



**CONSERVATION ENHANCEMENT ACTIVITY**

**E328136Z - Colorado**

**CONSERVATION STEWARDSHIP PROGRAM**

Leave standing grain crops unharvested to benefit wildlife food sources

**Conservation Practice 328: Conservation Crop Rotation**

**APPLICABLE LAND USE: Crop (Annual & Mixed)**

**RESOURCE CONCERN ADDRESSED: Fish & Wildlife – Inadequate Habitat**

**PRACTICE LIFE SPAN: 1 Year**

**Enhancement Description**

Implement a crop rotation which allows a portion of grain crops to be left in fields unharvested to provide food and cover for wildlife during winter months.

**Criteria**

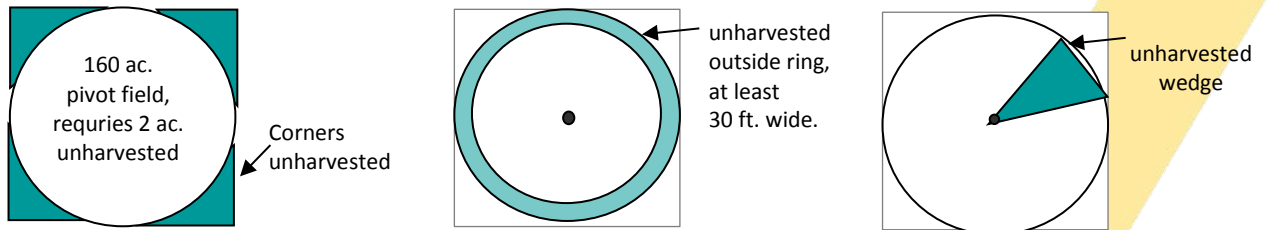
- Crops shall be grown in a planned sequence as outlined in the subsequent criteria. The crop rotation shall include a minimum of three different crops. For purposes of these criteria a cover crop is considered a different crop.
- Where applicable, plan suitable crop substitutions when the planned crop cannot be planted due to weather, soil conditions, or other local situations. Provide a contingency plan/statement indicating what crops would potentially be substituted and under what conditions.
- Select the crops and crop management activities<sup>1</sup> that provide food for the targeted wildlife species using an approved habitat evaluation procedure.
  - The targeted species will be a species, group or guild that occurs in the area and is known to utilize crop grain crops as forage during fall/winter/spring months.
  - The crop planned to be left unharvested will be the forage crop for the targeted species and it will be grown/irrigated to produce a seed head.
  - Use a state approved habitat evaluation, located in CO Biology Technical Note No. 40 - Wildlife Habitat Evaluation Guides (WHEGs).

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- Leave a minimum 0.5 acre of unharvested, standing grain crops<sup>1</sup> for each 40 acres of cropland. Unharvested plots shall be located in a single location on the 40 acre unit and additional plots shall be located on different 40 acres. It is recommended to plan plots as blocks rather than strips. If strips are used, they should be at least 30 ft. wide.

Cropland \_\_\_\_\_ acres / 80 = \_\_\_\_\_ acres (rounded to the nearest 0.5 acre) is the minimum required unharvested acreage.

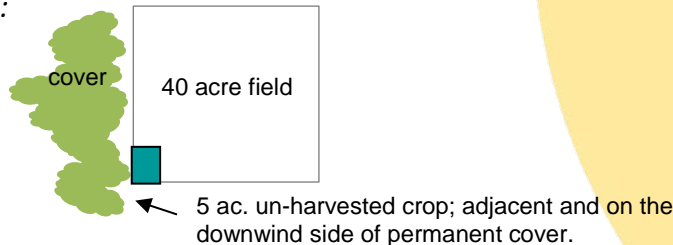
Examples:



<sup>1</sup> Depending upon the targeted species's WHEG, it may be recommended to mow the stand to make the seed available for the targeted species. \*This does not imply that the stand can be harvested.

- Locate the unharvested plots adjacent to permanent cover such as brushy fencerows, field borders, CRP lands, forest land, or wetlands (this does not include newly established vegetation). Preferably on the downwind side of prevailing winter winds.

Example:



- Leave unharvested crops standing over winter until it is time to prepare the soil for planting the next crop. Through the evaluation process, it may be determined that spring forage is a critical needed element for the targeted species. It may be *recommended* to delay spring preparations for as long as possible.
- The plots may not be harvested or otherwise disturbed (i.e. tillage, burning, grazing, etc. ), unless recommended by the WHEG.



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### Additional Information

Examples: Provided below are examples for typically targeted wildlife species. This is not a comprehensive listing, other species may be targeted.

#### Sandhill Cranes in the San Luis Valley, CO

Nearly the entire Rocky Mountain population of greater sandhill cranes (a state species of special concern) utilizes the San Luis Valley, CO as a staging area during their spring and fall migration. Where small grains provide the primary source of nutrients during these critical periods. However, changes in agricultural trends and practices have dramatically effected of the amount available for cranes, especially during the spring when forage demands are highest.

Leaving standing crops of barley or wheat can be highly beneficial for cranes. Especially when combined with residue management practices (leaving crop residues until spring) on adjacent grain fields. Crops can be grown with limited water; a low crop yield is acceptable. However, a seed head must be produced in order to meet the criteria of this enhancement. The crop should be swathed, mowed, or chopped in March to allow for easier crane feeding. The crop will not be altered until April 1<sup>st</sup>. Leave the crop until the end of April if possible.

Criteria. When leaving un-harvested grain for cranes, the crop area must be within 6 miles of a crane roosting wetland (but it does not need to be adjacent to a wetland).

#### Upland Birds including Ring-necked Pheasants and Bobwhite Quail

Crop stubble is often the predominant cover available to pheasants throughout the winter (from harvest until cultivation in the spring). It can provide critical winter thermal and escape cover, and foraging benefits. However, changes in agricultural practices such as conversion to semi-dwarf crop varieties and improved harvesting efficiencies has resulted in lower stubble height and greatly diminished seed 'waste' that would otherwise be available to upland birds.

Leaving standing crops of wheat, corn or sorghum can be highly beneficial for upland birds. Especially when combined with residue management practices on adjacent grain fields. Crops can be grown with limited water; a low crop yield is acceptable. However, a seed head or ear must be produced and the average plant height must be at least 15 inches for cereal grains, 24 inches for grain sorghum, and 36 inches for corn or forage sorghum in order to meet the criteria of this enhancement. The crop will not be altered until March 31<sup>st</sup>.



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## Documentation and Implementation Requirements

Participant will:

- Prior to implementation, provide NRCS with the planned crop rotation.

Field	Acres	Planned Crops (in sequence)	Length of Crop Rotation (years)

- Prior to implementation, develop a map showing planned location(s), crop type(s), and acreage of crops to be left unharvested.
- During implementation, notify NRCS of any planned changes in crops, crop rotation, or unharvested areas to verify the planned system meets the enhancement criteria.
- During implementation, take photos of all unharvested plots. Photos must indicate field location and date.
- After implementation, if changes to the rotation were made, complete the tables above to document the applied Conservation Crop Rotation for the contract period and provide to NRCS.
- After implementation, make map showing implemented location(s), crop type(s), and acreage of crops that were left unharvested each year available for review by NRCS to verify implementation of the enhancement.
- After implementation, make photos of unharvested plots available for review by NRCS to verify implementation of the enhancement.

NRCS will:

- As needed, provide technical assistance in selecting crop rotations or substitute crops that would meet the criteria of the enhancement.
- As needed, provide technical assistance in selecting crops for food according to the approved habitat evaluation procedure.



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- As needed, provide additional assistance to the participant as requested.
- During implementation, evaluate planned changes crops, crop rotation, or unharvested areas to verify the planned system meets the enhancement criteria.
- After implementation, review map showing implemented location(s), crop type(s), and acreage of crops that were left unharvested each year to verify implementation of the enhancement.
- After implementation, review photos of unharvested plots to verify implementation of the enhancement.

*When contracting this activity, the entire field is considered in the planning process to ensure the appropriate proportions of standing crops are left to meet the activity requirements and therefore all acres of the fields should be included in the acreage payment-- not just those left unharvested.*

### **Colorado Requirements**

- Specifications for this practice shall be prepared for each site. Specification shall be recorded using approved 328 specifications sheets, job sheets, narrative statements in the conservation plan, or other acceptable documentation.
  - The planned crop sequence, identifying the forage crop left for the targeted wildlife species.
  - A contingency plan/statement indicating what crops would potentially be substituted and under what conditions.
  - Map showing location(s), crop type(s), and acreage of crops to be left unharvested.
- The Wildlife Habitat Evaluation Guide (WHEG) completed for the targeted wildlife species, group or guild.
- Photo documentation, or other appropriate documentation, that confirms that the crop formed a seed head and that it was left unharvested until the following spring.



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**NRCS Documentation Review:**

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name \_\_\_\_\_ Contract Number \_\_\_\_\_

Total Amount Applied \_\_\_\_\_ Fiscal Year Completed \_\_\_\_\_

\_\_\_\_\_  
NRCS Technical Adequacy Signature

\_\_\_\_\_  
Date

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