

## VEGETATIVE PROPAGATION OF KENTUCKY BLUEGRASSES

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Bluegrass establishment has been traditionally done successfully by seeding, so a few words of justification for the subject matter of this discussion are in order.

There are several circumstances which require vegetative propagation. Some grasses such as Hybrid Bermudas, produce no seed or produce it in such small quantities that production is not economically feasible. Other plants like the creeping bents do not reproduce the parental type from seed. Seeds of Kentucky bluegrass strains are formed either apomictically, which means the seed is not the result of sexual fusions but is identical to the maternal parent or else through fusion (open pollination) in which case vegetative propagation is necessary to reproduce the characteristics of the parent.

Planting vegetatively is somewhat more expensive than seeding so that a variety committed to this method must be truly superior. Warren's A-20 bluegrass is such a selection. Techniques of vegetative planting are not new. We have been planting bentgrass and zoysia in this manner for some time. Most of the warm season grasses, Bermudas, St. Augustine and Centipede are also planted vegetatively.

These methods involve shredding, chopping or cutting sod in small pieces and planting them so that a 10:1 up to 50:1, or more, ration of increase is achieved. This material is broadcast by machines such as manure spreaders or hydromulchers, or various row planters.

Most of these ideas have been tried, but the most satisfactory plugging machine has been made by the Beck Company in Alabama. This machine takes rolls or slabs of sod, cuts them into small segments, of 1 to 3 inches and drops these on 6 to 9 inch centers. Three to four hundred yards of sod is required to plant one acre. A six man crew can plant 12 to 15 acres per day.

Plantings of this kind are done any time between April 1 and November 1 and water requirements are considerably less than establishing with seed. Little or no mowing is done during the first 4 or 5 months. Herbicides are used during this period to control competition from fast growing weeds.

One advantage in planting mature tissue is a wide choice of herbicides that can be used shortly after planting. We make limited use of pre-emergent chemicals when unwanted contamination is present in the soil. Mowing at 1 1/2 inches is begun when about 90% coverage has been reached. Finishing off for market is begun with a final weed clean up and nitrogen management to assure desired color.

There are several advantages in this method. Planting times are greatly extended, total requirements are less than in seeding, a wide range of herbicides can be used shortly after planting and of course it is the only way that some cultivars can be reproduced.

Disadvantages are recognized. This method is more expensive, planting is slower, and probably most important the burden of maintaining varietal purity falls upon the sod grower.