

NATURAL RESOURCES CONSERVATION SERVICE  
MONTANA CONSERVATION PRACTICE SPECIFICATION

**CONSERVATION COVER (ACRE)**

**CODE 327**

**DEFINITION:** Establishing and maintaining permanent vegetative cover.

**PURPOSE:** Conservation cover is an essential practice for all land where permanent vegetative cover is desired for other than forage production or critical area plantings. Successful implementation of this practice will accomplish reduction in soil erosion and sedimentation, improve water quality, improve air quality, enhance wildlife and pollinator habitat, improve soil quality, and manage plant pests.

**CONSERVATION MANAGEMENT SYSTEM**

Conservation cover is established as part of a conservation management system to address the soil, water, air, plant, animal, and human needs as related to the owner's goals and objectives. It is important to consider adjacent crop and forage production, wildlife and pollinator habitat needs and pest management when designing conservation cover.

The selection of species, when designing conservation cover, will be based on identifiable conservation objectives and any applicable conservation program objectives. When objectives are to establish introduced species, utilize the Field Office Technical Guide (FOTG), Section IV, Forage and Biomass Planting (Code 512) job sheet for planning and application documentation. When objectives are to establish native species, utilize the Range Planting (Code 550) job sheet for planning and application documentation.

**Seeding rates and methods** of establishment must be adequate to accomplish the planned purpose. Calculate seeding rates based on Pure Live Seed (PLS). Seedbed preparation, seeding rates, seeding dates, planting depths, fertility requirements, and planting methods will be consistent with rates and methods published in the Montana Plant Materials Technical Note MT-46 and MT-58. Seedbeds must be sufficiently weed and competition free prior to seeding. Weeds need to be controlled by either tillage or use of herbicides or a combination of both. A firm seedbed is essential for seed to soil contact to ensure adequate germination.

Species that have high amounts of dormant or hard seed must calculate PLS based on a tetrazolium test, which more accurately reports total viability versus the standard direct germination test.

Good quality seed is necessary to ensure successful stand establishment, therefore, certified seed is highly recommended when it is available and economically practical. Seed must meet all provisions of Federal and Montana state seed law including proper tagging and identification of seed source, percent germination, and percent purity.

Calibrate planting equipment prior to each seeding to ensure that the correct seeding rate and depth are set. Innovative seeding equipments or methods, which are not traditionally used and do not provide for precise seed placement, requires a variance approved by the State Resource Conservationist prior to use.

Grasses, forbs and legumes should be planted in mixes to encourage maximum plant diversity. Invasive species should be avoided. Crested or Siberian wheatgrass will not be included when wildlife habitat enhancement is an objective. However, when annual precipitation is less than ten inches, Crested or Siberian may be included in the mixture.

**Timing of seeding** is dependent on the species planned to be established. Spring seeding should typically be completed by May 15, however, later seeding may be accomplished if there is a minimum of two feet of moist soil and temperatures are expected to remain below 75° F.

Dormant fall seeding can be made once the soil temperature is less than 40° F at two inches of soil depth for 10 or more consecutive days. Generally, this will occur after October 15. Species with high percentage of

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dormant or hard seed must be planted as a dormant fall seeding if they are major components of a mix for best results.

Generally, a field is considered to have an **adequate stand** when there is an average of at least 0.75 plants established per square foot in areas receiving 15 inches or less of annual precipitation. Areas receiving more than 15 inches of annual precipitation shall have at least 1.0 plant established per square foot. An established plant is one that has a well-developed root system and shows evidence of tillering or producing seed. Any areas larger than two acres on which the stand is inadequate will require supplemental seeding.

Prior established stands of cover may need to be renovated or enhanced to improve wildlife or pollinator habitat, provide bio-diversity, or increase protection against erosion, or other objectives. Renovation or enhancement of a field may be required if:

- The stand has become stagnant due to excessive vegetative litter on the soil surface
- Pests such as weeds have become epidemic or noxious weeds persist
- Bio-diversity has been reduced due to monotypic stands
- Habitat benefits have been reduced due to depletion or non-existence of multi-species stands most beneficial to various wildlife or pollinator species.

Renovation of a stand may include a variety of practices including clipping, mowing, light discing, deep ripping, fertilization, prescribed burning, grazing, pesticide application, and seeding or re-seeding of additional grass or legume species. Refer to [Agronomy Technical Note MT-82](#) Strategies for Renovation and Enhancement for guidelines concerning stand renovation and enhancement issues.

### WILDLIFE

Grasses, forbs, shrubs and/or legumes shall be planted in a diverse mix to promote biodiversity and meet the needs of targeted wildlife or pollinator species. Consider using species that will accommodate reproduction and other life cycle requirements of target wildlife or pollinator species. Determine appropriate food and cover requirements from the FOTG, Section IV, Practice Standard, Upland Habitat Management (Code 645). Refer to Biology Technical Note, MT-20 (Rev. 5), Habitat Development for Pollinator Insects for species selection, management and maintenance of habitat for pollinator species.

### OPERATION AND MAINTENANCE

Mowing and harvest operations in perennial crop systems such as orchards, vineyards, berries, and nursery stock shall be done in a manner which minimizes the generation of particulate matter. Measures must be adequate to control noxious weeds and other invasive or undesirable species.

If wildlife habitat enhancement is a purpose, maintenance practices and activities shall not disturb cover during the reproductive/nesting period for the desired species. Periodic mowing or burning may be necessary to maintain the health of the plant community. Burning must be completed based on a Burn Plan developed under the guidance found in the FOTG, Section IV, Conservation Practice, Prescribed Burning (Code 338).

To benefit insect food sources for grassland nesting birds, spraying or other control of noxious weeds shall be done on a "spot" basis to protect forbs and legumes that benefit native pollinators and other wildlife.

If pollinator habitat enhancement is a purpose, plantings must remain undisturbed throughout the growing season (until after the first killing frost in the fall) so that flowers are available as a nectar source to adults and succulent herbage can be utilized by larvae. Maintenance treatments, such as grazing, burning, or haying may be required outside of the flowering period. Burning must be completed based on a Burn Plan developed under the guidance found in the FOTG, Section IV, Conservation Practice, Prescribed Burning (Code 338).