



GRAVEL SAVER HELPS PREVENT GRAVEL LOSS

By Ken Skorseth and Arlie Long, South Dakota LTAP field staff.

It is easy and commonplace to lose material around the toe of the moldboard when blading gravel roads. This is a greater problem in dry conditions or when the gravel does not have sufficient fines to bind the stone and sand particles together. This loss of material eventually results in less gravel on the road surface where it belongs, and begins to build a high shoulder which obstructs drainage.

Jeff Hargens, a motorgrader operator from Hand County, South Dakota, began to experiment with a device of his own design. Jeff began by salvaging the bearing and housing bracket from a rolling coulter of an old farm plow. He fabricated the device in the Hand County shop. He experimented with different blades and different methods of mounting.

The method that performed best was to mount a single disk blade on the coulter housing bracket and mount it directly to the grader's moldboard. This requires slight modification of the end bit on the moldboard, but does not affect the strength of the moldboard.

The single disk blade turns as the grader moves forward in front of the moldboard and prevents gravel from flowing around the toe and spilling onto the shoulder.

Jeff has used this device for two years and it has performed with no problems. As with any change in machinery, slightly different operating techniques are necessary. This device requires slight changes in the pitch and angle of the moldboard to work well, but it is easy to use. The photos show how simply this device works and how easy it is to attach or remove from either side of the moldboard.

