

Cover Crop

Virginia Conservation Practice Job Sheet

340



Definition

Grasses, legumes, forbs planted for seasonal cover.

Criteria Applicable to All Purposes

Select cover crop species that are:

- Compatible with producer's objectives, site conditions, and other aspects of farming system.
- Consistent with approved guidance such as VA Plant Establishment Guide, Tech Notes, etc.
- Not designated in Virginia as noxious weeds.
- Compatible with herbicides and their residues.

Do not harvest cover crops for seed. Ensure any harvesting of covers for forage or fodder does not compromise intended conservation purpose.

Do not burn cover crop residues.

Ensure rhizobium bacteria for legume cover crops is present in the soil or treat the seed prior to planting.

Ensure non-irrigated cover crops are terminated no later than five days after planting the subsequent crop, but before emergence of the subsequent crop.

Additional Criteria to Reduce Erosion

Select and manage cover crops for adequate protection of soil during critical erosion periods.

Additional Criteria to Maintain or Increase Soil Health and Organic Matter Content

To enhance soil health, select/manage covers to maximize implementation of soil health principles (keep soil covered, minimize soil disturbance, maximize living roots, maximize soil biodiversity).

To enhance soil organic matter, select/manage covers to return to soil large amounts of organic material.

Additional Criteria to Reduce Water Quality Degradation Due to Excessive Soil Nutrients

Select/manage covers to achieve any of these:

- Reduce the supply of excess nutrients in the soil (e.g., grasses or brassicas scavenging excess soil nitrogen (N) in the fall).
- Reduce the need to supply excess nutrients to the soil (e.g., legumes fixing atmospheric nitrogen for use by subsequent nitrogen-fertilized crops)
- Reduce transport for excess nutrients from the soil (e.g., covers reducing runoff, erosion, and leaching risk by transpiring moisture, increasing soil cover).

Additional Criteria to Suppress Weeds or Break Pest Cycles

Select/manage covers to suppress weeds through:

- Competition by actively growing cover crops.
- Mulching effects of dead cover crop residues.
- Allelopathic effects due to chemicals released by cover crops or cover crop residues.

Suppress insects, diseases, or other pests by:

- Rotating to non-host cover crops or cover crops that release substances toxic to pests.
- Growing cover crops that provide habitat for beneficial insects and organisms.
- Drawing pests away from main crops to trap crops.

Additional Criteria for Soil Moisture Management

Select/manage covers to eliminate or conserve soil moisture, depending on need of next crop(s).

Additional Criteria to Minimize and Reduce Soil Compaction

Select/manage covers to improve soil porosity through any of following:

- Production of large diameter roots.
- Production of deep roots.
- Production of large quantities of root biomass.

NOTE: This summary does not address all requirements and considerations in the VA Cover Crop Conservation Practice Standard (VA-340). Consult the Conservation Practice Standard for further details.

General Information

Client: _____	County: _____
Field Office: _____	Contract #: _____
Farm #: _____	Tract #: _____
Field # and acreage: _____	

Client's Purpose(s) (check all that apply)

Note: Some purposes trigger additional requirements to include in Specifications – see page 1 or Standard for details.

- ☐ Reduce erosion from wind and water
- ☐ Maintain or increase soil health or organic matter content
- ☐ Reduce water quality degradation due to excessive soil nutrients
- ☐ Suppress excessive weed pressures and break pest cycles
- ☐ Improve soil moisture management
- ☐ Minimize soil compaction

Practice Specifications

Follow all specifications and recommendations below for practice implementation.

General Criteria Required by Standard in All Cases

1. Selected cover crop species and management shall be compatible with producer's objectives, site conditions, and other crops and practices in farming system.
2. Selected cover crop species and management shall be consistent with approved guidance such as Plant Establishment Guide for Virginia, Tech Notes, etc.
3. Plants designated in Virginia as noxious weeds shall not be used as cover crops.
4. Cover crop residue shall not be burned.
5. Non-irrigated cover crops shall be terminated no later than five days after planting the subsequent crop, but before emergence of the subsequent crop.
6. Herbicides and herbicides residues shall be compatible with cover crops.
7. Cover crops shall not be harvested for seed. Harvesting cover crops for forage shall not compromise intended conservation purposes of cover crops.
8. Ensure rhizobium bacteria for legume cover crops is present in soil or inoculate the seed at planting.

Timing of Cover Crops in Planned Cropping Sequence

As appropriate, specify timing / role of cover crops in overall crop rotation. See also VA-328 for crop rotation planning.

Recommendations/Specifications for Cover Crop Establishment, Management, and Termination

Field Number(s)	Establishment				In-season		Termination		Other recs/specs	Target for cover crop performance (% cover or biomass yield)
	Species to plant	Planting date(s)	Planting rate(s)	Planting method/depth	Is biomass harvest planned?	Other management	Kill method	Kill timing		

Additional Specifications / Criteria Required by Standard Depending on Client's Purpose(s)

Write in applicable additional criteria, if any, based on client's purpose(s); see complete Standard for details

Additional Site-specific Recommendations

List any additional recommendations related to site preparation, cover crop management or complementary practices (conservation tillage, crop rotation, etc.) to achieve conservation objectives.

Operation & Maintenance (O&M)

Carry out the following to ensure that the planned cover crop practice functions as intended after initial implementation / establishment.

Minimum O&M Requirements:

1. Verify that cover crops are established and performing as desired.
2. Reseed as needed or carry out other in-season management such as weed control, fertilization, etc. to ensure targets for plant performance are achieved.

Additional O&M Recommendations

Provide any additional practical guidance for actions to ensure the long-term effectiveness of practice.

Planner Certification

The Cover Crop practice planned in this job sheet fulfills minimum requirements of Virginia NRCS Conservation Practice Standard 340.

Signature

Title

Date

Certification of Practice Completion

The Cover Crop practice planned in this job sheet has been completed and maintained according to Virginia NRCS specifications (indicate in Practice Specifications any changes to planned activities and acreage).

Signature

Title

Date

If needed, an aerial view or a side view of the practice can be shown below. Other relevant information, complementary practices and measures, and additional specifications may be included.

Scale 1"= _____ ft. (NA indicates sketch not to scale: grid size=1/2" by 1/2")

Additional Specifications and Notes:

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