Are weeds showing up in your wheat stubble fields?

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Post Rock Extension Answers
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Now that the 2025 wheat harvest is progressing, producers may be seeing weeds show up in their wheat stubble. NOW is the time to manage the weeds before they become uncontrollable! Stay tuned, and I will share some management guidelines to remember.

Some places have received moisture, so the weeds that have been suppressed by the canopy will grow rapidly once crop competition is removed. In addition, weeds that have emerged through the wheat canopy will be damaged during harvest and will quickly begin regrowth. Delaying control can result in lost soil moisture that could be used for crop production, as well as weed seed production, which will cause difficulties in the future.

According to Dr. Sarah Lancaster, K-State Research and Extension, Weed specialist, "When thinking about weed control in wheat stubble, there are two priorities – controlling already emerged weeds and preventing later flushes." Making applications before weeds exceed 4 to 6 inches is necessary for good control of already emerged weeds. Residual herbicides are needed to reduce the number of herbicide applications needed to control multiple flushes of weeds.

Lancaster stresses that despite a growing number of herbicide-resistant weeds, glyphosate plus 2,4-D LVE and/or dicamba remain important for weed control in wheat stubble. However, these herbicides alone are not likely to provide adequate control of pigweeds or kochia, especially when applied in the hot, dry conditions that are common after wheat harvest. Be careful about making herbicide applications in high temperatures. Here are some herbicide options commonly used to control weeds after wheat harvest. Thanks to Dr. Sarah Lancaster for providing this information in the K-State Research and Extension, Agronomy Newsletter from June 20, 2025.

Paraquat (Gramoxone, others) is a Group 22 herbicide that can work well in place of glyphosate to control emerging pigweed and kochia. Paraquat is a contact herbicide, so spray coverage is critical. Spray volumes of 20 gallons/acre or higher are preferred, especially on larger weeds or denser stands. If sprayed at less than 20 GPA, flat fan nozzles are required. Paraquat needs to be applied with a non-ionic surfactant or oil concentrate to enhance the surface coverage of the plant foliage. Also, remember that there is a requirement for handlers and applicators to complete training every three years to use paraquat.

If planning to plant corn or sorghum next spring, a tank mix of paraquat with atrazine (Group 5) will enhance the control of emerging weeds and provide some residual weed control. Atrazine labels have recently changed such that the only non-crop uses of atrazine permitted are for wheat stubble in wheat-fallow-wheat, wheat-corn-fallow, and wheat-sorghum-fallow rotations. In these rotations, it is still important to be aware of the total amount of atrazine you are applying to each field in a given year and stay below the maximum rate allowed for your field. Metribuzin is another Group 5 herbicide that can be used instead of atrazine to enhance control and provide some residual activity. There are three benefits of using metribuzin instead of atrazine.

First, there are more options for crop rotation. Atrazine limits crop options to corn or sorghum in the next season, whereas metribuzin can be applied as a pre-emergence herbicide for soybeans or field peas.

Second, post-emergence applications of metribuzin will have some activity on atrazine-resistant weed populations. Third, the residual weed control provided by metribuzin is likely not affected by enhanced degradation associated with extensive atrazine use.

One final note regarding paraquat. Limited research out of Australia suggests applying paraquat 2 weeks after a glyphosate application will increase weed control. This is called a 'double knock' strategy. This information is included here not as a recommendation per se, but to encourage careful thought about when you want to utilize contact herbicides in your fallow weed management system. If paraquat were sprayed with or before glyphosate, the rapid damage to leaf tissue with prevent uptake and translocation of glyphosate. However, if a glyphosate application partially controls weeds, there will be sufficient leaf area 2 weeks after application for paraquat to be effective.

Saflufenacil (Sharpen), a Group 14 herbicide applied at one to two fluid ounces per acre, is an option to provide postemergence and short-term residual control of Palmer amaranth, kochia, and other broadleaf weeds. Sharpen should be applied with glyphosate for grass control, and can be applied with other products labeled for use in wheat stubble, but do not apply Sharpen with Valor. Sharpen works best with the addition of methylated seed oil and ammonium sulfate. Good spray coverage is needed, so using 15 to 20 gallons/acre spray solution is important. Be sure to note crop rotation intervals for your situation, especially if using more than one fluid ounce per acre or applying to sandy or low organic matter soils. Tiafenacil (Reviton) is a Group 14 very similar to Sharpen in terms of weed control and adjuvant use.

Flumioxazin (Valor, others) is a Group 14 herbicide that can be added to burndown treatments at rates of one to four fluid ounces per acre for activity on emerging broadleaf weeds and some residual activity on broadleaf and grass weeds in wheat stubble. Flumioxazin can be mixed with glyphosate or clethodim (Select Max) for enhanced grass control. It can also be mixed with 2,4-D, atrazine, metribuzin, or paraquat.

• Wheat can be planted 30 days after two fluid ounces per acre, or 60 days after three fluid ounces per acre if at least one inch of rain occurs between application and planting.

• Soybeans can be planted immediately after an application of three fluid ounces per acre.

• Corn, sorghum, sunflowers, or soybeans can be planted in the spring following the application of four fluid ounces per acre.

Residual weed control with flumioxazin will depend on rainfall (0.25 inch) for activation, just as with pre-plant treatment in soybeans.

Lancaster mentioned that another group 14 herbicide that can be considered is Sulfentrazone (Spartan, others). Sulfentrazone can be applied to stubble and will control Palmer amaranth and kochia as well as other broadleaf weeds and some grasses. However, Sulfentrazone can limit crop rotation options. Specifically, if rates greater than 8.0 fl. oz of a 4L formulation are used, the rotation to sorghum is 18 months, while it is 10 months for lower rates. Lancaster stresses that the Group 14 herbicides discussed, flumioxazin and sulfentrazone, provide the greatest residual activity; however, Saflufenacil provides greater postemergence kochia control than flumioxazin.

For more detailed information, see the "2025 Chemical Weed Control for Field Crops, Pastures, and Noncropland" guide available online at https://www.bookstore.ksre.ksu.edu/pubs/CHEMWEEDGUIDE.pdf or in our district offices in Beloit, Lincoln, Mankato, Osborne or Smith Center. Be sure and contact our K-State Research and Extension, Post Rock District, Crop Production Agent, Sandra Wick, with all your crop production needs.

Kansas Game Warden Q&A

BY LANDEN CLEVELAND

PFD's

When you hear the term "PFD" what do you think it is? Do you think it is a lifejacket? Because that is exactly what it is. PFD stands for Personal Flotation Device and there are five different classes of them.

If you want to see pictures of them, you can use your google search or go to page 8 of the Kansas Boating Regulation handbook.

What I am going to explain today is not necessarily what makes them different from one another, but what kind you need on your boat when operating on Kansas waters.

Kansas law requires that all boats have a US Coast guard approved type 1,2,3, or 5 PFD for each person on board the vessel or being towed and must be always worn by all occupants under the age of 13. Now you just asked yourself, "what about a type 4 PFD"? A type 4 PFD is more commonly called a throw cushion and must be carried on all vessels longer than 16 feet.

While on the water throw cushions must be out and readily accessible. They cannot be in a stored compartment.

Now, back to the PFDs for each person. When I say you must have a PFD for each person on board there are also some caveats. The first is that all the PFDs need to be the proper size for each person on board. You can't have Cousin Darryl that weighs in at over 200 lbs wearing the princess PFD for a little kid that weighs 30-50 lbs or vice versa. So, check to make sure your life jackets are the correct size for each passenger on board before you launch.

Second, all your PFDs need to be serviceable. This means they cannot be ripped or falling apart at the seams. I have seen a couple in my day that look like they have been kept underwater for a couple months a year and are so saturated they would probably sink if dropped in the lake. Those do not work either.

Third, the PFDs that I have been explaining must be out while on the water. By out I mean they cannot be in a closed compartment. This is hands down the most common violation I come across on the water. I usually get asked, "why do they need to be out?" The reason for this is that if a boat flips over the pressure keeps the storage compartments closed and you cannot get to them. It is also a no brainer, that if an accident happens, they are easier to get to when they are out at arm's reach. In closing I want you to check all your PFDs before heading out to the lake the next time and read the label printed or sewn on them. Make sure it is a US Coast guard approved PFD and serviceable.

If you would like to read the statute pertaining to this, it is KSA 32-1129. If you have any questions, please feel free to email me at: landen.cleveland@ks.gov

Isbell

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After graduating from Fort Hays State University, Isbell began his career as a computer-aided drafting teacher in Manhattan. He then moved to a similar role in Concordia as a teacher, coach, and eventually athletic director. He continued his educational journey with a master's degree from Kansas State University, an Education Specialist degree from Fort Hays State University, and ultimately earned a Doctor of Education degree in Educational Leadership from Lamar University.

Isbell began his journey in higher education in 2012 as the Dean of Instruction at North Central Kansas Technical College, where he led campus instructional teams through several curriculum changes and accreditation maintenance efforts. In 2019, he was selected as the Vice President of Student and Instructional Services at North Central, where he proved to be an effective leader and fundraiser, securing $250,000 in funding that directly supported the development of a new academic program and the acquisition of state-of-the-practice robotic welders. Isbell also played a key role in securing state and federal grants for North Central, totaling more than $3.25 million.

"We will greatly miss Dr. Isbell at Fort Hays Tech | North Central. He has been my right hand for the past 13 years," said Eric Burks, president of Fort Hays Tech | North Central. "Corey is an excellent leader and helped the college advance in many ways over his tenure. While I will miss working with him every day as a friend and colleague, I am very pleased that we will continue to work together through the Affiliation, and I'm happy for Corey to have this opportunity. I wish him and his family the very best in Goodland!"

Throughout his career, Isbell has demonstrated a strong commitment to advancing the quality of life in North Central Kansas. "Having lived in small communities my entire life, I have developed a deep understanding of the strong sense of community and pride that rural communities have. The demand for skilled talent in our service area is growing exponentially," Isbell said. "As the President of Fort Hays Tech Northwest, I will work tirelessly to continue the amazing technical education our skilled faculty and staff provide and maintain a constant pipeline of skilled workers to our rural communities."

During his time at Fort Hays Tech | North Central, Isbell has worked with local businesses to help develop and build their workforces. He also facilitated multiple sponsorship agreements with local businesses to create unique apprenticeship opportunities and attract and retain skilled professionals in rural Kansas, where they are needed most.

"Dr. Isbell is a proven leader, a strategic thinker, and a driving force behind the efforts of FHSU's Strategic Affiliation initiative to advance career and technical education in rural Kansas," said Dan Wasson, Chairman of the Area Advisory Board for Fort Hays Tech | Northwest. "Based on his extensive experience in tech ed, higher education administration, and economic and workforce development, our search committee was very confident that he is the right leader at the right time for Fort Hays Tech | Northwest. We are all thrilled that Corey and his family have decided to make the move to Goodland."

Isbell's first day as President of Fort Hays Tech | Northwest will be July 21.

Preserving the Harvest: Tips for Canning, Freezing, and Drying

BY JAMIE RATHBUN, FAMILY AND COMMUNITY WELLNESS AGENT
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Post Rock Extension Answers
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Is your garden producing more than you can use before it goes bad? Are you out of friends and family to share your abundance with? Preserve that extra produce by canning, freezing or drying. This helps reduce waste and lets you enjoy your harvest long after the growing season. Each method has specific steps to keep your food safe, nutritious, and delicious for months.

Canning is an economical and safe way to preserve food if practiced properly. It involves placing foods in jars and heating them to a temperature that destroys microorganisms.

The acidity of the food determines the method that needs to be used: a boiling water canner or a pressure canner.

High acid foods like fruits, pickles, jams and jellies can be processed in a boiling water canner. Low-acid foods like vegetables, meats and soups require a pressure canner to eliminate botulism risks. Tomatoes need added acid, such as bottle lemon juice or citric acid, to ensure a safe product.

Always follow the latest research-based canning methods. Avoid using untested or old recipes. Tested recipes are available from the National Center for Home Food Preservation, https://nchfp.uga.edu/how/can, and your local K-State Research and Extension Office, https://www.ksre.k-state.edu/about/statewide-locations/. These sites also have information on all things canning.

Elevation affects canning, since water boils at lower temperatures as the elevation increases. Canning directions for each food will give proper processing times or pressure of elevation adjustments. To find your elevation go to https://whatismyelevation.com/. Elevation in the Post Rock Extension District falls between 1328 feet and 1873 feet above sea level, so altitude adjustment is necessary.

Pressure canner dial gauges should be tested annually for accuracy. Many K-State Research and Extension offices offer free dial gauge testing. If you are in the Post Rock Extension District, call 785-524-4432 to schedule a testing time.

Freezing foods is easy, quick and convenient. Freezing temperatures stop microorganism growth and slow down chemical reactions that degrade food quality.

Blanching is essential for most vegetables to slow or stop enzyme action that affects flavor, color and texture. Blanching times vary by vegetable and size, but onions, peppers and tomatoes do not need blanching.

Fruits can be prepared for freezing in three ways: dry pack, sugar pack or syrup pack. Peaches, apples, pears and apricots darken and lose flavor quickly when exposed to air, but using ascorbic acid, citric acid or lemon juice can reduce discoloration.

For best quality, use frozen fruits and vegetables within 8-12 months. While freezing keeps food safe indefinitely at 0oF or below, rotating foods to use older items first ensures you enjoy them at the best quality.

To learn more about freezing, visit https://nchfp.uga.edu/how/freeze

Drying is one of the oldest food preservation methods. It removes moisture to prevent the growth of bacteria, yeast and mold. Dried foods need little storage space. Some, like fruit leathers, are eaten as is; others are rehydrated for use.

Dehydrators produce the best quality dried foods. An oven can be used but takes 2-3 times longer. For even drying, slice or cut produce into similar-sized pieces. Pretreat fruits and vegetables before drying. Dip fruit in ascorbic acid, citric acid or lemon juice, then drain and dry. Water blanch or use a citric acid solution for vegetables, then drain and dry. Condition dried fruit that has been cooled by packing it loosely into an air-tight glass or plastic container for 7-1- days to distribute the remaining moisture evenly. Vegetables do not need conditioning like fruits. Package and store dried foods in tightly sealed containers and store in a cool, dry place.

To learn more about drying, visit https://nchfp.uga.edu/how/dry.

What's the Best Method for You? The best food preservation method depends on your needs. If you have ample storage space and prefer convenience, freezing is great. For long-term storage without refrigeration, canning is ideal. If you want lightweight, portable snacks, drying is perfect. Consider your resources, the type of food and your preferences to decide.

Contact Jamie Rathbun at jrathbun@ksu.edu or by calling 785-524-4432.