairie or CRP fields)Minimum fuel load should be 1,200 pounds per acre continuous across the burn area with at least 50 percent of the herbaceous fuel in an upright or standing position.
 - 3) **Relative Humidity** – Relative humidity should be determined prior to the burn and monitored during the burn. Relative humidity for herbaceous fuels less than 20 inches in height will be 30 to 60 percent and 45 to 65 percent for herbaceous fuels greater than 20 inches.
 - 4) **Air Temperature** – Air temperatures should be determined prior to the burn and monitored during the burn. Air temperatures for herbaceous fuels less than 20 inches in height will be 32° to 80° F and 25° to 80° F for herbaceous fuels greater than 20 inches.
 - 7) **Firebreaks** – Firebreaks are used to contain the fire to the desired area. Mechanical, chemical, wetline, burned, natural or structural firebreaks should be used alone or in combination. The type, width, location and orientation of firebreaks should be determined prior to the burn. Consult the NRCS Firebreak Specification and/or local fire department for specific planning guidelines for firebreaks.
- ND-CPA-338 Prescribed Burning Plan **Form** has been updated with name changes to “Description of Burn Area” as follows:
 - Ecological Site
 - Similarity Index & Apparent Trend
 - Forage Suitability Group

Conservation Practice 528 – Prescribed Grazing has been updated as follows:

- Prescribed Grazing **Specification** – 528 has the following additions:

ADDITIONAL MANAGEMENT CONSIDERATIONS FOR WILDLIFE

The overriding management goal is to adjust the design and management of the prescribed grazing system to produce a healthy, vigorous, diverse plant community which will meet the life requisites of grassland dependent species. Adjustments may include modifying the timing, frequency, and intensity of grazing for a pasture or pastures within the rotation to produce a patchwork of differing covering heights across the pasture(s).

Changing season of deferment from year-to-year and adequate recovery periods for pastures grazed more than once during the grazing season are still elements of prescribed grazing.

Target cover heights should average 6 to 8 inches on those ecological sites/plant community phases capable of producing that level of cover.

The management flexibility needed to meet plant community and wildlife cover goal is enhanced as pasture numbers increase within the prescribed grazing rotation.

Long-term non-use (rest) has proven to be detrimental to native plant community health and results in habitat degradation for many native grassland dependent wildlife species. Periods of excessive rest favor the invasion and increase of Kentucky bluegrass and smooth brome grass which displace native species and reduce native plant diversity. Consult the appropriate ecological site description(s) for information on plant community dynamics, thresholds and guidance on the appropriate length of rest periods.

Where practical, manage woody draws as separate pastures to permit better control of the timing, frequency and intensity of grazing. This will minimize browsing, permit regeneration of shrubs and trees, and promote a diverse herbaceous understory.

Grazing each pasture within the rotation only once during the grazing season will permit those pastures grazed early in the season an opportunity to re-grow. This will provide enhanced winter cover and nesting cover the following spring. Plant vigor will be maintained or enhanced by designing the system with sufficient pastures so that grazing periods are 10 days or less. This will minimize the opportunity for livestock to graze plant re-growth during the grazing period.

Grazing some pastures within the rotation once, and others twice is also a viable design provided recovery periods between grazing events are adequate for plant recovery and grazing intensity is adjusted to meet cover requirements.

ADDITIONAL MANAGEMENT CONSIDERATIONS TO MAINTAIN RIPARIAN AND WATERSHED FUNCTION

Where practical, manage riparian areas as separate pastures to permit better control of the timing, frequency and intensity of grazing to minimize impacts on wet soils and to maintain healthy, diverse, deep rooted native herbaceous and woody vegetation. Additional information on riparian area management can be found at:

<http://www.ag.ndsu.edu/pubs/ansci/range/r1539.pdf>

<http://www.ag.ndsu.edu/pubs/ansci/range/r1541.pdf>

<http://www.ag.ndsu.edu/pubs/ansci/range/r1543.pdf>

<http://www.ag.ndsu.edu/pubs/ansci/range/r1540.pdf>

<http://www.ag.ndsu.edu/pubs/ansci/range/r1542.pdf>

<http://www.cowsandfish.org/>

- Prescribed Grazing **Fact Sheet** - 528:
The following video links have been added to the Monitoring section of the Prescribed Grazing Fact Sheet:
<http://www.ag.ndsu.edu/HettingerREC/range-wildlife> <http://www.youtube.com/watch?v=2PD548sW6OU>
- ND-CPA-9 – Planning or Data Sheet for Grass and/or Legume Seeding **Form**, Certification section has been revised as follows:
 - Is the germ test date for all species within **12 months** of when it was planted (not including the month of the test)?

Please direct questions regarding FOTG Notice 131 as follows:

- WHEG to Cindy Zachmeier, Acting State Biologist at cindy.zachmeier@nd.usda.gov .
- Heavy Use Area Protection – 561 Standard to Jill Helmuth, Agricultural Engineer @ jill.helmuth@nd.usda.gov .
- Herbaceous Vegetation Establishment Guide, Prescribed Burning, Prescribed Grazing, Critical Area Planting, Filter Strips, and forms ND-CPA-338 and ND-CPA-9 to Jeff Printz, Rangeland Management Specialist at 701-530-2080 or jeff.printz@nd.usda.gov.
- Resource Concerns and Quality Criteria and CSG questions to Mark Anderson at 701-530-2034 or mark.anderson@nd.usda.gov .

/s/

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Distribution: FOTG