NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE SPECIFICATION

CROSS WIND TRAP STRIPS

(Ac.)
CODE 589C

PURPOSE OF SPECIFICATION

This Specification provides guidance for the installation of the practice Cross Wind Trap Strips. Guidance may include information about applying different methods listed in the Conservation Practice Standard, details of site preparation and protection, instructions for use of materials described in the Standard, and other information not directly addressed in the Standard.

Specifications for the installation, operation and maintenance of the practice shall be prepared for each treatment unit in accordance with the requirements in the Conservation Practice Standard and the guidance in this Specification. The site specifications shall be recorded in the Conservation Practice Jobsheet and given to the client.

SPECIES SELECTION

Information about adapted plants, seeding or planting rates, rainfall, elevation, and other requirements for this practice in Hawaii is included in the Hawaii Vegetative Guide, available online at: ftp://ftp-fc.sc.egov.usda.gov/HI/pub/technotes/vegetative/. Planners in other Pacific Islands Area locations, may use the Hawaii Vegetative Guide, however they should also consult the NRCS Pacific Islands East Agronomist to verify plant species selection.

SEEDING MIXTURES

Where more than one species is to be seeded, reduce the seeding rate for each species in proportion to the number of species in the mixture.

ESTABLISHMENT

By Seeding

Site Preparation. Site preparation will be in a manner to create an environment suitable for seed germination and growth. Examples are: rototilling, plowing,or disking. Prepare a firm seedbed. Use no-till seeding methods and equipment, where practicable.

The following actions may be required if the cross wind trap strips will be planted separately from the cash crop.

Contact your local Cooperative Extension Service and determine if a pre-emergence herbicide is recommended for your planting.

Collect soil samples and send to the local land grant university for nutrient analysis.

Planting. Seeding may be accomplished by either broadcasting or drilling.

Where seed is broadcast, dragging the area with a chain, or light plank will help to ensure good soil-seed contact. Very shallow disking or rototilling is also effective; try a small portion of the field to determine the depth of seed burial. Adjust equipment if burial depth is not satisfactory.

Depth of seeding depends on seed size, soil moisture and soil texture. Plant seeds deeper when soil moisture is low and shallow when moisture is abundant. Large seeds are generally planted deeper than small seeds. A general recommendation is to plant at a depth equal to four times the diameter of the seed.

Where topography permits, site preparation and planting shall be done on the cross-slope or contour to minimize the erosion hazard.

Adequate moisture is critical for successful planting. Plant only after the rainy season has begun or provide irrigation until the plants are well established.

By Vegetative Method

Site Preparation. Site preparation shall consist of rototilling, plowing, or disking. Prepare a firm planting site. Vegetative material should be evenly distributed on the site and disked in.

Planting. For a more positive placement of the vegetative material, site preparation may be followed by plowing furrows at a maximum depth of 6 inches. Vegetative material is then placed in the furrows. Cover the material with soil by disking, or other suitable means, in the direction of the furrow; then compact lightly to ensure good plant-soil contact.

Dense plantings will produce a quicker stand of grass with fewer weeds. Unless planting material is limited, make the furrows about 3 feet apart and place the vegetative material as close as practicable in the furrows.

Where topography permits, site preparation and planting shall be done on the cross-slope or contour to minimize the erosion hazard.

Adequate moisture is critical for successful planting. Plant only after the rainy season has begun or provide irrigation until the plants are well established.

Tips for Establishing a Grass Trap Strip

The following was edited from the University of Florida, Institute of Food and Agricultural Science Extension (IFAS). It provides good tips for establishing a grass trap strip. Edited from "Five Basic Steps to Successful Perennial Pasture Grass Establishment From Vegetative Cuttings on South Florida Flatwoods[1]" Martin B. Adjei and Paul Mislevy.

Step 1) Prepare a clean, moist seedbed ready for planting.

Step 2) Precondition clean planting material. Planting material should be obtained from a pure grass stand with no weeds.

Step 3) Time your planting for good soil moisture. It is best to wait for at least 2 to 3 inches of rainfall before planting vegetative cuttings (tops) of perennial grasses. Generally, good rainfall should prevail in the immediate period-to-weeks after planting

Step 4) Adopt good planting techniques.

Material must be loosened and uniformly spread on a prepared seedbed (1500 lb/ac) the same day as cut, and followed within 15 minutes by disking).

Finally, the land should be rolled firmly in two directions immediately after disking or crimping material into the soil. The objective of step 4 is to minimize drying of planting material and improve plant-soil moisture contact. This will allow for a successful establishment even if no rain is received for two to four days after planting.

Step 5) Implementation of good weed control and fertilizer program after planting.