

## Be Counted – 2017 Census of Agriculture

America's farmers and ranchers will soon have the opportunity to strongly represent agriculture in their communities and industry by taking part in the 2017 Census of Agriculture. Conducted every five years by the U.S. Department of Agriculture's (USDA) National Agricultural Statistics Service (NASS), the census, to be mailed at the end of this year, is a complete count of all U.S. farms, ranches, and those who operate them.

"The 2017 Census of Agriculture remains the only source of uniform, comprehensive, and impartial agriculture data for every county in the nation," said NASS Administrator Hubert Hamer. "As such, census results are relied upon heavily by those who serve farmers and rural communities, including federal, state and local governments, agribusinesses, trade associations, extension educators, researchers, and farmers and ranchers themselves."

The **census data benefits producers in a number of ways**. Farm and ranch organizations use the data to evaluate and propose programs and policies that will help farmers and ranchers. Agribusinesses use the information to develop marketing strategies and determine locations of facilities that will serve producers. Farmers and ranchers use the census data to determine potential business opportunities, and to evaluate their operation in comparison to local, State, and national averages. Extension specialists and universities use census statistics to develop new improved methods to increase agricultural production and profitability. **Additionally, elected local and state representatives will use the census data to develop farm programs that will help producers and promote U.S. agriculture.**

**2017 | CENSUS OF AGRICULTURE**  
**YOUR VOICE. YOUR FUTURE. YOUR OPPORTUNITY.**

Every farmer and rancher needs to be counted regardless of the size and type of operation. Information on individual operations will **remain strictly confidential by law** (Title 7, U.S. Code). NASS safeguards the confidentiality of operators' responses and will not disclose any information about an individual farm or ranch operation.

In December, the census forms will be mailed out. U.S. law (Title 7, U.S. Code) requires operators/producers to respond to the census. Responses are important because only U.S. farmers and ranchers can supply the answers needed to generate an accurate picture of the Nation's agriculture. Forms can be returned by mail, or by filling out the Census online via a secure website. Please take the time to be counted!

For more information about the 2017 Census of Agriculture and to see how census data are used, visit [www.agcensus.usda.gov](http://www.agcensus.usda.gov)

**Source:** *Wesley Tucker, Ag Business Specialist*

## **MU Extension guide offers helps on hiring, keeping employees**

University of Missouri Extension recently released its 2017 Farm Labor Guide.

Finding and keeping dependable workers is one of the largest challenges today for farm owners and managers, says MU Extension agricultural economist Joe Horner. “As farms grow in size, learning to recruit, manage and retain high-quality employees becomes even more critical.”

The free online publication is MU Extension’s response to farmers’ requests for a simple, Missouri-specific guide to navigating the complexities of human resources management, Horner says.

The guide is available as a downloadable PDF file at [agebb.missouri.edu/commag/farmlabor](http://agebb.missouri.edu/commag/farmlabor).

Horner, MU Extension agricultural economist Ryan Milhollin and agribusiness consultant Alice Roach created the guide to help employers make decisions that lead to a quality workforce and satisfied employees.

The guide divides the employment process into six segments: recruitment; hiring; onboarding, training and mentoring; operations; retention; and termination.

Horner says the guide gives a systematic list to identify and hire suitable employees. The guide covers safety, employee compensation and other human resources protocols.

Horner says it is important to decide on the needs of the operation before the employee search begins. Does the farm or business need full-time or part-time help? What are the hours that the employee is needed? Is the work seasonal or year-round?

After the employer makes these decisions, Horner recommends creating a formal job description. This helps job seekers decide if they qualify for a job or have an interest. It also helps the employer track whether applicants qualify, need training and if goals are met after the hire. It sets expectations of the employee’s role and relationships with coworkers, vendors and others.

The guide outlines six steps to writing a job description and tells where to publicize job postings for best results. It also offers advice

on interviewing, including a list of acceptable and unacceptable questions, and general work rules such as overtime.

The guide discusses subjects such as background, drug and reference checks, as well as needed paperwork, taxes and employment laws. It follows through with options for training and mentoring.

The guide lists numerous free online resources to recruitment and hiring from extension specialists across the country.

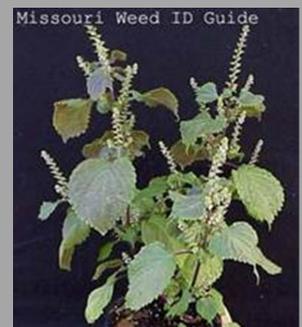
**Source:** Dr. Joe Horner, *State Extension Agricultural Economics Specialist*

## **Perilla Mint Toxic Weed Found In Many Pastures**

Perilla mint is a weed that is becoming more common. This annual weed in the mint family tends to be found in shady areas. Like others in the mint family, it has a square stem. Foliage is green with purple coloring. Because of its coloring it may be planted as an ornamental and escape into forage fields.

Thankfully livestock usually avoid eating it, but if pasture forage is short, they may be more likely to eat it.

The same if it is baled into hay or silage. Plants that are wilted after treating with herbicides also may be more attractive to livestock so don’t let them in treated areas until the foliage decomposes. For help in identifying weeds, go the weed identification website at [www.extension.missouri.edu](http://www.extension.missouri.edu) or download the free idweeds app.



**Source:** Pat Miller, *Agromony Specialist*

## Understanding hay testing and cattle nutrient requirements is important when feeding cattle through the winter

It is time to discuss nutritionally how to carry cattle through the winter. Hay is part of the winter cattle feeding strategy. Whether hay is purchased or home raised, hay testing and understanding cattle nutrient requirements are key to efficiently feeding cattle through the winter with minimal supplementation, resulting in improved profit potential of the cattle operation.

Hay testing is important because it is the only way to know the exact nutrient value of the hay. The main hay test components to look at are fiber, energy and protein.

Neutral detergent fiber (NDF) and acid detergent fiber (ADF) are the forage fiber components evaluated in the hay test. The NDF measurement is used to determine forage intake. Cattle will consume 1.2% of their bodyweight in forage NDF daily. The other fiber measurement, ADF, measures forage digestibility. When forage NDF and ADF percentages increase, less forage intake and digestibility occur, which represents a poorer quality forage.

Total digestible nutrients (TDN) and net energy are two forage testing measures of energy. Total digestible nutrients looks at more than just energy, since TDN includes crude protein, carbohydrates, and fats. This measurement is a long-standing representation of energy. As TDN increases, the forage has more energy, is higher quality, and is more likely to satisfy the energy needs of the animal. Net energy, a more accurate representation of energy, accounts for the actual energy that the forage will provide to the animal. Net energy is broken into categories with the first one that the animal uses being net energy for maintenance (NEm). Once the NEm requirement is satisfied, the left over net energy will go to performance like lactation (NEl) or growth (NEg). For beef cows, we look at NEm and for growing cattle in addition to NEm we also look at NEg. An increase in forage net energy represents a better quality forage and increases the likelihood that forage is meeting the animal's energy requirements.

Two measurements used to evaluate forage protein content are crude protein and available protein. Crude protein (CP) is calculated by multiplying measured forage nitrogen content by 6.25. As forage quality improves, crude protein content increases improving the likelihood that forage will meet the animal's protein requirements. Hay that was baled wet and has a tobacco appearance and aroma may have reduced protein availability and absorption by the animal. Therefore, an available protein test should be used to determine the percentage of protein available for the animal. When purchasing hay and not aware of the baling process, it is a good idea to do an available protein test so that you know how much forage protein is available for the animal to use.

In addition to knowing the nutritive value of the forage, understanding cattle nutrient requirements is necessary to determine if the forage is adequate or if supplementation is needed to meet animal needs for maintenance and production goals. You can break cattle into four categories based on their nutrient requirements, growing cattle, lactating mature cows, lactating first calf cows, and dry cows. Growing animals have the highest nutrient needs. Depending on body weight and gain expectations, TDN requirements range from 64% to 69% and CP requirements range from 10.6% to 12.8%. The reason for growing cattle needing a high percentage is their intake is much lower than cows at approximately 12 to 14 lbs. of dry matter (DM) daily.

Cattle that have the next highest nutrient demand are first-calf lactating cows with 62% TDN and 10.7% CP, consuming approximately 27 lbs. of DM daily. There is a high nutrient demand because these cows are lactating for the first time, still growing, and becoming reproductively sound prior to the next breeding season.



The final two groups include mature dry and lactating cows. Lactating cows have a higher percent TDN requirement (59 to 58 versus 54 to 50) and a higher percent CP requirement (9.8 to 10.5 versus 7.1 to 7.9) than dry cows. Lactating cows have an increased nutrient requirement due to the nutrient demand associated with milk production. Furthermore, as cows enter the final 1/3 of pregnancy, make sure to increase the nutrient content of the diet to the higher end of the dry cow nutrient need because of the growing fetus. Total DM intake for dry cows ranges between 21 lbs. and 24 lbs., with higher intakes as they get closer to calving. Lactating cow DM intake ranges from 27 lbs. to 32 lbs.

The keys to feeding cattle efficiently through the winter includes determining hay nutrient content, sorting cattle into feeding groups based on nutrient requirements, and matching forage quality to cattle requirements with minimal grain/co-product based supplementation. In addition to appropriate supplementation, if hay is poorer quality than what is required by the animal, adjust future hay making or hay purchasing processes to get better quality hay. Cattle that use more forage to meet their nutrient requirements have less need for supplementation which can potentially improve profitability of the cattle operation. Hopefully understanding a hay test will result in providing better quality hay for your cattle. Furthermore, grouping and feeding cattle based on nutrient needs will lead to more efficient supplementation of cattle through the winter. This will potentially reduce supplementation cost leading to improved profit potential of the cattle operation.

**Source:** Patrick Davis, *Livestock Specialist*

## **Integrated Weed Management Resource Center**

### ***Combining tools to combat herbicide resistant weeds***

Herbicide resistance is a rising economic problem in American agriculture. Increasingly, growers, crop consultants, and other ag professionals are looking toward Integrated Weed Management to eradicate resistant weeds on their farms. IWM allows growers to use multiple tactics together in order to attack weeds from multiple angles.

The Integrated Weed Management (IWM) Resource Center is a place to find helpful, trustworthy resources on using integrated weed management for herbicide resistant weeds. This website is updated regularly by a team of weed scientists from 14 universities and the USDA Agricultural Research Service as part of an area-wide project.

On this website:

- Find a clearinghouse of reliable educational resources necessary to integrate new weed management practices successfully, from trusted sources throughout the US
- Ask questions and participate in discussions about herbicide resistant weed management
- Read up-to-date articles on IWM innovations and herbicide resistant weeds
- Learn what herbicide resistant weeds are in your state right now



**Website:** [integratedweedmanagement.org](http://integratedweedmanagement.org)

**Submitted:** *Joni Harper, Agronomy Specialist*