



# FACT SHEET

United States Department of Agriculture  
Natural Resources Conservation Service

*Helping People Help the Land*

## BROADCAST SEEDING METHOD FOR BURNED AREAS

**Purpose** Uniform distribution of seed over burned areas will help ensure uniform vegetative cover and will increase protection against erosion caused by winter rains.

**Seed Needed** Seed supplies of each species should be obtained in separate bags and kept cool and dry. Total amount of seed purchased should equal the acres burned multiplied by the recommended seeding rate” per acre. Include any roads and firebreaks in the burned acreage. If the seed is coated by the supplier or is less than 80 percent Pure Live Seed (PLS), the amount of seed purchased should be based on the “adjusted seeding rate.”

**Pure Live Seed (PLS)** A term used to describe the amount of live seed in the mixture.  
Check seed tags for the species and percent germination and purity.  
Calculate PLS by multiplying the percent germination by the percent purity.

**Low PLS Adjustment** If the seed purchased is less than 80 percent PLS the amount of seed purchased should be based upon the “adjusted seeding rate”.

EXAMPLE: where the recommended seeding rate is 10 lbs/acre:

From seed tag: 90% purity x 70% germination = 63% PLS  
Adjustment factor 80 (percent desired)/ (63 actual PLS) = 1.3  
Adjusted seeding rate = 1.3 x 10 lbs/acre = 13 lbs/ac needed

**Coated Seed Adjustment** Sometimes the seed of legumes or clover is coated by the supplier with a coating of an inoculant or other materials. Recommended seeding rates are based on uncoated seed and need to be adjusted. No adjustment is needed when you inoculate clover or other legumes at the site.

EXAMPLE: 9 lbs of clover seed needed  
Adjustment factor = 1.5  
Adjusted seeding rate for clover seed = 1.5 x 9 lbs/ac = 13.5 lbs/ac

Equipment and materials should be ready before you start. The following list will minimize disruptions and let you finish seeding in one day:

- Hand-operated Seeder      One “belly grinder” for each person doing seeding.
- Weighing Scale              At least 20 pound capacity
- Plastic Bucket                At least two
- Paper Bags/Pens              Four grocery bags and two marker pens.
- Inoculant\*                      Specific type for each clover or legume.

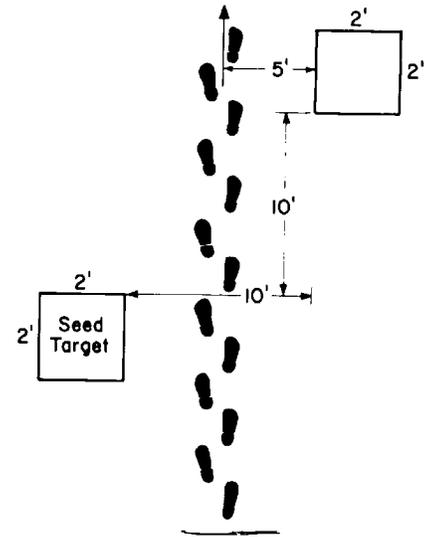
*\*Omit if seed coated by supplier*

## Getting Started:

**INOCULATE CLOVERS** and other legume seeds if they have not been inoculated by supplier. Coated seed inoculated over 30 days ago or seed that has not been kept cool and dry should be reinoculated. Do this the evening before or early on seeding day so the seed will be dry by seeding time.

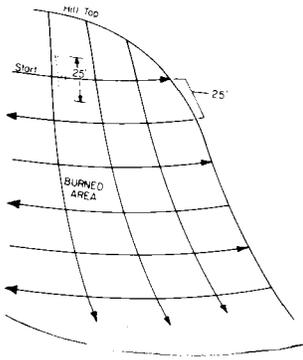
**DIVIDE SEED** of each species into equal amounts and label bags. Keep cool and dry. When seeding a mixture, broadcast each species separately to get the most uniform distribution of seed. This may not always be possible.

**ADJUST SEEDER** according to the manufacturer's instructions based on half the seeding rate when doing split seeding. Adjust it based on the full seeding rate when doing a single once-over seeding. Set out two Seed Targets 10 feet apart and offset 10 feet. With the hand operated seeder half full, start broadcasting and walk between the two seed targets. Stop and check the seed count in each seed target. Adjust the seeder and repeat as needed.



## Seeding:

**BROADCAST IN TWO DIRECTIONS** to achieve a uniform distribution of seed. Using half the seed of a species, broadcast as you walk across the slope starting at the top of the burn area. Notice how far the seed is thrown. When you reach the other edge of the burned area, move downslope a distance equal to the width of throw. Continue broadcasting and walk back across the slope, trying to avoid gaps. Repeat this procedure all the way down to the bottom edge. When several people are seeding, move across the slope together. Adjust your walking pace on the second half of the field so you have enough seed to finish.



Using the remaining half of the seed, repeat the procedure going downslope. On gentle slopes you may be able to broadcast walking back up the slope. On steep slopes it is best to broadcast only walking downslope because you need to maintain the same walking speed used to calibrate the seeder. Using several people will make this easier.

**BROADCAST IN ONE DIRECTION** if conditions do not allow seeding in two directions. Broadcast the remaining seed in the same direction across the slope while walking midway between your previous lines of travel. Repeat the procedure for each species.

## When to Seed:

**TIMING OF SEEDING IS CRITICAL** for success and will vary with location and elevation. Ideally, seeding should be done before winter rains pack the burn ash. Timeliness of rains will affect how well the plants will grow, and at cooler temperatures plants germinate and grow more slowly. As a guide: recommended seeding times in Northern California are October through November and February, and recommended seeding times in Southern California are November 15 through January 15.

Exposed areas (new roads, firebreaks, and steep embankments) should be protected with straw mulch. Use two tons per acre and anchor by punching with shovels or with crimping equipment. A 74-pound bale of straw would cover 800 square feet.

## Where to Get Help:

**TECHNICAL ASSISTANCE** is available from the U.S. Department of Agriculture's Natural Resources Conservation Service, local Resource Conservation District, county Cooperative Extension Service, and California Department of Forestry and Fire Protection.