



# Cover Crop

## Iowa Job Sheet

Natural Resources Conservation Service (NRCS)  
Des Moines, Iowa

Iowa Conservation Practice 340  
April 2016

### Definition

Cover crops are planted in the late summer or fall around harvest and before spring planting of the following year's crops. Common cover crops used in Iowa include winter hardy plants like cereal rye and wheat. Other less common, but also effective cover crops include oats, spring wheat, hairy vetch, red clover, sweet clover, turnips, rapeseed, radishes, and triticale.

### Purpose

Cover crops reduce soil erosion, utilize excess soil nutrients, suppress weeds, minimize soil compaction, increase soil organic matter, improve soil moisture efficiency, and improve overall soil health. Cover crops increase surface cover, anchor corn and soybean residues, increase water infiltration, and reduce compaction.

In addition to the environmental and soil health benefits, several cover crops may be used for grazing forage for livestock and wildlife.

### Conditions Where Practice Applies

Cover crops may be used on all lands needing seasonal vegetative cover for natural resource protection and improvement. They are an excellent tool for helping to improve soil health.

### General Specifications

**Seeding:** Establish cover crops according to recommended seeding rates, dates, and methods provided by NRCS. For prepared seedbeds, crops should be seeded at the proper depth for fast emergence – .25 to .5 inches deep for legumes and grasses, and .75 to 1.5 inches deep for cereal grains. (See NRCS Agronomy Technical Note 38 for Cover Crop Management, including Seeding Rates and Dates. See NRCS Agronomy Technical Notes 36 and 39 for Cover Crop Seeding Methods.)

If seeding the cover crop prior to harvest, broadcast the seed by a method that allows for good coverage and prevents damaging the standing crop. No seedbed preparation is necessary. Seeding into standing soybeans should be completed before the soybeans have dropped more than 10% of their leaves. The leaf fall after seeding will act as



mulch and provide soil protection and moisture conservation. Broadcast seeding into standing corn should be delayed until the kernel milk line is at least 50% formed. For silage corn, broadcast seed several weeks before cutting silage, when the corn is in early dent stage. Consider current weather and air temperature before sowing into other standing crops.

Inoculate legume seed with species-specific Rhizobia bacteria before seeding. Control pests as needed to ensure cover crop development.

**Cover Crop Termination:** Cover crops can be terminated by harvesting, crimpers, frost, mowing, tillage or herbicides. Make sure any herbicides are compatible with the following crop. Follow all Federal, State and local laws and regulations, as well as manufacturer's label with all herbicides. Do not burn cover crop residue.

### Maintenance

Cover crops should be terminated as late as feasible to maximize plant growth and residual nutrient accumulation, while allowing sufficient time for the cover crop to decompose, release nutrients, and recharge soil moisture.

Acceptable benefits, for most purposes, are usually accomplished when the combined canopy and surface cover is at least 60 percent and the above ground dry biomass production is at least 800 lbs/acre. This should be accomplished when the cover crop is 6" tall.

# Cover Crops(340)

<b>Date:</b>		<b>Farm #:</b>	
<b>Prepared by:</b>		<b>Tract #:</b>	
<b>Owner/Client:</b>		<b>Acres:</b>	

### Definition:

Grasses, legumes or forbs planted for seasonal vegetative cover.

### Application:

This practice applies to all lands requiring seasonal vegetative cover for natural resource protection or improvement.

### Purpose (mark all that apply)

<input type="checkbox"/>	Reduce erosion from wind and water
<input type="checkbox"/>	Increase soil organic matter
<input type="checkbox"/>	Manage excess nutrients in the soil
<input type="checkbox"/>	Promote biological nitrogen fixation
<input type="checkbox"/>	Increase biodiversity
<input type="checkbox"/>	Suppress weeds and break pest cycles
<input type="checkbox"/>	Provide supplemental forage
<input type="checkbox"/>	Improve soil moisture use efficiency
<input type="checkbox"/>	Minimize soil compaction

	Field	Total Acres	Residue Type	Species	Seeding Rate (lbs/ ac PLS*)	Seeding Date	Seeding Method	Termination Date or Stage	Termination Method
<b>Planned</b>									
<b>Actual Implementation</b>									
<b>Planned</b>									
<b>Actual Implementation</b>									
<b>Planned</b>									
<b>Actual Implementation</b>									

\* To figure Pure Live Seed (PLS) rates, multiply the percent purity by the percent germination. Divide the seeding rate by the percent PLS to find the bulk seed needed per acre.

For example: 98% purity X 60% germination = 0.588 PLS  
10 lbs/acre ÷ 0.588 PLS = 17 lbs/acre

### Other

- Nutrient Rate, Timing, etc.
- Management Requirements

### REQUIRED DOCUMENTATION:

- All Invoices (application & seed)
- Seed tag or other PLS documentation

**Note:** Producer must complete the yellow portion of this form.

**If you are receiving conservation financial assistance, this form is REQUIRED. Any changes need to be discussed with NRCS prior to implementation or financial assistance may not be provided.**

Producer Initials & Date

Seeding Completion Certification (sign/date)