

**NATURAL RESOURCES CONSERVATION SERVICE**  
**CONSERVATION PRACTICE STANDARD**  
**CONSERVATION COVER**

(Ac.)

**CODE 327**

**DEFINITION**

Establishing and maintaining permanent vegetative cover.

**PURPOSES**

This practice may be applied for one or more of the following purposes:

1. To reduce sheet, rill, and wind erosion and sedimentation;
2. To reduce ground and surface water quality degradation by nutrients, and surface water quality degradation by sediment;
3. To reduce emissions of particulate matter (PM), PM precursors, and greenhouse gases;
4. To enhance wildlife, pollinator, and beneficial organism habitat;
5. To improve soil health.

**CONDITIONS WHERE PRACTICE APPLIES**

This practice applies to all lands needing permanent herbaceous vegetative cover. This practice can be applied on a portion of a field. This practice does not apply to:

1. Plantings intended for forage production. Refer to the conservation practice standard Forage and Biomass Planting (512);
2. Plantings that will be established on critically eroding areas that usually cannot be stabilized by ordinary conservation treatment

and management. Refer to the conservation practice standard Critical Area Planting (342);

3. Plantings on field edges or in riparian buffers, for which other standards are applicable. Refer to the conservation practice standards for Field Border (386), Filter Strip (393), and Riparian Herbaceous Cover (390).

**CRITERIA**

**General Criteria Applicable to All Purposes**

Select vegetative cover to accomplish the intended purpose of the practice and the objectives of the client. Select plant types and species selected based on their compatibility in growth rates, shade tolerance, moisture requirements, and other characteristics. Plant materials shall either be native to Delaware or introduced and non-invasive (i.e., not likely to spread beyond the planted area and displace native species). When feasible, select locally native plant species and/or species that are beneficial to wildlife. No plant listed by the state of Delaware as an invasive species shall be established in the planting.

Planting rates, dates, and planting methods shall be adequate to accomplish the planned purpose. When available, use certified, high quality seed and planting stock. The method of planting shall include hand or machine planting techniques, suited to achieving proper depths and placement for the selected plant species.

Vegetation may be established by using seed, bare-root plants, bulbs, rhizomes, corms, tubers, or containerized stock. Younger planting stock

is generally preferred to older stock because younger plants adapt more readily to new conditions.

Apply lime and fertilizer if needed based on soil test results. Refer to the appropriate fact sheets for warm-season grasses, cool-season grasses, and pollinator habitat for more specific information about pH and nutrient requirements. The use of commercial fertilizer and other forms of plant nutrients must be in compliance with Delaware nutrient management regulations, as applicable.

Select the plant species to be established from Table 2 of this standard. This table contains lists of herbaceous plant species, including key attributes of each species, that can be used when selecting vegetative cover. Plantings shall consist of two or more species to provide greater vegetative diversity.

All plant materials shall be correctly handled before planting. In general, all materials shall be planted as soon as possible after receiving them from the supplier. For bare-root plants, keep the roots moist at all times and keep the plants out of direct sunlight as much as possible. Keep seed and other unrooted plant materials cool and dry until planting.

Use Figure 1 and Table 1 to determine the appropriate planting dates for the different types of plant materials.

Protect the planting from unacceptable impacts due to pests, wildlife, livestock, or wildfire. Exclude livestock as needed to establish the planting. Control noxious weeds as required by state law.

#### **Additional Criteria to Reduce Sheet, Rill, and Wind Erosion and Sedimentation**

Use the current approved wind and/or water erosion prediction technology to determine and maintain the amount of plant biomass and cover needed to reduce wind and water erosion to the planned soil loss objective.

#### **Additional Criteria to Reduce Emissions of Particulate Matter (PM), PM Precursors, and Greenhouse Gases**

In perennial crop systems such as orchards, vineyards, berries, and nursery stock, establish vegetation to provide full ground coverage in alleyways to minimize generation of particulate matter during mowing and harvest operations.

#### **Additional Criteria to Enhance Wildlife, Pollinator, and Beneficial Organism Habitat**

To establish high-quality habitat for wildlife, select mixes that have a diverse combination of grasses, forbs, and legumes to provide food and cover.

Schedule mowing, harvesting, weed control, and other management activities to accommodate reproduction and other life cycle requirements of desired wildlife species. Do not mow during the primary nesting season (April 15 to August 15).

If establishing cover specifically to address pollinator habitat, utilize mixes, seeding rates, and species identified in the Delaware NRCS fact sheet *Herbaceous Plantings for Pollinator Habitat*.

Locate habitat plantings to reduce pesticide exposures that could harm wildlife, pollinators, and other beneficial organisms.

#### **Additional Criteria to Improve Soil Health**

To maintain or improve soil organic matter, select plants that will produce high volumes of organic material. Use the current soil conditioning index procedure to determine the amount of biomass needed.

*Note: Specific programs or other funding sources may dictate criteria in addition to, or more restrictive than, those specified in this standard.*

## CONSIDERATIONS

This practice may be used to promote the conservation of wildlife species in general, including threatened and endangered species.

Consider using plant species that have multiple values such as those suited for nesting, biomass, fruit, seeds, browse, aesthetics, and tolerance to locally used herbicides.

Avoid selecting plant species or planting near existing species that may be alternate hosts to undesirable pests or that may be considered invasive or undesirable. Species diversity should be encouraged in order to minimize problems due to species-specific pests.

Consider the potential for volunteer invasive species that could pose establishment or management risks. Include mitigation for these risks in the establishment, maintenance, and management plans, when appropriate.

When establishing habitats with diverse plant species needs, such as pollinator habitat, consider establishing separate planting areas for plantings with different management requirements (e.g., establish clovers for early season pollination in a separate area from a native pollinator mix).

Mature plantings of warm-season grasses can be flammable. Large areas of warm-season grasses should have cool-season grass firebreaks adjacent to woodlands and buildings and in other locations where firebreaks may be needed to manage a prescribed burn.

Inoculating legume seed with the proper *Rhizobium* bacteria should be considered on sites where the legumes to be planted have not been previously grown.

Mowing may be needed during the establishment period to reduce competition from broadleaf annual weeds.

Consider rotating management and maintenance activities (e.g., mow only one-fourth or one-third of the area each year) throughout the managed area to maximize spatial and temporal diversity.

Consider the resource and management requirements for maintaining the planting.

Where pollinator and wildlife habitat are primary purposes, consider less dense seeding rates as long as soil loss is within tolerable soil loss limits.

Consider a diverse mix of plant species that come into bloom at different times and provide a sequence of bloom throughout the year (e.g., plant at least three flowering species from each of the three bloom periods -- spring, summer, and fall).

To provide habitat for natural enemies of crop pests, consider a mix of plant species that provide year round habitat and food (accessible pollen or nectar) for the desired beneficial species. Consider habitat requirements of predatory and parasitic insects, spiders, insectivorous birds and bats, raptors, and terrestrial rodent predators. Consult University of Delaware Cooperative Extension Integrated Pest Management (IPM) recommendations for beneficial habitat plantings to manage the target pest species.

During vegetation establishment, natural mulches, such as wood products or hay, can be used to conserve soil moisture, support beneficial soil life, and suppress competing vegetation.

Consider the adverse impacts of high populations of nuisance wildlife such as deer, groundhog, beaver, or resident geese, on the establishment and maintenance of vegetation. When feasible, select plant species that are not preferred foods of the nuisance animals and utilize methods for protecting the plants until they become well established.

Consider the potential for attracting nuisance wildlife into an area, either intentionally or unintentionally. Plantings that contain preferred wildlife foods may be used to attract nuisance wildlife away from valuable agricultural crops or ornamental plantings, but may also result in attracting additional nuisance wildlife into an area.

Consider the use of grazing animals to maintain herbaceous cover.

Take note of other constraints such as economic feasibility, access, regulatory or program requirements, social effects, and visual aspects.

### PLANS AND SPECIFICATIONS

Plans and specifications for this practice shall be prepared in accordance with the previously listed criteria. Plans and specifications shall contain sufficient detail to ensure successful implementation of this practice and may be recorded in narrative form, on Implementation Requirements (IR) worksheets, or other approved forms.

Follow the establishment recommendations provided in the Delaware fact sheets for warm season grass plantings and/or cool season grass plantings and complete the 327 IR worksheet. The appropriate fact sheet(s) and IR worksheet can serve as the planting plan and specifications for the practice.

The following items shall be addressed, as appropriate:

1. Method of site preparation;
2. Species and rates to be seeded/planted;
3. Seeding/planting dates;
4. Rate and type of soil amendments to be applied (if any);
5. Method(s) used to protect plantings from animal damage (e.g., fencing, repellents, etc.) or for weed control.

### OPERATION AND MAINTENANCE

An Operation and Management (O&M) plan shall be prepared and is the responsibility of the client to implement. The appropriate fact sheet(s) and IR worksheet may serve as the management plan, as well as supporting documentation, and shall be reviewed with and provided to the client.

At a minimum, the following components shall be addressed in the O&M plan, as applicable:

1. Describe the extent of management needed to maintain vegetation in the desired species

composition or age class (if applicable), or no management required (e.g., natural area);

2. Inspect the planting at least annually. Shape and reseed areas damaged by heavy rainfall, animals, chemicals, tillage, or equipment traffic, and any other areas where the stand is not adequate;
3. Check for insects and diseases, and if an incidence threatens stand survival, take corrective action to keep the pest under control;
4. Control undesirable plants by pulling, mowing, or spraying with a selective herbicide. Control noxious weeds as required by state law;
5. Protect the planting from wildfire and damage from livestock, wildlife, and equipment, to the extent feasible;
6. Where wildlife habitat is a concern, do not mow during the primary nesting season (April 15 to August 15);
7. Apply soil amendments periodically, if needed to maintain plant vigor. If nutrients are applied, refer to the conservation practice standard for Nutrient Management (590);
8. Do not use the planted area for hay storage or machinery parking for an extended period of time, especially if doing so will damage or impair the function of the practice;
9. Describe the acceptable uses (e.g., flash grazing, haying, etc.) and time of year or frequency of use restrictions, if any. *Pay particular attention to program requirements as they relate to acceptable vs. restricted uses and other management restrictions.*

If native cover (other than what was planted) becomes established, and this cover meets the intended purpose of the practice and the client's objectives, the cover should be considered adequate.

## SUPPORTING DATA AND DOCUMENTATION

The following is a list of the minimum data and documentation to be recorded in the case file:

1. Extent of planting in acres, field number where the practice located, and the location of the practice marked on the conservation plan map;
2. Assistance notes. The notes shall include dates of site visits, name or initials of the person who made the visit, specifics as to alternatives discussed, decisions made, and by whom;
3. Copy of the appropriate fact sheet(s) and completed IR worksheet, or other specifications and management plans.

## REFERENCES

1. Brown, Melvin L. and Russell G. Brown. 1984. *Herbaceous Plants of Maryland*. University of Maryland, Port City Press, Baltimore.
2. Brown, Russell G. and Melvin L. Brown. 1972. *Woody Plants of Maryland*. University of Maryland, Port City Press, Baltimore.
3. Delaware Department of Natural Resources and Environmental Control. *The Flora of Delaware Online Database*. <http://www.wra.udel.edu/de-flora/Introduction/>
4. US Fish and Wildlife Service, Chesapeake Bay Watershed. 2003. *Native Plants for Wildlife Habitat & Conservation Landscaping*.
5. USDA, Natural Resources Conservation Service. *Conservation Practice Standards*. Delaware Field Office Technical Guide, Section IV.
6. USDA, Natural Resources Conservation Service. *Maryland Wildlife Biology and Management Handbook*.
7. USDA, Natural Resources Conservation Service. *Preventing or Mitigating Potential Negative Impacts of Pesticides on Pollinators Using IPM and Other Conservation Practices*. National Agronomy Technical Note 9, Washington, DC.
8. Vaughan, Mace, Matthew Shepherd, Claire Kremen, and Scott Hoffman Black. 2011. *Farming for Bees: Guidelines for Providing Native Bee Habitat on Farms*. The Xerces Society for Invertebrate Conservation, Portland, OR.

**FIGURE 1: USDA Plant Hardiness Zones for Delaware**



<b>TABLE 1: Recommended Planting Dates for Delaware <sup>1/</sup></b>	
<b>Type of Plant Material</b>	<b>Plant Hardiness Zones</b>
	<b>7a and 7b</b>
Seeds - Cool-Season Grasses (includes mixes with forbs and/or legumes)	Feb 1 to Apr 30 Aug 15 to Nov 30
Seeds - Warm-Season/Cool-Season Grass Mixes (includes mixes with forbs and/or legumes)	Feb 1 to Apr 30♦ <i>May 1 to May 31*</i>
Seeds - Warm-Season Grasses (includes mixes with forbs and/or legumes)	Mar 15 to May 31♦ <i>Jun 1 to Jun 30*</i> <i>Dec 1 to Dec 31**</i>
Bare-Root Plants; Bulbs, Rhizomes, Corms, and Tubers <sup>2/</sup>	Feb 1 to Apr 30 <i>May 1 to Jun 30*</i>
Container Plants	Mar 1 to Apr 30 <i>May 1 to Jun 30*</i> <i>Oct 1 to Dec 15*†</i>

**TABLE 1 NOTES:**

1. The planting dates listed are averages for each zone. These dates may require adjustment to reflect local conditions, especially near the boundaries of the zones.
  2. When planted during the growing season, most of these materials must be purchased and kept in a dormant condition until planting. Bare-root grasses are the exception—they may be supplied as growing (non-dormant) plants.
- ♦ In general, planting during the latter portion of this period allows more time for weed emergence and weed control prior to planting. When selecting a planting date, consider the need for weed control vs. the likelihood of having sufficient moisture for later plantings, especially on droughty sites.
  - \* Additional planting dates during which supplemental watering may be needed to ensure plant establishment.
  - \*\* Fall dormant season plantings of warm-season grasses – starting approximately 2 weeks after the first hard freeze (average date based on air temperature reading of 28 degrees F or lower, 50% probability of occurrence). Warm-season grasses need a soil temperature of at least 50 degrees F in order to germinate. If soil temperatures are colder than 50 degrees, or moisture is not adequate, the seeds will remain dormant until conditions are favorable.
  - † Frequent freezing and thawing of wet soils may result in frost-heaving of materials planted in late fall, if plants have not sufficiently rooted in place.

TABLE 2: Herbaceous Cover								
Mix	Recommended Cultivar	Seeding Rate (lbs/ac)	Plant Hardiness Zone	Soil Drainage Class	Max. Height (feet)	All Native Species	Plant Type	Remarks
1. Switchgrass <i>Panicum virgatum</i> Eastern Gamagrass <i>Tripsacum dactyloides</i> Coastal Panicgrass <u>OR</u> <i>Panicum amarum</i> Red Fescue <i>Festuca rubra</i>	Shelter Pete Atlantic Common	1 - 2 3 - 4 2 - 3 2 - 4	All  (See Remarks)	W - SP	6 - 8	Y	Warm & Cool-season grasses	Plant with a regular grass drill. Coastal Panicgrass PHZ 7b.
2. Big Bluestem <i>Andropogon gerardii</i>  Switchgrass <i>Panicum virgatum</i> Indiangrass <i>Sorghastrum nutans</i> <u>OPTIONAL:</u> Coastal Panicgrass <i>Panicum amarum</i>	Niagara or Rountree Shelter Rumsey Atlantic	2 - 4 1 - 3 2 - 4 See Remarks	All	E - MW	6 - 8	Y	Warm-season grasses	Use a native seed drill. For increased diversity and salt tolerance, add 2 -3 lbs./ac. Coastal Panicgrass, and reduce amounts of Big Bluestem, Switchgrass, and Indiangrass to 1 - 2 lbs./ac. each.
3. Indiangrass <i>Sorghastrum nutans</i> Big Bluestem <i>Andropogon gerardii</i> Little Bluestem <i>Schizachyrium scoparium</i>	Rumsey Niagara or Rountree Aldous or Blaze	2 - 3 2 - 3 1 - 2	All	E - MW	6 - 8	Y	Warm-season grasses	Use a native seed drill.



TABLE 2: Herbaceous Cover								
Mix	Recommended Cultivar	Seeding Rate (lbs/ac)	Plant Hardiness Zone	Soil Drainage Class	Max. Height (feet)	All Native Species	Plant Type	Remarks
4. Purple Lovegrass ( <i>Eragrostis spectabilis</i> ) Little Bluestem ( <i>Schizachyrium scoparium</i> ) Broomsedge ( <i>Andropogon virginicus</i> ) Indiangrass ( <i>Sorghastrum nutans</i> ) Black-eye Susan ( <i>Rudbeckia hirta</i> ) Partridge pea ( <i>Chamaecrista fasciculata</i> ) Dogbane ( <i>Apocynum cannabinum</i> ) Bristly aster ( <i>Aster puniceus</i> ) Common milkweed ( <i>Asclepias syriaca</i> ) Butterfly milkweed ( <i>Asclepias tuberosa</i> )	Common Aldous Common Rumsey Common Common Common Common Common Common	0.1 1.8 0.8 0.3 0.45 0.45 0.02 0.02 0.03 0.03	All	W – SP	2 – 3	Y	Warm season grasses & native forbs	Low growing native mix. This mix is available already formulated. Contact the local NRCS office.
5. Switchgrass <i>Panicum virgatum</i> Coastal Panicgrass <i>Panicum amarum</i>	Shelter Atlantic	2 - 3 4 – 5	All	E - W	6 - 8	Y	Warm-season grasses	Plant with a regular grass drill.
6. Deertongue <i>Dicanthelium clandestinum</i> Virginia Wild Rye <i>Elymus virginicus</i> Red Fescue <i>Festuca rubra</i> <u>OR</u> Little Bluestem <i>Schizachyrium scoparium</i>	Tioga Common Common Aldous	1 – 2 2 – 3 3 – 4 2 – 3	All	E – SP (See Remarks)	3 – 4	Y	Warm & cool season grasses	Low growing native mix. Use Little Bluestem on drier soils and Red Fescue on wetter soils.
7. Red Fescue <i>Festuca rubra</i> Switchgrass <i>Panicum virgatum</i>	Common Shelter	6 – 10 2 – 4	All	E - SP	4 - 6	Y	Cool & warm season grasses	Plant with a regular grass drill.

TABLE 2: Herbaceous Cover

Mix	Seeding Rate (lbs/ac)	Plant Hardiness Zone	Soil Drainage Class	Max. Height (feet)	All Native Species	Sun – Shade Tolerance	Flower Color
8. Wildflowers and Legumes Select at least 3 wildflowers and 1 legume from below. Legumes should not comprise more than 25% of the total mix. Add this mix to all-grass Mixes 1 - 3, 5 - 7, 11, and 15 for added wildlife and aesthetic value.	0.25 - 0.50						
Wildflowers: Black-eyed Susan <i>Rudbeckia hirta</i>		All	W - MW	1-2	Y	○	Yellow
Blazing Star <i>Liatris spicata</i>		All	W - SP	2-5	Y	○ - ◐	Pink-Lavender
Boneset <i>Eupatorium perfoliatum</i>		All	SP - P	2-4	Y	○ - ◐	White
Butterflyweed <i>Asclepias tuberosa</i>		All	W - MW	1-2	Y	○	Bright Orange
Heath Aster <i>Aster pilosus</i>		All	E - MW	2-5	Y	○	Light Purple
Joe-Pye Weed <i>Eupatorium fistulosum</i>		All	SP - P	4-6	Y	○ - ◐	Pink-Purple
New York Aster <i>Aster novi-belgii</i>		All	MW - P	3-5	Y	○	Violet
New York Ironweed <i>Vernonia noveboracensis</i>		All	MW - P	5-8	Y	○	Purple
Rough Goldenrod <i>Solidago rugosa</i>		All	SP - P	2-6	Y	○	Yellow
Tickseed <i>Coreopsis tinctoria</i>		All	W - MW	2-3	Y	○	Yellow
Wild Bergamot <i>Monarda fistulosa</i>		All	W - SP	2-4	Y	○ - ◐	Lavender
Wild Blue Indigo <i>Baptisia australis</i>		All	W - MW	3-5	Y	○	Blue
Wild Columbine <i>Aquilegia canadensis</i>		All	W - MW	1-2	Y	○ - ◐	Scarlet
Legumes: Bush Clover <i>Lespedeza capitata</i>		All	E - MW	2-4	Y	○	White to Yellow
Hairy Bush-Clover <i>Lespedeza hirta</i>		All	E - MW	2-4	Y	○	White to Yellow
Partridge Pea <i>Chamaecrista fasciculata</i>		All	W - SP	2-3	Y	○ - ◐	Yellow

TABLE 2: Herbaceous Cover

Mix	Recommended Cultivar	Seeding Rate (lbs/ac)	Plant Hardiness Zone	Soil Drainage Class	Max. Height (feet)	All Native Species	Plant Type	Remarks
9. Orchardgrass <i>Dactylis glomerata</i> Red Fescue <i>Festuca rubra</i> Alsike Clover <i>Trifolium hybridum</i> White Clover <i>Trifolium repens</i>	Any Common Common Common	3 - 6 3 - 4 1 - 2 1 - 2	All	W - MW	2 - 3	N	Cool-season grasses with legumes	Can be used for: FIREBREAK
10. Orchardgrass <i>Dactylis glomerata</i> Bluegrass <i>Poa pratensis</i> <u>AND/OR</u> Timothy <i>Phleum pratense</i> <u>AND ONE OF THE FOLLOWING:</u> White Clover <i>Trifolium repens</i> Red Clover <i>Trifolium pratense</i> Common Lespedeza <i>Lespedeza striata</i> Korean Lespedeza <i>Lespedeza stipulacea</i>	Any Not a turf type Climax  Common Any Kobe Climax or Rowan	4 - 6 2 - 4 4 - 6  1 - 2 1 - 2 3 - 5 3 - 5	All   (See remarks)	W - MW	2 - 3	N	Cool-season grasses and legumes	Timothy does not perform well in Zones 7a and 7b, especially on sites with coarse-textured soils, unless there is sufficient moisture during the growing season.  Can be used for: FIREBREAK
11. Chewings Fescue <i>Festuca rubra ssp. fallax</i> Hard Fescue <i>Festuca brevipila</i> (formerly <i>Festuca trachyphylla</i> ) Sheep Fescue <i>Festuca ovina</i>	Common Beacon, Gotham, Spartan, Sword Bighorn	3 - 6 3 - 6 3 - 6	All	W - MW	0.5 - 1	N	Cool-season grasses	Can be used for: FIREBREAK PATHS COMPANION PLANTING

TABLE 2: Herbaceous Cover

Mix	Recommended Cultivar	Seeding Rate (lbs/ac)	Plant Hardiness Zone	Soil Drainage Class	Max. Height (feet)	All Native Species	Plant Type	Remarks
12. Sheep fescue <i>Festuca ovina</i>	Common or Bighorn	4 - 8						
Hard Fescue <i>Festuca brevipila</i> (formerly <i>Festuca trachyphylla</i> )	Beacon, Gotham, Spartan, Sword	4 - 8						
Black-eyed Susan <i>Rudbeckia hirta</i>	Common	1/8 - 1/4	All	W - MW	2 - 3	N	Cool-season grasses, forbs, and legume	Attractive, low-growing grass and wildflower mix.
Lance-leaved Coreopsis <i>Coreopsis lanceolata</i>	Common	1/8 - 1/4						
Partridge Pea <i>Chamaecrista fasciculata</i>	Common	1 - 2						
Purple Coneflower <i>Echinacea purpurea</i>	Common	1/8 - 1/4						
13. Rough Bluegrass <i>Poa trivialis</i>	Common	4 - 8						
Chewings Fescue <i>Festuca rubra ssp. fallax</i>	Common	3 - 6	All	SP - P	4 - 5	N	Cool-season grasses and legumes	Can be used for: FIREBREAK
Alsike Clover <i>Trifolium hybridum</i>	Common	1 - 2						
White Clover <i>Trifolium repens</i>	Common	1 - 2						
14. Fowl Meadowgrass <i>Poa palustris</i>	Common	2 - 4						
Virginia Wild Rye <i>Elymus virginicus</i>	Common	1 - 2	All	SP - P	4 - 5	N	Cool-season grasses and legumes	Can be used for: FIREBREAK
Red Fescue <i>Festuca rubra</i>	Common	2 - 4						
Alsike Clover <i>Trifolium hybridum</i>	Common	1 - 2						
White Clover <i>Trifolium repens</i>	Common	1 - 2						

TABLE 2: Herbaceous Cover

Mix	Recommended Cultivar	Seeding Rate (lbs/ac)	Plant Hardiness Zone	Soil Drainage Class	Max. Height (feet)	All Native Species	Plant Type	Remarks
15. Sideoats Grama <i>Bouteloua curtipendula</i>	(See Remarks)	2 - 3	All	EW - W	2 - 3	Y*	Warm season grasses	No eastern cultivars of sideoats grama have been released. Midwest varieties such as El Reno, Butte, Pierre, and Trailway reportedly have been used in parts of the Northeast.  Broomsedge seed is quite expensive (\$40-\$50 per pound PLS).
Little Bluestem <i>Schizachyrium scoparium</i>	Aldous	3 - 4						
Broomsedge <i>Andropogon virginicus</i>	Common	1 - 2						
<u>OR</u> Deertongue <i>Dicanthelium clandestinum</i>	Tioga	1 - 2						

**TABLE 2 NOTES:**

1. This table provides seed mixes of native and introduced species to meet the conservation cover purposes of erosion control, water quality, and wildlife habitat enhancement.
2. When a seeding rate is expressed as a range (i.e., 4 - 6), the lower rate should be used if erosion is not a concern.
3. Where erosion is a concern, use the higher seeding rate and add one of the following nurse crops with the selected mix:  
20 - 40 lbs/ac oats, barley, or cereal rye. This can be planted with the selected mix at the time of seeding. If using a conservation tillage method, plant the nurse crop in the fall, mow in early spring, and drill into the remaining stubble.
4. Seeding rates for warm season-grasses are in pounds of pure live seed.
5. The term “native” refers to species that occur naturally in the state of Delaware. Native mixes may include non-native nurse crops (which are short-lived) for site stabilization during establishment of the permanent planting. Due to page limitations, this listing of native species is not all-inclusive. There are more native plants which occur in Delaware and may be suitable for use in conservation plantings.
6. All legume seed should be inoculated before planting with the appropriate *Rhizobium* bacteria.
7. **Plant Hardiness Zones** designate where a species can be successfully planted in Delaware.
8. **Soil Drainage Class** (refer to the county soil survey for further information):  
E - Excessively Drained; W - Well Drained; MW - Moderately Well Drained; SP - Somewhat Poorly Drained; P - Poorly Drained.
9. **Sun - Shade:** Sunlight and shade tolerance for each species (Mix 8).
  - Full Sun - 6 or more hours of light per day or 4 hours of midday sun;
  - Part Shade - 3 to 6 hours of light per day;
  - Shade - less than 3 hours of light per day.

**10. Additional Remarks:**

FIREBREAK - Mix can be used as a firebreak around warm-season grass plantings when controlled burning will be used for management.

PATHS - Mix provides a low growing, low maintenance planting suitable for pathways and walkways which will receive light to moderate use.

COMPANION PLANTING - Mix provides a non-competitive planting that can be used for erosion control in conjunction with tree and shrub plantings.