

**UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE**

CONSERVATION PRACTICE STANDARD

RECREATION AREA IMPROVEMENT

(Acre)

CODE 562

DEFINITION

Establishing grasses, legumes, vines, shrubs, trees or other plants or selectively reducing stand density and trimming woody plants to improve an area for recreation

oak, water oak, willow oak, live oak, southern red oak, northern red oak, scarlet oak, yellow-poplar, deodar cedar, southern magnolia, eastern redbud, flowering dogwood, fringetree, Japanese magnolia, ash, arborvitae, and eastern white pine.

PURPOSE

To increase the attractiveness and usefulness of recreation areas and to protect the soil, water, air, plant and animal resources with cultural, social, and economic considerations

2. Spacing - Where planted in-groups, space trees no closer than 12 feet by 12 feet. Plant individual trees no closer than 25 feet to existing trees.

CONDITION WHERE PRACTICE APPLIES

On any area planned for recreational use.

C. To attract song birds and other wildlife

CRITERIA

Criteria for Trees and Shrubs

A. For wind protection, screens and barriers

1. Suitable species - The following are species that may be used: eastern red cedar, loblolly pine, longleaf pine, slash pine, Virginia pine, eastern white pine, American holly, Carolina laurel-cherry, wax myrtle, eleagnus, photenia and crape myrtle.
2. Spacing - Trees should be spaced about 6 to 10 feet apart and shrubs should be spaced about 3 to 5 feet apart.

1. Suitable species - Species should be selected based on soils and climate. The following are species that may be used: red maple, flowering dogwood, crabapple, yellow-poplar, sweetbay, red bay, black cherry, bald cypress, magnolia, redbud, oaks, pecan, hickories, beech, sweetgum, persimmon, pine, ash, sassafras, eastern red cedar, American beautyberry, hawthorn, yaupon, holly, dahoon, autumn olive, mulberry and wild plum.

2. Spacing - Trees should be spaced about 6 to 10 feet apart and shrubs should be spaced about 3 to 5 feet apart.

B. For shade and ornament

1. Suitable species - Species should be selected based on soils and climate. The following are species that may be used: red maple, Bradford pear, swamp chestnut oak, silver maple, sugar maple, overcup oak, pin oak, Shumard oak, Nuttall oak, sycamore, white oak, laurel

D. Site preparation - Competing vegetation should be removed from the area where each plant is to be established. The amount of vegetation removed will vary by the type and size of the competing vegetation.

E. Time of planting - Dormant season planting

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

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stock should be planted during the dormant season, usually between November 15 and March 15. Stock that is either balled or grown in containers may be planted anytime during the year if the plants can be watered

during dry periods. Trees should be protected from recreationists by using signs, tree shelters, or barriers.

- F. Maintenance - Recreational areas can be improved by reducing stand density and pruning. See specifications for 660-Tree/Shrub Pruning and 666-Forest Stand

Improvement. Protect all plantings from recreationists. Fertilizer may be applied to increase growth.

- 4. Suitable legumes - Clovers, vetches, and lespedezas may be used in areas where traffic is not heavy and where adequate sunlight is available. Flowering legumes are most attractive. See 512-Pasture and Hayland Planting.
- 5. Mulching - Use mulch on sloping areas and on erodible soil. See 484-Mulching.

- B. Improved areas - Plant to either lawn or turf grasses and manage intensively.
 - 1. Seedbed preparation - Prepare a well-pulverized and firm seedbed.
 - 2. Lime and fertilizer - Apply lime and fertilize according to soil test.
 - 3. Turf and lawn grasses - St. Augustine, Bermuda, zoysia, and centipede are good turf and lawn grasses. Establish them by sprigging, plugging, or sodding. Centipede grass can also be established from seed.

Criteria for Grasses and/or Legumes

A. Areas of low intensity management - On areas not managed intensively, establish grasses and/or legumes to stabilize the soil and to reduce erosion. Grasses and /or legumes must be adapted to the soils and climate where they are to be established.

- 1. Seedbed preparation - Tillage is used to prepare a good seedbed. Tillage generally involves disking, harrowing, chiseling, or some similar method of land preparation. Tillage should be done on the contour to reduce erosion. A sod seeder (no-till planter) may be used to plant seed in an existing cover or mulch.
- 2. Lime and fertilizer - Apply lime and fertilizer according to soil tests.
- 3. Suitable grasses – Suitable grasses are:

bahiagrass, centipedegrass, common bermudagrass, dallisgrass, and fescue grass. Annual plants such as ryegrass, oats, rye, and wheat can provide temporary cover before the establishment of warm season grasses. See 512-Pasture and Hayland Planting. Species should be selected according to the use of the area.

Planting Rates for Lawn and Turf Grasses_

Grass Interval	Spacing per 1000 sq. ft.	Amount of Sod per 1000 sq. ft.	Seeding Rate
<u>St. Augustine</u>			
2-inch plugs	10-12"	30-50 sq. ft.	
sprigs	10-12"	10-15 sq. ft.	
<u>Centipede</u>			
2-inch plugs	10-12"	30-50 sq. ft.	
sprigs	10-12"	10-15 sq. ft.	
seed			1/4 to 1/2 lbs.
<u>Zoysia</u>			
2-inch plugs	12"	30-50 sq. ft.	
sprigs	6"	8-15 sq. ft.	
<u>Bermuda</u>			
2-inch plugs	10-12"	30-50 sq. ft.	
sprigs	10-12"	10-15 sq. ft.	

- 4. Maintenance - Fertilizing and mowing are the most important maintenance practices.
 - a. Fertilizing - See B. 2. Lime and Fertilizer.
 - b. Mowing - The coarser the leaf texture of grass, the higher it should be cut. Mowing too close decreases vigor. Frequency of cutting is important also. Never cut more than one-third of the leaf surface during any one cutting. Therefore to maintain a height of 2

inches, cut before the grass gets taller than 3 inches.

The following table contains information on mowing some of the lawn and turf grasses:

Grass	Mowing Frequency (Days)	Desired Height (Inches)	Type of Mower
Bermudagrass	5-7	1/2 - 1	Reel or Rotary
Centipedegrass	10-14	1 1/2 - 2	Reel or Rotary
St. Augustine	7-10	1 1/2 - 2 1/2	Reel or Rotary
Zoysia	7-10	1/2 - 1	Reel or Rotary

Vertical mowing may be necessary because of thatch buildup. This method of cutting requires a special mower.

C. Pest control - Protect lawns and turf grasses from weeds, insects, and diseases. Where applying pesticides, follow instructions on the label.

Criteria for Ground Covers

Ground covers are low-growing plants that are used to either cover bare areas or to enhance the appearance. They include shrubs, vines, and herbaceous plants.

- A. Site preparation - Prepare the soil at least 6 inches deep. Spread 2 to 3 inches of organic matter over the ground and spade into the soil. If the entire area cannot be spaded, dig individual holes and fill with a mixture of soil and either organic matter or a soil amendment.
- B. Fertilizer and lime - Apply fertilizer according to soil tests. Do not apply lime except under extreme conditions. Instead, use plants that grow in the existing soil.
- C. Types of ground cover
 1. Shrubs - Desirable shrubs for ground cover are creeping junipers, boxwoods, Hollies, yaupons, barberries, privets, euonymuses, azaleas, aucubas, jasmines, mahonias, and gardenias.
 2. Vines - Desirable vines for ground cover are honeysuckle, jasmine, ivy, trumpet creeper, and climbing rose.
 3. Herbaceous plants - Herbaceous plants that can be used for ground cover are periwinkle, thrift, ferns, phlox, carpet bugle, maiden pinks, daylilies, ajuga, lilytuf, snakeboard, and monda grass.

- D. Planting - Small plants may be spaced as close as 4 to 6 inches apart; larger plants may need as much as 4 feet between them.

The areas covered by 100 plants, planted at various distances are:

Planting Distance (Inches)	Area Covered (Sq. Ft.)
4	11
6	25
8	44
10	70
12	100
18	225
24	400
36	900
48	1,600

- E. Maintenance - Fertilize ground cover plants two times every year--once in winter and again in early spring. Since ground cover plants are often slow in covering bare areas, weeds could become a problem. Mulches of wood chips, bark, straw, leaves, or other organic matter will help control most weeds. During periods of dry weather, it may be necessary to water ground cover plants. Allow the water to penetrate deeply into the soil.

Criteria for Mulching

Mulch should be used in establishing vegetation on sloping land where erosion could occur. See 484-Mulching. Mulch should also be used around flowers, shrubbery and trees to control weeds and conserve moisture. Mulch may be rock, hay, wheat straw, pine straw, peanut hulls, leaves, grass clippings, wood chips or other organic material.

Criteria for Traffic and Pedestrian Control

One of the best ways to improve a recreation area is to protect it from abuse by users. Foot traffic as well as vehicle traffic can be a major

cause of soil and water problems on recreation areas. Traffic may be controlled by establishing barriers such as fences, posts, rocks, trees, shrubs, and earthen bars.

CONSIDERATIONS

Avoid establishing plants which may become a nuisance or pest.

Plants to be established should be plants which meet or exceed the minimum criteria for plant quality.

Consider plant characteristics such as fall colors, flowers, fruit and mature plant height .

When multiple species are used, consideration should be given to plants which provide food and cover for wildlife.

Care should be taken when applying fertilizers and pesticides to protect water quality.

Any pruning or removal of vegetation should be done in a manner which will not have a negative impact on the esthetic value of the area.

If installation or maintenance of the practice has potential of affecting cultural resources (archaeological, historic, historic landscape, or traditional cultural properties), follow Alabama's state policy for considering cultural resources.

PLANS AND SPECIFICATIONS

Plans and specifications for Recreation Area Improvement shall be prepared for each site in accordance with the criteria set forth for the practice.

OPERATION AND MAINTENANCE

An operation and maintenance plan shall be prepared for each Recreation Area that is improved. The maintenance guidance set forth in the criteria shall be followed for each improvement made.