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Conserve fuel and energy when moving snow

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The site is designed for farmers, lenders, farm managers, agriculture instructors and others involved in agriculture. The site offers a wide range of business information on marketing, leasing, land values, legal issues, costs and returns, new business development, and many other topics.

Website features
The Ag Decision Maker website provides assistance in a variety of ways.

- A six-page business newsletter is provided monthly that contains information and analysis of current business and economic issues.
- More than 430 Information Files provide information and analysis for finding solutions to many of the decisions facing farmers and agribusinesses.
- Many of the Information Files have Decision Tools for on-line computation. Just enter figures into the spreadsheet to analyze individual situations and save the analysis as a file with personal records.
- Teaching Activities are provided for use in the classroom.

• Voiced Media presentations offer further details on some Information Files.

Information regularly updated
Outlook and profitability files on the website are updated on a monthly basis to show profitability for various crop and livestock enterprises. These files as well as links to the Iowa Farm Outlook newsletter, USDA reports and weather information can be found on the Outlook and Profitability page.

AgDM posts timely tips throughout the month on a blog and through Twitter feed, @ISU_AgDM.

The Ag Decision Maker website currently has over 3,200 visitors per day. These visitors spend a total of 500 hours on the site every day.

Visit the site at http://www.extension.iastate.edu/agdm and bookmark it for future reference. Monthly e-mail notification of new information posted to the website is available at no charge. Visit the “e-mail sign-up” link on the homepage for the online form, or e-mail agdm@iastate.edu.

Conserve fuel and energy when moving snow

by Dana Petersen, ISU Farm Energy Conservation and Efficiency Initiative, 515-294-5233, petersen@iastate.edu, and Mark Hanna, extension ag engineer

Expect the unexpected might be the theme for this year's winter weather, especially if Iowa's December snow storm is an indication of what lies ahead. Every farm has unique features—windbreaks, site-specific terrain, building placement—and blowing snow may present a challenge. This winter, consider these tips for minimizing farm energy costs and machinery wear and tear when moving snow on the farmstead.

“A common misconception about managing farm energy expenses is that farmers must be willing to spend money to capture savings,” says Mark Hanna, ISU extension ag engineer. “During the winter months, many energy-saving practices can be implemented with little or no out-of-pocket cost for farmers.”

Hanna emphasizes that engine care is critical, especially during the cold weather. “To avoid cold starts, the winter routine typically requires a block heater for your motor,” he says. “Assuming twelve cents per kilowatt hour for a 1000-watt block heater, you can save more than a dollar a day by simply installing a two-hour timer for that heater instead of leaving it plugged in all night.”

In addition to engine care and maintenance, Hanna notes that certain pieces of machinery are better suited to particular types of snow removal.

If your farmstead has space for piles of snow, you may be able to get by with a blade mounted to a ¾-ton truck. Sleet, ice, and slushy, heavy snow...
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typically can be cleared with a 60- or 72-inch plow blade. However, there are drawbacks to using the farm truck. Pushing snow is hard on the engine and transmission, and the limited maneuverability results in overlapping and excess fuel consumption.

By comparison, a plow blade mounted to a four-wheel drive tractor allows you to make tighter turns, capture more horsepower and use less fuel. Visibility from the tractor seat is also typically better than a pick-up. For the safety of all farm employees, maintaining a steady speed when moving snow—whether on a tractor or in a truck—will minimize fuel consumption while maximizing farm safety.

Another advantage of moving snow with a tractor is versatility. A front-end loader can be used to dig through deep drifts. Other attachments, such as a blower or a blade, can also be rear-mounted to the same tractor. This allows the operator to move more snow with fewer passes, thereby saving fuel.

For heavy snow accumulation, a blower moves the snow quickly and easily. If your local snowfall is intermittent, a three-point, rear-mounting blower that attaches to a tractor’s PTO is simple and straightforward. In comparison, a front-mounted snow blower typically has a more complicated mounting mechanism that incorporates hydraulics. Snow blowers are helpful for maintaining long driveways that are prone to drifting snow, but loose gravel may clog the blower with grit and gusting winds may compromise the blower’s reach.

If you find yourself in over your head, ask a neighbor for help. Be sure to maintain clear communication regarding fueling and maintenance when sharing machinery among neighbors or family. This is especially important to minimize fuel costs and unnecessary wear and tear.

Keep your equipment running smoothly on the farmstead this winter to reduce energy consumption—and aggravation—no matter what the weather brings!