

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE SPECIFICATION
COVER CROP
 (acre)

CODE 340

SPECIFICATIONS

• **Cropland Cover Crops**

Table 1 shows suitable species for cropland, seeding rates, and planting dates. Most plants in **Table 1** can be used for grazing. Planting dates are by MLRAs as grouped in table one.

Table 4 shows recommended dead litter crops or cover crops for dry land erosion control. Recommended planting dates by MLRAs (this table is taken from the Range Planting specification 550).

Seeding rates in **Table 1, 2, and 3** are based on 20 seeds per square foot for dryland and 30 seeds per square foot for irrigated. These rates are for ideal conditions for seeding. When conditions are less than ideal (poor seedbed preparation, poor seeding equipment, unreliable seed placement, or broadcast application with poor incorporation) **the seeding rates should be doubled**. This is very important to have a successful planting.

Seeding rates of starred (*) species in column 1 may not be practical at the 20 and 30 plants/ft² rates. Rates for those species may be reduced to table rates.

Mustard, Oilseed Radish, and Rapeseed have soil fumigant properties, and can be used just prior to planting a root crop to reduce the risk of rootknot nematode damage. Cowpeas, Vetch, Winter Peas, Clovers, and Sun Hemp are legumes and can add nitrogen when used as a green manure crop. The annual grain crops can be used to temporally stabilize construction sites when soil moisture is available.

It is important to specify a planting date early enough to establish enough cover to protect the

field from wind erosion. If cover is needed after cotton to protect a sandy field then it should be harvested first to get the cover established.

Following low residue producing crops such as Chile, Cotton, and Peanuts, small grain can be flown on the field just before harvest, and watered up after harvest. This technique reduces the labor and time in the fall to establish a cover.

Many times cropland will fail to meet a soil condition index rating greater than zero. This is because there is not enough biomass produced to make the rotation sustainable. A cover crop may make the rotation sustainable.

Use non-native mixes if native seed is not available or natives will not perform well for the needed use.

• **Other Cover Crop Sites (Orchards)**

Cover crops for orchards include the annual crops (**Table 2**) listed for cropland plus perennial crops (**Table 3**). Planting dates for the latter should correspond to rates and dates for irrigated pasture and hayland.

Table 2 shows plant mixes that can be used for short a period cover on irrigated land.

Table 3 shows perennial cover for longer time spans. These are typically orchard ground covers or Alley Cropping.

• **Non-irrigated**

The potential use of cover or green manure crops on non-irrigated land in NM is limited. Those crops having greatest potential for success include the winter small grains, millet, sorghum and sweetclover. Seeding rates are listed in **Table 1**. Seeding dates should be based on soil moisture and probability of rainfall.

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Table 1 CROPLAND COVER CROP SPECIES

SPECIES	SEEDING RATES		PLANTING DATES BY MLRA		
	DRY PLS (lbs/ac)	IRR. PLS (lbs/ac)	SD, HP-3, & CP-4 (date)	HP-1, HP-2, CP-1, CP-2, CP-3, WP- (all), & ND (date)	RM-1, RM- 2, HV-1, & HV-2 (date)
Barley (for fall)	65	100	8/15 to 11/1	8/1/ to 10/1	8/1 to 10/1
Chickery	Not Suited	2	8/15 to 9/15	8/1 to 9/1	8/1 to 9/1
Clover, Alsike	4	5	3/1 to 4/15	4/1 to 5/1	4/1 to 5/1
Clover, Red	4	5	3/1 to 4/15	4/1 to 5/1	4/1 to 5/1
Clover, Strawberry	4	4	3/1 to 4/15	4/1 to 5/1	4/1 to 5/1
Cowpeas	25*	40*	4/15 to 8/1	5/1 to 7/15	5/1 to 7/15
Forage Sorghums	10*	20*	4/15 to 8/1	5/1 to 8/1	5/1 to 7/15
Millet (Foxtail)	4	4	4/15 to 8/15	5/1 to 8/1	5/1 to 7/15
Millet (Pearl)	10	15	4/15 to 8/15	5/1 to 8/1	5/1 to 7/15
Mustard	Not Suited	8*	8/15 to 9/15	8/1 to 9/1	8/1 to 9/1
Oats (fall)	60	100	8/15 to 11/1	8/1/ to 10/1	Not Suited
Oats (spring)	60	100	3/1 to 5/16	3/1 to 5/15	4/1 to 5/15
Oilseed Radish	Not Suited	18	8/15 to 9/15	8/1 to 9/1	8/1 to 9/1
Rapeseed	Not Suited	7	8/15 to 9/15	8/1 to 9/1	8/1 to 9/1
Rye (cereal)	48	70	8/15 to 11/1	8/15 to 10/15	8/1 to 10/1
Ryegrass	Not Suited	4	8/15 to 11/1	8/15 to 10/15	8/1 to 10/1
Sun Hemp (SD only)	Not Suited	20*	4/15 to 8/1	Not Suited	Not Suited
Sweetclover (fall)	4	5	8/1 to 10/1	7/15 to 9/15	7/15 to 9/1
Sweetclover (spring)	4	5	3/1 to 4/15	4/1 to 5/1	4/1 to 5/1
Triticale (winter)	55	82	8/15 to 11/1	8/15 to 10/15	8/1 to 10/1
Turnips	Not Suited	8	8/15 to 9/15	8/1 to 9/1	8/1 to 9/1
Vetch (annual)	12*	24*	8/1 to 10/15	8/1 to 10/15	8/1 to 10/1
Turnips	Not Suited	8	8/15 to 11/1	8/15 to 10/15	8/1 to 10/1
Chickery	Not Suited	4	8/15 to 11/1	8/15 to 10/15	8/1 to 10/1
Wheat (winter)	58	88	8/15 to 11/1	8/15 to 10/15	8/1 to 10/1
Winter Peas	22*	30*	8/1 to 10/1	8/1 to 10/1	7/15 to 9/15

Note: Do not plant any cover unless soil moisture is available or rain is on the way.

Table 2 IRRIGATED ANNUAL COVER - Orchards and Other Cover Crops

Species	Seed-Mix Options, PLS					
	A lbs/ac & (% of stand)	B lbs/ac & (% of stand)	C lbs/ac & (% of stand)	D lbs/ac & (% of stand)	E lbs/ac & (% of stand)	F lbs/ac & (% of stand)
Winter Wheat			88 (100%)			70 (90%)
Hairy Vetch				30* (100%)		15 (10%)
Field Peas					80* (100%)	
Cereal Rye	70 (100%)					
Triticale		80 (100%)				

Table 3 IRRIGATED PERENNIAL COVER

Species	Seed-Mix Options ¹ , PLS				
	A lbs/ac & (% of stand)	B lbs/ac & (% of stand)	C lbs/ac & (% of stand)	D lbs/ac & (% of stand)	E lbs/ac & (% of stand)
Birdsfoot Trefoil				3 (50%)	
Canada Bluegrass (ground cover)	3 (100%)	1 (100%)			
Creeping Red Fescue (ground cover)				2 (50%)	
Tall Fescue (hay or graze)					6 (100%)
Tall Wheatgrass (hay or graze)			8 (100%)		

¹1 lb/ac of Alsike clover can be added to all mixes if a legume is desired.

TABLE 4: RECOMMENDED DEAD LITTER CROPS OR COVER CROPS

(REFERENCE: RANGE PLANTING SPECIFICATION – 550)

FOR DRY LAND EROSION CONTROL

SPECIES	PLANTING DATES BY MLRA		
	SD, HP-3, & CP-4 (date)	HP-1, HP-2, CP-1, CP-2, CP-3, WP-(all), & ND (date)	RM-1, RM-2, HV-1, & HV-2 (date)
Barley (for fall)	8/15 to 11/1	8/1/ to 10/1	8/1 to 10/1
Cowpeas	4/15 to 8/1	5/1 to 7/15	5/1 to 7/15
Forage Sorghums	4/15 to 8/1	5/1 to 8/1	5/1 to 7/15
Millet (Foxtail)	4/15 to 8/15	5/1 to 8/1	5/1 to 7/15
Millet (Pearl)	4/15 to 8/15	5/1 to 8/1	5/1 to 7/15
Oats (fall)	8/15 to 11/1	8/1/ to 10/1	Not Suited
Oats (spring)	3/1 to 5/16	3/1 to 5/15	4/1 to 5/15
Rye (cereal)	8/15 to 11/1	8/15 to 10/15	8/1 to 10/1
Triticale (winter)	8/15 to 11/1	8/15 to 10/15	8/1 to 10/1
Wheat (winter)	8/15 to 11/1	8/15 to 10/15	8/1 to 10/1
Winter Peas	8/1 to 10/1	8/1 to 10/1	7/15 to 9/15

Note: Do not plant any cover unless soil moisture is available or rain is on the way.

For recommended seeding rates and seeding dates of Dead Litter or Cover Crops, refer to Table-3 of Range Planting standard.

• **Planting**

1. Plant cover crops in a weed-free seedbed by drilling or broadcasting. If broadcasting the seed seeding rates are doubled.
2. Planting depth should be about 10 times the diameter of the seed. Soil should be firmed over the seed.
3. Preplant starter fertilizer is helpful if a soil test indicates a need or soils are in poor condition. Use 30 lbs/ac N and 60 lbs/ac P₂O₅. These should be worked into the soil surface.

• **Management**

1. Allow cover to grow to the needed height. Stop growth by tillage or herbicide. Grazing may also be used to control height. Be sure to prevent hard seed set if volunteering is an issue.

2. Legumes and to a lesser degree vegetated stages of growth of other plants, can release large amounts of nutrients when incorporated into warm moist soil. Care should be taken to time the destruction of a cover because of the spike of nutrients released to the next crop.
3. Do not remove cover during nesting season for the birds of concern. Many use March through June.
4. Maximum wind erosion control and seedling protection is obtained by direct seeding (No-till) into winter killed or herbicide killed cover.
5. Delay tillage (removing the cover) of the cover as long as possible before seedbed preparation for the next crop.

herbicide. Planting date can also regulate growth if cold weather stops growth.

PLANS AND JOBSHEETS

Plans and specifications will prepare for the practice site. Specifications will include, but are not limited to, **recommended species, seeding rates and dates, establishment methods, nutrients needed, and other establishment information.**

Specifications will be recorded on NM 340 job sheets, or forms designed to provide specific requirements for the practice. For additional **Table 4** planning details, refer to Range Planting standard 550.

Acceptable species, seeding rates, and planting dates for annuals can be selected from **Table 1 and Table 2**. Acceptable species can be perennials that can be selected from **Table 3**.

OPERATION AND MAINTENANCE

Growth of the cover crop should be managed. Growth can be by mechanical forage harvest, tillage, grazing, or