



CONSERVATION ENHANCEMENT ACTIVITY

E340H

CONSERVATION STEWARDSHIP PROGRAM

Cover crops to suppress excessive weed pressures and break pest cycles

Conservation Practice 340: Cover Crop

APPLICABLE LAND USE: Crop (Annual & Mixed); Crop (Perennial)

RESOURCE CONCERN: Plants

ENHANCEMENT LIFE SPAN: 1 Year

Enhancement Description

Establish a cover crop mix to suppress excessive weed pressures and break pest cycles. Select cover crop species for their life cycles, growth habits, and other biological, chemical and/or physical characteristics. Select cover crop species that do not harbor pests or diseases of subsequent crops in the rotation. Cover crop shall not be harvested, grazed, or burned.

Criteria

- Plant species, seedbed preparation, seeding rates, seeding dates, seeding depths, fertility requirements, and planting methods will be consistent with applicable local criteria and soil/site conditions **(REFER TO STATE SPECIFIC LISTS)**.
- Determine method and timing of cover crop termination to meet grower's objective and current NRCS Cover Crop Termination Guidelines.
- Select species that are compatible with other components of the cropping system.
- Ensure herbicides used with crops are compatible with cover crop selections.

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- Cover crops may be established between successive production crops, or companion-planted or relay-planted into production crops. Select species and planting dates that will not compete with production crop yield or harvest.
- Do not burn cover crop residue.
- Do not harvest or graze cover crop.
- If specific rhizobium bacteria for selected legumes are not present in the soil, treat seed with appropriate inoculum at time of planting.
- Select cover crop species that do not harbor pests or diseases of subsequent crops in the rotation. Select cover crop species for their life cycles, growth habits, and other biological, chemical and or physical characteristics to provide one or more of the following:
  - To suppress weeds or compete with weeds.
  - Break pest life cycles or suppress of plant pests or pathogens.
  - Provide food or habitat for natural enemies of pests.
  - Release compounds such as glucosinolates that suppress soil borne pathogens or pests.



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## Documentation and Implementation Requirements

### Participant will:

- Prior to implementation, provide NRCS with the current and planned crop rotation and field operation(s) used for each crop.

### Planned Management Rotation Including Cover Crop

Field	Planned Crops/Cover Crop (in sequence)	Planting Date	Harvest/Termination Date

### Cover Crop Mix and Seeding Rate

Species	Variety	Seed Size	Typical Seeding Depth	Seeding Rate (PLS lbs/acre)	Percent of Mix (%)

### Establishment and Management Considerations:

Task	Provide information and details
Seedbed Preparation	
Seeding Date	
Seeding Depth	
Seeding Method	
Fertilizer, as needed	
Weed Management, as needed	
Termination Date (window)	
Termination Method	

- Prior to implementation, read and follow current [NRCS Cover Crop Termination Guidelines](#).



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- During implementation, cover crops must not be grazed, burned, harvested or biomass removed.
- During implementation, notify NRCS of any planned changes in crops, crop rotation, or unharvested areas to verify the planned system meets the enhancement criteria.
- After implementation, if changes to the cover crop and crop rotation were made, complete the tables above to document the applied Cover Crop for the contract period and provide to NRCS.

**NRCS will:**

- As needed, provide technical assistance in selecting cover crop mixes for the crop rotations or substitute species that would meet the criteria of the enhancement.
- As needed, provide additional assistance to the participant as requested.
- Prior to implementation, provide and explain the current [NRCS Cover Crop Termination Guidelines](#).
- During implementation, evaluate planned adjustments in cover crop selected, timing in crop rotation, management, or field operations to verify the new system meets the enhancement criteria.
- After implementation, evaluate the applied crop rotation or management using information provided from the participant, if any variation to planned evaluation, document that the applied rotation met the enhancement criteria.

**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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**IOWA SUPPLEMENT TO  
CONSERVATION ENHANCEMENT ACTIVITY**

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PROGRAM**

**E340H**

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**Additional Criteria for Iowa**

- State list of approved Cover Crop species, seeding rate, seeding dates, seeding depths and planting methods for suppressing weeds and breaking pest cycles can be found in 340 Iowa Implementation Requirements for Cover Crops.
- Mixes may be developed using the Midwest Cover Crops Council Cover Crop Decision Tool for Iowa <http://mccc.msu.edu/selector-tool/>. Filter the list of potential cover crops for your county by selecting the first goal as weed fighter for excessive pest pressure. For breaking pest cycles, utilize "Managing Cover Crops Profitably".
- Specific weed and pest suppressing characteristics of individual cover crop species can be found Charts 1 and 2 of "Managing Cover Crops Profitably".
- Spring seeded cover crops are allowed as per 340 Cover Crop Implementation Requirements.
- Single species of cereal grain cover crop are allowed.
- Consider seeding at 200% of the minimum seeding rate for the mix.
- The cover crop will not be terminated in the spring until it has reached a plant height of 12 inches.