



## Soil Quality Enhancement Activity – SQL05 – Use of deep rooted crops to break up soil compaction

### State Criteria

Acceptable Deep Rooted Crops are: Alfalfa; Sweet Clover; Canola; Radish; Turnip; and any Sorghum, Sudangrass or Sudan/Sorghum hybrids seeded early enough in the summer to allow for adequate growth to occur prior to winter (Follow NRCS [340 Cover Crop](#) standard).

*Example 1:* Existing rotation is corn – beans – wheat. A turnip cover crop will be planted after wheat to break up soil compaction.

***Cover crops must be planted whenever the crop they are scheduled to follow in the rotation is grown and rotated across all planned acres by the end of the contract period.***

### Cover Crop Requirements

- Cover crops cannot be harvested or grazed
- Cover crops must follow planting dates, seeding rates, method of planting and other requirements in 340 Cover Crop Standard. Specifications will be provided on the [Cover Crop Worksheet \(NE-CPA-7\)](#).
- Cover crops which winter kill must be planted at least 8 weeks prior to the average date of the first killing frost.
- Cover crops which over winter must have at least 4 weeks of spring growth before termination.
- Winter annual cover crops planted following a low residue crop must have a minimum of 6-8” of growth before they are terminated.
- Cover crop must be a different crop type (i.e. warm season grass, cool season grass, warm season broadleaf, cool season broadleaf) or, if a cover crop mix is used, include a different crop type than the previous crop.
- Cover crops which follow fall harvested crops must be winter annual small grains such as rye, wheat or triticale, or a winter annual small grain with a legume.

*Example 2:* Existing rotation is continuous corn. Alfalfa will be added to the rotation to break up soil compaction.

***Any crop added to an existing crop rotation must be scheduled by the third year and rotated across all planned acres by the end of the contract period.***



United States Department of Agriculture  
 Natural Resources Conservation Service

NE-SQL05 2010 Ranking Period 2

**DOCUMENTATION REQUIREMENTS**

Complete the Table below:

| To be completed by NRCS and Producer during planning |          |                   |  |                  |               | To be completed by Producer during certification process |               |
|--|----------|-------------------|--|------------------|---------------|--|---------------|
| 1  | 2        | 3                 | 4                                      | 5                | 6             | 7  | 8             |
| Tract  | Field(s) | Existing Rotation | Planned Rotation with Deep Rooted Crop | Deep Rooted Crop | Acres Planned | Date Planted   | Acres Applied |
| <i>1</i>   | <i>1</i> | <i>C-B-W</i>      | <i>C-B-W-cc</i>                        | <i>Turnips</i>   | <i>50 Ac.</i> | <i>Aug. 1</i>  | <i>50 Ac.</i> |
|  |          |                   |  |                  |               |  |               |
|  |          |                   |  |                  |               |  |               |
|  |          |                   |  |                  |               |  |               |
|  |          |                   |  |                  |               |  |               |
|  |          |                   |  |                  |               |  |               |
|  |          |                   |  |                  |               |  |               |

EX= EXAMPLE, COLUMNS 1-6 NRCS COMPLETES, COLUMNS 7-8 PRODUCER COMPLETES  
**C=Corn; B=soybeans/edible beans; W=Wheat; M=Milo; A=Alfalfa; O=Oats; cc=cover crop;**  
**Others=\_\_\_\_\_**

**I certify that the following information meets specifications and has been provided to NRCS:**

1. Planned rotation, deep rooted crop grown, planting date and the number of acres where the enhancement was applied (Complete the above table.).
2. A map with delineation of the area where the enhancement was applied.
3. A [completed Cover Crop Worksheet \(NE-CPA-7\)](#) if deep rooted cover crops were included in the rotation.
4. Photographs of a representative number of fields showing deep rooted crops.

I understand that it is my responsibility to obtain all necessary permits and to comply with all laws, regulations and ordinances pertaining to the application of these activities.

**Certified by:** \_\_\_\_\_ **Date:** \_\_\_\_\_