

## Where to Obtain Information

Contact your local USDA - Natural Resources Conservation Service Office for more information.

Visit our Plant Materials Internet Site at <http://Plant-Materials.nrcs.usda.gov> to find more information on solving conservation problems using plants.

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## Determining Seed Fill in Grasses



Conservation plant  
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## Determining seed fill when making field collections

When is the right time to harvest seed?

The right day to harvest is the one when the largest amount of seed is ripe or filled. However, when collecting seed from more than one species it is not always possible to harvest seed in one day. This makes it necessary to start harvesting before all seed is mature.

Heading and flowering of many range and pasture grasses generally does not occur at one time but over a long period of time. In general, the interval between bloom and seed maturity is about 4 weeks. Cool moist weather may lengthen the interval while hot dry weather may shorten it.

Keep in mind that flowering starts at the top of the head and moves downward. This always places the most mature seed at the top of the head.

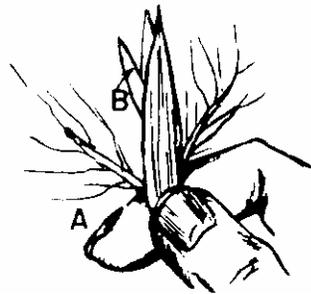
Stages of maturity in grass seed are the same as for any other grain: milk, soft dough, hard dough and vitreous or mature. The optimum time for seed harvest is the hard dough and mature stage. Seed harvested in this stage tend to be filled, will survive the curing process, and will germinate when planted. Seed harvested in the milk or soft-dough stage tend to be not filled, will shrivel as it cures, and generally will fail to germinate when planted.

Some shattering of seed will always occurs before harvest, but for a few days the rate of shattering is matched by the amount of seed ripening. When this stage is past, the rate of shattering exceeds the rate of new seed ripening. This means that at times

some heads will be full of ripe seed, while early producing heads will have very few seeds due to shattering, and late producing heads will have just started flowering.

This makes it important that careful daily inspections be made during the flowering period to decide when most of the heads contain seed in the hard-dough and mature stage.

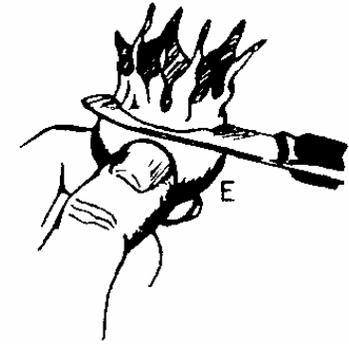
**Field methods of determining grass seed fill (use method that most closely resembles the type species you are collecting)**



Pinching base of a fertile, sessile spikelet of little bluestem



Rubbing out spikelets of lovegrass in palm of hand



Cutting across center of buffalograss bur with a knife



Pressing across center of a fertile floret of switchgrass



Pinching base of several spikelets in a single spike of sideoats grama