

Harvesting short wheat tips

Harvesting short wheat
In many areas of Kansas, prolonged drought has resulted in short wheat and thin stands. Harvesting wheat in these situations can be a challenge. Special attention needs to be given to cutting height, machine adjustments, and operator control. In short wheat, getting the heads into the combine with less straw will be a challenge. In some cases, the reel may not be able to effectively convey the wheat back from the cutter bar to the auger, nor hold it in place during cutting. Short cutting will also mean more contact potential with the ground and reduced levels of surface residue which can negatively impact cropping systems in water-limited environments.

In the case of material conveyance, stripper headers, air reels, and draper headers may be a great help.

Stripper headers

Stripper headers allow the grain to be harvested efficiently while leaving the maximum amount of standing residue in the field. Research has shown that this preservation of wheat residue can reduce evaporative losses of water after harvest, aid in the moisture retention of snow, and improve the yields of the next year's crop.

To properly use a stripper header, note the following:

Operators need to be aware of the rotor height and the relative position of the hood to the rotor. This position needs to be set correctly so that heads approach the rotor at the proper angle for stripping.

Keep the nose of the hood orientated so that the top of the wheat heads are even with, or slightly below, the forward point of the nose. This may require operating the header with the nose in a slightly lower-than-normal position relative to the rotor. However, it's important to note that running a stripper header lower than necessary will result in increased power consumption and finger wear.

Combine ground speeds should be kept high (above 4 mph) to maintain collection efficiency and minimize header losses.

Several people have reported that adjusting header height with a stripper header is not as critical as it is with a conventional header, and that a stripper header could easily be run by non-experienced people (see step 1).

Continue to adjust stripping rotor speed throughout the day as conditions change. If rotor speeds are too high, that will result in detachment of the entire head and unnecessary increases power requirements. Rotor speeds that are too slow will result in unstripped grain remaining in the head. In general, rotor speeds will be less in thin short wheat than in better stands.

Air reels

Air reels will also aid in the material conveyance from the cutter bar to the auger in reel-type units when crops are light or thin. These units are made in several different types including finger air reels, non-reel, and units that fit over existing reels. Examples of manufacturers are Cray (West Fargo, ND) and AWS (Mitchell, Ontario Canada). Non-reel units have the advantage of less eye strain from the continuously rotating header reel, but all units have collection efficiencies compared to conventional reels even in sparse or short crops. These units do not control the amount of wheat stubble left in the field

Views with Van Keith Van Skike, Extension Director



and the operator still has to control the cutting height. In short wheat this may mean little to no field stubble will be left for next season's moisture collection and for these reason stripper headers may be better choice for certain areas of Kansas.

Draper headers and flex heads

Draper headers may also help with the conveyance of material since they have a very short distance between the cutter-bar the conveyance belt. The ability to tip the cutterbar completely back will aid in keeping harvested crop material moving across the cutter bar and onto the belt as well as ensuring some stubble remains standing on the soil surface. Cleats on the belt need to be in good to new condition to maximize conveyance of crop material away from the cutter-bar. Set gauge wheels properly to maximize cutting height and leave standing residue.

Flex heads will also help deal with the lower cutting heights and potential ground strikes. In thin stands of wheat it is even more important that sickles and guards are in good condition as there is not as much crop material to push, which would normally help ensure cutting by worn sickles and guards. On headers with finger reels it is quite likely that the short cut wheat will pass in between the fingers rather than being swept backward. Producers may consider adding material over or behind the fingers to act more as a bat to sweep the cutter-bar clean. Plastic/vinyl materials or repurposed round baler belting have been successfully used for this purpose.

If harvesting with a draper or flex header, maintain the cutting height as high as possible to preserve standing stubble. Typically, cutting wheat at two-thirds of its full height will result in losses of less than 0.05 percent as any missed heads contain grain that will be lost as tailings during the harvesting process.

Conventional headers

Still for many farmers, new equipment may not be an economical choice and you may have to make do with a conventional head on your combine. In this case, adjust the reel to get the best movement of the heads from the cutter bar to the auger. Combining in slighter wetter conditions may help prevent shatter and decrease losses. If wheat heads have flipped out of the header from the top of the auger, an extra "auger stripper bar" may be necessary. A small strip of angle iron can be bolted slightly behind and below the auger to help with material conveyance. In thin stands of wheat it is even more important that sickles and guards are in good condition as there is not as much crop material to push and ensure cutting by worn sickles and guards.

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Combine adjustments

In addition to material con-

veyance and cutting height, lower yields and uneven crop flow may also require performing combine adjustments to the concave/rotor cage clearance, cylinder/rotor speed, and fan speed. Follow the manufacturer's recommendations. The leading cause of grain damage under almost any harvesting condition is overly fast cylinder or rotor speed. This will especially be evident in harvesting short wheat as there will be less material in the concave or rotor cage to thresh against, increasing the likelihood of grain damage if cylinder/rotor speed is too high.

On conventional machines it may be necessary to reduce concave clearance to attain good separation. On rotary combines it may be advantageous to maintain a typical clearance to provide a more normal threshing condition while using less threshing area. The use of blanking plates on the rotor cage may improve separation. You may have to lower the fan speeds slightly to minimize grain losses. Once adjusted properly, try to keep material crop flow as constant as possible as most threshing and cleaning units work best under these constant flow conditions. As the amount of material passing through the combine decreases the response to various settings such as cylinder/rotor speed, concave/rotor cage clearance, and fan speed will be more sensitive than under more normal operating conditions.

Performing kill-stops during harvest will be especially critical in evaluating grain losses and identifying which stage of the harvesting process is the source. After performing a kill-stop the operator should look at shattered grain losses before the header, losses after the header and before the spread pattern of the combine, and losses in the tailings behind the combine. Losses can be quickly checked by looking at the number of seeds in the tailings and elsewhere around the combine.

Typically, 20 seeds per square foot is equal to 1 bushel per acre for a sampling area equal to the cutting width of the combine. For the tailings area, where the material is concentrated, multiply the 20 seeds per square foot by the header-to-tailings width ratio. For example, a combine with a 7-foot spreader width and 28-foot header would have a factor of 4, and 80 seeds per square foot would be the correct number for a bushel-per-acre loss. Also, a normal shoe length is typically one foot, so estimated measurements can be done with your foot. Individual field and header losses are determined by looking at areas before and under the combine. Actual combine threshing losses are determined by subtracting these numbers from the tailing loss.

Summary

Although this maybe a rough year for many farmers, some changes can be made to help maximize harvest efficiencies. If you have ever wanted to try an alternate header (stripper, flex-draper, etc.), this may be the year for you. For those not wanting to buy, renting may also be an option.

Producers in dry land production systems need to keep in mind that in very low-yielding wheat years anything that can be done to preserve what little crop residue is present will have huge impacts on evaporative losses and productivity of the next crop.

Sunflower Pioneer Power Association



The Sunflower Pioneer Power Association Antique Show was held on Saturday in Alma. A parade started off the day with old cars, tractors, police and fire trucks.
-Telegram photo by Shylo Paxton

Funding to create new rural jobs

Agriculture Secretary Tom Vilsack today announced the selection of 48 community-based organizations in 26 states, the District of Columbia and the Commonwealth of Puerto Rico for grants to promote economic growth, support rural business development and create jobs.

"These grants will bring increased economic opportunities to rural residents and communities by strengthening the capacity of regional organizations to help small and emerging businesses," Vilsack said. "They also will help organizations experienced in economic development create more job opportunities for rural residents across the country."

United States Department of Agriculture is making the investments through the Rural Community Development Initiative Program. It helps community-based development organizations, federally recognized Indian tribes and other groups promote economic growth in low-income, rural communities. Recipients are required to obtain matching funds, which increase the value of the grants. United States Department of Agriculture does not provide the grants directly to businesses or individuals. Instead, the Agency awards the money to public or non-profit intermediaries. Much of the Rural Community Development Initiative Program funding is regional in nature and underscores United States Department of Agriculture's support of locally-based development strategies.

Here are some ways these grants will help rural communities. In Sacramento, Calif., the Rural Community Assistance Corporation will use a \$152,492 grant to help local leaders implement community development initiatives. It also will teach community developers how to leverage resources to increase the supply of Tribal housing.

The Champaign County Regional Planning Commission, in Urbana, Ill., will receive a \$71,375 grant to build the capacity of 23 municipal government boards in Champaign, Douglas, Ford, Iroquois, Piatt and Vermillion counties in east central Illinois. Board members will receive training in governing, planning and economic development.

In Concord, N.H., the Northern Forest Center, Inc. will use a \$107,956 grant to provide workforce development and business training services to tourism businesses in the Maine Woods region.

Under today's announcement, United States Department of Agriculture is providing \$6.7 million to strengthen local and regional economic development enterprises. Funding for recipients announced today is contingent upon the grantee meeting the terms of the grant agreement.

The Rural Community Development Initiative program has a proven history of bringing economic benefits to rural communities. In 2012, the Iowa Economic Development Authority used a \$200,000 Rural Community Development Initiative grant to help more than 50 non-profit recipients develop marketing and branding strategies for community assets. Local groups learned how to collect and review demographic data, and to identify business retention, expansion and recruitment strategies. This process, dubbed "Re-Energizing Main Street's Economic Performance," helped implement a re-

vitalization and growth plan for downtown businesses.

President Obama's plan for rural America has brought about historic investment and resulted in stronger rural communities. Under the President's leadership, these investments in housing, community facilities, businesses and infrastructure have empowered rural America to continue leading the way - strengthening America's economy, small towns and rural communities. United States Department of Agriculture investments in rural communities support the rural way of life that stands as the backbone of our American values



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Friday, June 20, 2014, 1 p.m.-5 p.m.
Saturday, June 21, 8 a.m.-7 p.m.

Offering for sale the following partial list of household items, old dishes, furniture, guns, hand tools, yard furniture, antiques and collectibles and many miscellaneous items.

Antique Brass Double Bed; Old Trunks; Antique Oil Lamps; Washboards; Wicker Chairs; Recliner Sofa; Sofa Bed; Double Bed with Head and Footboard; Metal Bed with Frame; Wooden Rocker; Dining Table/4 Chairs on Casters; China Cabinet; Old Buffet; Antique Dressers with Mirrors; Steinway Upright Piano/Bench; Pictures; Pfaff Sewing Machine in Cabinet; Kneeling Bench; End Tables; Lamps; Patio Chairs; Hand Tools; Masonic Sword/Scabbard; Mauser Model 1895 7 mm; Nylon Remington Stevens 12G Model 811; Buck Hunting Knife; Remington Model 31 12G; Rifle Scabbard; 50's and 60's Model Car Kits; Antique Kerosene Stove/Oven; Old Kitchen Table; Pie Safe; Other Cupboards; Book Shelves; Wooden Rolling Pins; Old Jars; Canning Items with New Jars; Crock Bowls; Butter Churns; Red Wing Crocks; Carnival Dishes; Green Glass; Butter Dishes; Fire King; Enamelware; Other Collectible Glass; Kitchen Items; Linens; Records

MANY OTHER ITEMS UNDISCOVERED AS OF YET!

TERMS: CASH OR GOOD CHECK the day of auction. NO CREDIT CARDS. Nothing to be removed until settled for. Announcements made day of auction take precedence over written material. All items to be sold "AS IS". No guarantees. Not responsible in case of accidents, theft or damage. ID will be required to receive buyer number. We reserve the right to refuse bids from anyone.

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PUBLIC RECORD

Municipal Court

These transactions were taken from the records of filings in the offices of the Norton Municipal Court. These cases were given to the paper with the date of the hearings.

April 24

May 2-Saul E. Salinas Castillo, Grand Island, Neb.; Charge: 1. Speeding 43 in 35, 2. No drivers license; Plea: Guilty; Found: Guilty; Sentence: 1. \$30 2. \$500, costs \$76, total \$606.

April 3-Calvin Gill, Norton; Charge: 1. No turn signal, 2. No

proof of insurance; Other Actions: 1. Dismissed by city prosecutor for costs, 2. Dismissed/proof. Sentence: Costs \$76.

April 14-Dalton Smith, Norton; Charge: Speeding 33 in 20 school zone; Plea: Guilty; Found: Guilty; Sentence: Fine \$100, Community service, pull all weeds and pick up all trash around and on courthouse square April - Dec.

April 7-James Durham, Norton; Charge: Vicious dog; Plea: No contest; Found: Guilty; Sentence: Fine \$100, Costs \$76,

Total \$176, meet ordinance requirements for vicious dog by June 30.

March 27-David Harshbarger, Norton; Charge: No proof of insurance; Other actions: Dismissed/proof.

April 2- Kelly Milton, Norton; Charge: 1. Speeding 33 in 20 school zone, 2. No proof of insurance; Plea: Guilty; Other actions: 2. Dismissed/proof; Found: 1. Guilty; Sentence: Fine \$136, Costs \$76, Total \$212.

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