NATURAL RESOURCES CONSERVATION SERVICE

GENERAL SPECIFICATION

RANGE PLANTING

(Ac.)

CODE 550

GENERAL SPECIFICATIONS

Procedures, technical details, and other information relevant to and for providing additional guidance in carrying out selected components of the Conservation Practice Standard 550, Range Planting are listed below or are documented in Plant Materials Technical Note OK-21.
http://efotg.sc.egov.usda.gov/references/public/OK/planmat_ok-21vegtn_82011.pdf

Deviations

Deviations from the standards and/or specifications can only be approved by the State Resource Conservationist (SRC).

Seeding Mixtures

Refer to Tables 1 – 5 below for the appropriate seeding rates and mixtures by soil type.

All range seedings will be mixtures. Limits are set as minimum and maximum percentages for each species on each soil type as noted in Tables 1 – 5 below. Species to be planted above the minimum required is to be a decision of the land user following technical assistance from the NRCS conservationist.

Use the Ecological Site Descriptions for further guidance on rates and mixtures that are appropriate for the specific site planned for seeding.

Generally, seeding will not be needed when 15% composition by weight of the desirable plants is present, the plants are well distributed over the area, and the area can be managed to a stand within an acceptable time frame. Seeding may be needed when there is significant (>20%) ground disturbance from other activities.

For wildlife plantings refer to the Oklahoma NRCS Practice Standard and Specification for Upland Wildlife Habitat Management (645) or a Wildlife Habitat Appraisal Guide for the species of concern.

Reseeding Native Range or Woodlands Following Brush Management

Mechanical methods to remove brush, such as dozing, rootplowing, raking, chaining and/or burning can be a part of the seedbed preparation process. Additional seedbed preparation may be needed with heavy or farm-type equipment so that seeding equipment can get over the area. If heavy equipment, such as a rootrake is used to prepare a seedbed, the rake teeth should be at least three feet long, spaced no more than twenty-four inches apart, and operated ten to twenty inches deep. A roller chopper can also be used following rootplowing to firm the seedbed and close up large cavities that would allow seed to be covered too deeply.

It may be necessary to plant cover crops for two consecutive years prior to seeding to reduce resprouting brush species, especially with oaks. See the Oklahoma NRCS Practice Standard and Specification for Cover Crop (340) for information. A technical determination will be made on the need for additional years of cover crops.

Drill or broadcast to adapted species. Seed must have mineral contact with the soil. Seed into a firm seedbed. Use aerial application only when conventional equipment or broadcasting is impractical.

Pits left from individual treedozing can be an excellent seedbed as long as the treedozing is done during the normal seeding time. In these cases, prorate the seeding rate based on the percent ground disturbance. Hand application before the soil has crusted is permissible.

On soils subject to wind erosion, cover needs should be planned to keep erosion rates down to the tolerance level of the soil to be seeded.

Other methods will be limited to special conditions with prior approval of the State Resource Conservationist (SRC).

General Considerations

Generally, it is recommended to remove terraces prior to seeding, but a technical determination should be made concerning terrace removal.

Forbs, legumes, and some shrubs are the quality component of livestock and wildlife diets. Adapted forbs, legumes and shrubs should be considered for inclusion into range seeding mixtures.

Because of their proven adaptability and persistence, consideration should be given to using locally native species in the mix whenever possible.

Protect from burning that is not prescribed.

Protect from severe insect damage where practical. Refer to the Oklahoma NRCS Practice Standard and Specification for Pest Management (595).

The use of certified planting materials should be encouraged. However, economics, distance and source limitations on seed and plant stock should be considered as well.

TABLE 1

Deep Loamy-type Uplands, Limy, Mixed

SPECIES	MINIMUM PERCENT	MAXIMUM PERCENT
Little Bluestem	5	30
Sand Bluestem/Big Bluestem	5	40
Switchgrass	5	40
Indiangrass	5	40
Sideoats Grama	5	60
Blue Grama	5	40
Buffalograss	5	20
Mixture Total from Above	50	100
Sand Lovegrass	0	20
Sand Dropseed	0	10
Western Wheatgrass	0	10
Plains Bristlegrass	0	10
Tall Dropseed	0	5
Forbs, Legumes, Shrubs	0	10

TABLE 2

Deep Sandy-type Uplands, Savannahs, Dunes

SPECIES	MINIMUM PERCENT	MAXIMUM PERCENT
Little Bluestem	10	40
Sand Bluestem/Big Bluestem	10	40
Switchgrass	5	40
Indiangrass	10	30
Sand Lovegrass	10	20
Mixture Total from Above	50	100
Sideoats Grama	0	30
Blue Grama	0	25
Sand Dropseed	0	10
Tall Dropseed	0	10
Big Sandreed	0	20
Forbs, Legumes, Shrubs	0	10

TABLE 3

Shallow Uplands, Hardlands, Clays

SPECIES	MINIMUM PERCENT	MAXIMUM PERCENT
Little Bluestem	5	50
Sand Bluestem/Big Bluestem	5	25
Switchgrass	5	25
Indiangrass	5	20
Sideoats Grama	10	60
Blue Grama	5	50
Buffalograss	5	20
Mixture Total from Above	50	100
Sand Lovegrass	0	10
Western Wheatgrass	0	25
Tall Dropseed	0	10
Alkali Sacaton	0	80
Forbs, Legumes, Shrubs	0	10

TABLE 4

Bottomlands, Moderately Saline, Subirrigated, Wet Meadow

SPECIES	MINIMUM PERCENT	MAXIMUM PERCENT
Little Bluestem	10	30
Sand Bluestem/Big Bluestem	10	40
Switchgrass	10	40
Indiangrass	5	30
Mixture Total from Above	50	100
Sideoats Grama	0	10
Blue Grama	0	10
Buffalograss	0	5
Western Wheatgrass	0	20
Tall Dropseed	0	10
Alkali Sacaton	0	40
Eastern Gamagrass	0	25
Forbs, Legumes, Shrubs	0	10

TABLE 5

Alkali Bottomland, Saline Subirrigated, Slickspot

SPECIES	MINIMUM PERCENT	MAXIMUM PERCENT
Little Bluestem	0	20
Sand Bluestem/Big Bluestem	0	20
Switchgrass	10	40
Indiangrass	0	20
Sideoats Grama	10	25
Blue Grama	10	25
Buffalograss	0	20
Western Wheatgrass	10	30
Tall Dropseed	0	10
Alkali Sacaton	10	50
Forbs, Legumes, Shrubs	0	10
Mixture Total from Above	100	100