

Gravel saver for grader blades

OUR COLLEAGUES in South Dakota have developed a simple, inexpensive device to keep gravel on the road during maintenance. Blading spreads gravel and smooths the surface, but material can easily slip around the toe or leading edge of the moldboard. Dry weather or lack of fines in the gravel can make the problem worse. In time less gravel is on the roadway surface where it belongs and there is a build-up on the shoulder that can block drainage.

Jeff Hargens, a motorgrader operator from Hand County at Miller, SD, experimented with different ways to mount a disk blade to a grader's moldboard. Eventually he devised an effective method which the county has been using for three years.

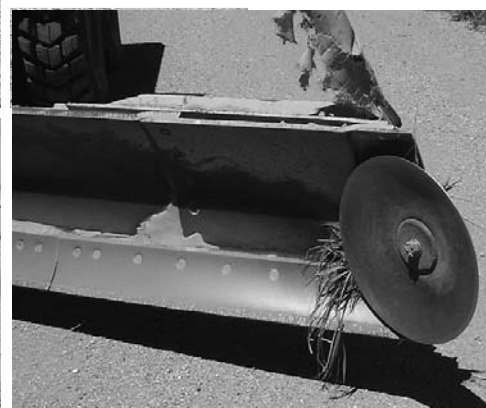
Working with a salvaged bearing and housing bracket from a farm plow's rolling coulters, Hargens experimented with different blades and different

methods of mounting. They got the best performance by putting a single disk blade on the coulters housing bracket and mounting it directly to the grader's moldboard. The blade turns as the grader moves forward. It recovers gravel and pushes it in front of the moldboard again. The moldboard's end bit needs to be modified slightly, but the original strength is not affected.

Operators using the device need to make a small change in the pitch and angle of the moldboard. With that adjustment it works well and is easy to use. "Jeff demonstrated this to us on the road last summer," says Ken Skorseth, Field Services Manager of the South Dakota LTAP Center. Skorseth taught at TIC pavement maintenance workshops in northern Wisconsin earlier this year.

"We are pleased to recognize another local employee who has done something innovative to help his department," says Skorseth. "It took some real persistence on Jeff's part to continue to make modifications until he got the design perfected. But, it is very rewarding when you finally have a product that works effectively."

Adapted from an article in the Fall 2005 newsletter of the South Dakota LTAP Center.



UPPER LEFT "Gravel saver" disk mounted on the moldboard. BOTTOM LEFT The disk has a simple mount. BOTTOM RIGHT Disk keeps gravel from flowing around the toe of the moldboard.

Web ratings entry easier, quicker

WORD IS that WEB WISLR works "slick as a whistle" for entering pavement ratings. "It was really easy to do," says Marilyn Bhend, Clerk for the Town of Johnson in rural Marathon County. "The hardest part was to have somebody go out and actually rate the roads."

The town was among the 45% of local municipalities that submitted their 2005 pavement ratings by entering them directly into WISLR. An equal number sent their ratings on paper, and the remaining 10% used electronic spreadsheets, according to Susie Forde, Chief of WisDOT's Data Management Section.

Overall completion rate was 94%, about the same as 2003. "Some locals asked for extensions due to weather," says Forde. "Others are working directly with WisDOT to build a better interface between their local system and WISLR to load a higher percentage of pavement rating data."

Each new user has to complete a training program first. A computer-based tutorial is available for local officials or staff who want to submit annual physical roadway changes through WISLR anytime during the year. It simulates WISLR entry screens and gives step by step instructions. The user can practice and repeat until she or he is comfortable with the process. Instructions are also printed in pamphlets you can refer to while in WISLR.

"It's laid out simple enough, if you follow the instructions," says Bhend. "If you have questions there are people you can call and talk to."

The entry process is fairly quick. You only put in new or changed information, and ratings stay the same on many segments. Using a paper printout from WISLR to write down your ratings in the field makes it easier; the road segments are in the same order. ▶