

Build a Better Mousetrap

Adding a heavy-duty wing wheel

Editor's note: The "heavy duty wing wheel" is the first in a series of several winning innovations from the Better Mousetrap competition at the Iowa Maintenance Training Expo in 2003. In each issue of Technology News we'll highlight one of the winners. For information about other winning mousetraps, see CTRE's website, www.ctre.iastate.edu/ (Popular Links).

HERB MORLEY, mechanic with the Iowa DOT in Elkader, found that, during snow removal, the wing blade on his snowplow sometimes scraped gravel from the shoulders into the ditches.

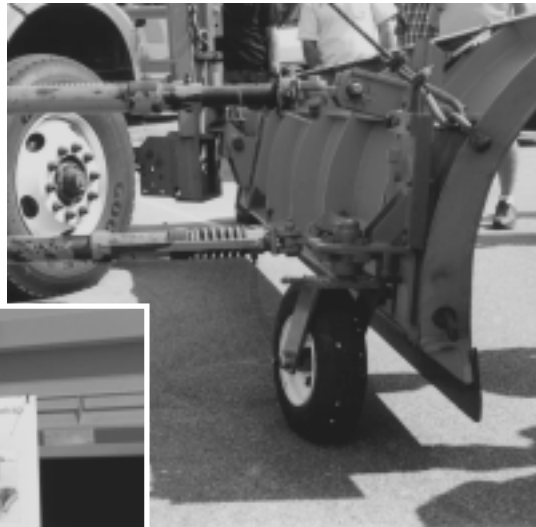
Morley wanted to keep gravel from being plowed away, so he added a heavy-duty wheel to the wing blade. The wheel holds the outer end of the wing up, and since the wheel follows the contours of the shoulder, less gravel is scraped into the ditch.

He used hardware and old plow wheels for his innovation. And he's currently perfecting the invention by making it hydraulic.

For more information about adding a wing wheel to your plow, contact Herb Morley, 563-245-2724, herbert.morley@dot.state.ia.us.



The heavy-duty wing wheel installs easily on the end of the plow blade.



The heavy duty wing wheel prevents the snowplow blade from scraping gravel off the shoulders.

Herb Morley (right) explains his innovation as Al Olson, a competition judge, looks on.



LTAP Advisory Board

The people listed below help guide and direct the policies and activities of Iowa's Local Technical Assistance Program (LTAP). Contact any of the advisory board members to comment, make suggestions, or ask questions about any aspect of LTAP.

Saleem Baig
Local Systems
Iowa DOT
Telephone: 515-239-1051

Gary Fox
Traffic and Transportation Director
City of Des Moines
Telephone: 515-283-4973

John Goode
Monroe County Engineer
Telephone: 641-932-7123

Neil Guess
Howard R. Green Company
Telephone: 515-278-2913

Bret Hodne
City of West Des Moines
Telephone: 515-222-3475

Larry Jesse
Local Systems
Iowa DOT
Telephone: 515-239-1291

Wally Mook
Director of Public Works
City of Bettendorf
Telephone: 319-344-4128

Greg Parker
Cedar Rapids Engineer
Telephone: 519-286-5828

Bob Sperry
Story County Engineer
Telephone: 515-382-7355

Chris Whitaker
Transportation Planner
Region XII Council of
Governments
Telephone: 712-792-9914



**Iowa Department
of Transportation**



Center for Transportation
Research and Education

IOWA STATE UNIVERSITY