



For more information please contact your MU Extension Center:

Adair
(660) 665-9866

Audrain
(573) 581-3231

Boone
(573) 445-9792

Callaway
(573) 642-0755

Chariton
(660) 288-3239

Clark
(660) 727-3339

Howard
(660) 248-2272

Knox
(660) 397-2179

Lewis
(573) 767-5273

Linn
(660) 895-5123

Macon
(660) 385-2173

Marion
(573) 769-2177

Monroe
(660) 327-4158

Pike
(573) 324-5464

Putnam
(660) 947-2705

Osage
(573) 897-3648

Ralls
(573) 985-3911

Randolph
(660) 269-9656

Schuyler
(660) 457-3469

Scotland
(660) 465-7255

Shelby
(573) 633-2640

Sullivan
(660) 265-4541

Your local link to MU for ag extension and research information

<http://aqebb.missouri.edu/aqconnection>

Weaning Strategies

Weaning is one of the most stressful times in a calf's life. Calves display stressed behaviors by spending more time vocalizing and walking fences, and less time eating. As a result, calves lose weight and have decreased performance in the feedlot. They may also have suppressed immune function and an increased risk of illness. In addition to being separated from their mothers, calves may experience additional stress from other processing methods often performed at the same time as weaning, such as castration, vaccination, and dehorning.

Traditional weaning involves cows and calves being abruptly separated with no further contact. Calves may be immediately loaded on a truck and sold or taken to a different area of the farm where they may be confined to a dry lot. This is the highest stress method and can result in vocalization and fence walking for up to three days. Calves weaned with the traditional method have been found to have lower weight gains for ten weeks after weaning than calves weaned with a low stress method. However, traditional weaning requires less time and facilities than other methods and may be the best method for some operations.

Fenceline weaning is a lower stress method of weaning that places cows and calves across the fence from each other. The pair can still see, hear, and smell each other, but calves are not able to nurse. They will spend the first several days close to the fence and then gradually spend more time away from the fence. A good fence separating the two pastures is essential for this strategy to work. A 5-strand barbed wire or electric fence is suggested. This strategy also works best when pairs are put in a pasture together for a week before separation. The cows are moved to the new pasture across the fence and calves are left in the familiar pasture so they know the location of the fenceline and water.

Another method of weaning, known as two-step weaning, uses a plastic nose piece which allows the calf to graze and drink water, but prevents the calf from nursing. Calves are left with their mothers for about two weeks after being fitted with the nose piece. Afterwards, cows and calves are separated, the nose piece is removed, and calves are handled as described in traditional weaning. This method has been shown to reduce stress, measured through decreased vocalization and fence-walking, but some studies show decreased weight gains in calves compared to those that are allowed to nurse until separation. Two-step weaning also requires extra labor because two trips through the chute are needed to insert and remove the nose pieces.

No matter which weaning method a producer uses, keep it as low stress as possible, for both cattle and humans.

Source: [*Jenna Monnig, livestock specialist*](#)

Answers to quiz on last page

Coronavirus Food Assistance Program 2 (CFAP 2)

Round two of the Coronavirus Food Assistance Program from USDA is available through December 11, 2020. CFAP 2 provides financial support to eligible agricultural producers who continue to deal with market disruptions and associated costs because of COVID-19.

To be payment eligible, a person or legal entity must either have an average adjusted gross income of less than \$900,000 for tax years 2016, 2017 and 2018; or derive 75% or more of their adjusted gross income from farming or ranching. Other requirements include: 1) commercially produce the eligible commodities; 2) be in the business of farming at the time of application; 3) adhere to the conservation compliance provisions; and 4) not have a controlled substance violation. Contract growers who do not share in the price risk of production are ineligible.

There are three categories of CFAP 2 payments: 1) Price trigger commodities; 2) Flat-rate crops; and 3) Sales commodities.

Price Trigger Commodities experienced at least a 5% price decline in a comparison of the average price for the week of January 13-17, 2020, and the average price for the week of July 27-31, 2020. The commodities covered include barley, corn, sorghum, soybeans, sunflowers, upland cotton, wheat (all classes), broilers, eggs, beef cattle, dairy, hogs and pigs, lambs and sheep.

Payments will be the greater of: 1) the eligible acres multiplied by a payment rate of \$15 per acre; or 2) the eligible acres multiplied by a nationwide crop marketing percentage, multiplied by a crop-specific payment rate, and then by the producer's weighted 2020 Actual Production History (APH) approved yield. If the APH is not available, 85 percent of the 2019 Agriculture Risk Coverage-County Option (ARCCO) benchmark yield for that crop will be used.

Livestock payments are based on a fixed number of head, defined as the lower of: 1) the highest maximum owned inventory of eligible livestock, excluding breeding stock, on a date selected by the producer from April 16 - Aug. 31, 2020; or 2) the maximum number of livestock per type established by USDA. Payment rates will be \$55 a head for beef cattle, \$23 a head for hogs and pigs, and \$27 a head for lambs and sheep.

Flat-rate crops are crops that either do not meet the

5% price decline or do not have data available to calculate a price change. Flat-rate crops include, but are not limited to alfalfa, amaranth grain, buckwheat, canola, millet khorasan wheat, mustard, oats, peanuts, quinoa, rapeseed, safflower, sugar beets, triticale.

Flat-rate crops, payments will be calculated by multiplying the producer's share of reported or determined 2020 planted acres of the crop, (excluding prevented planted and experimental acres), by \$15 / acre.

Sales Commodities include: fruits and vegetables, aquaculture grown in a controlled environment, nursery crops and floriculture (including Christmas trees), other livestock (excluding breeding stock) not included under the price trigger category that were grown for food, fiber, fur, or feathers, tobacco, goat milk, mink (including pelts), mohair, wool.

Payments will be calculated using a sales-based approach from five payment levels associated with the producer's 2019 sales of the commodity. Payments for new producers who had no production or sales in 2019 will be based on the producer's actual 2020 production or sales as of the date the producer submits an application for payment.

CFAP 2 payments are subject to a per person and legal entity payment limitation of \$250,000. This applies to the total amount of CFAP 2 payments for all eligible commodities. Unlike other FSA programs, special payment limitation rules apply to participants that are corporations, limited liability companies, limited partnerships, trusts, and estates. These legal entities may receive up to \$750,000 based upon the number of members (not to exceed three members) who each contribute at least 400 hours of active personal labor or active personal management. For example, if one of these legal entities has two members, they can get \$500,000 or a three member entity is eligible for \$750,000. CFAP 2 payment limitation is separate from the CFAP 1 payment limitation.

Ineligible commodities include hay, except alfalfa, crops intended for grazing, green manure crops and those left standing, equine and breeding livestock. For a complete list, go to: www.farmers.gov/cfap.

Applications may be submitted to FSA via mail, fax, hand delivery, or via electronic means. Please call your local FSA office prior to sending applications electronically. The CFAP 2 application and associated forms are available online at www.farmers.gov/cfap. USDA has a national help line 877-508-8364.

The payment calculator on the USDA website requires Microsoft Excel. If you need help completing or printing the forms or do not have Microsoft Excel contact your extension regional ag business specialist.

Source: *Darla Campbell, ag business specialist*



Maintaining Biosecurity for Livestock

Methods of biosecurity include management practices coordinated to control and eliminate new diseases from entering the farm. This is the least expensive and most effective means of disease control for farmers. Since vaccines are not able to completely eliminate diseases and treatment is only a means of reducing losses, biosecurity is the primary mode of action to halt the spread of diseases and other ailments both on and off the farm. Most bovine diseases are spread through five principal modes of transmission; saliva, urine, manure, cattle blood and exhaled air. It is imperative to reduce interaction and contact of animal to animal or even animal to object and then object to animal. Controlling movement of animals on the farm and quarantining new animals, reduces transmission. Additionally, cleaning facilities and disinfecting prominent areas will greatly reduce contamination.

Diseases in cattle and other livestock predominately take place through animal to animal contact. Therefore, placing incoming cattle to the farm in isolation for 30 days greatly reduces spread. The preferred site should be well drained and, in an area, where wind direction is directed away from other livestock. Animals should be monitored for signs of possible disease and should be dewormed and vaccinated. Those animals which appear to be sick need to be further quarantined from all other animals until signs of sickness have dissipated.

Newly acquired animals should be placed together in separate areas until immunity has reached a minimum threshold. Those animals placed in quarantined and in separation should only be handled after all other livestock has been touched to reduce sickness in healthy animals.

Biosecurity is most effective when importing livestock onto the farm is controlled. Diseases have many modes of transference including: human contact, insects, rodents, birds and even vehicles. Farm gates should be locked and entrance areas should be posted. Vehicles which have been on other farms should not be allowed in barn lots or pastures.

To reduce possible entry of pathogens, farms should have one entrance and visitors should wear clean clothing and footwear. Persons handling animals should wash their hands after handling each animal. Other animals such as dogs should be kept in areas away from both animals and feed. A key component of biosecurity is an effective program related to control of pests. This can include fly traps, baits, screens and even fences to reduce nocturnal animals.

Eliminating germs and other pathogens are the primary means of disinfection. The most prominent means of transference happens through chutes, needles, dehorers, and castration utensils. For best management practices, it is important to discard disposable equipment after each use. For other equipment, boiling water should be used for sterilization. Then it should be dried and placed in air tight plastic bags. For a disinfectant to work, the area must first be cleaned with soap and water and then rinsed since saliva and manure render disinfectants ineffective. The most popular and less expensive disinfectant is chlorohexidine which can be found under many brand names.

Utilizing an effective biosecurity program on your farm is the least expensive and most successful means of improved herd health. Using isolation and control of animal movement to and on the farm as well as disinfectants will decrease pathogen infection. Implementing even the most minute management control

Source: *Jason Morris, ag business specialist*



Fake Meat

Last month there was an editing mistake. The end of the *Fake Meat* article was accidentally omitted.

On the next page are three columns with the ingredient lists from the Impossible Burger, Beyond Burger and dog food. Consumers might have a hard time determining which list is for the two burgers and which is for dog food. (*answers are at bottom of Page 1*)

Impossible Foods' mission is to disrupt the meat industry by "completely replacing the use of animals as a food production technology." Impossible Foods claims their plant based meat alternative is better for consumers and better for the planet. It will not be easy to get consumers to change their eating habits permanently, especially if it is an all or nothing proposition.

Source: *Heather Conrow, livestock specialist*

Can you guess which label is dog food?

#1

Water, Pea Protein Isolate*, Expeller-Pressed Canola Oil, Refined Coconut Oil, Rice Protein, Natural Flavors, Cocoa Butter, Mung Bean Protein, Methylcellulose, Potato Starch, Apple Extract, Salt, Potassium Chloride, Vinegar, Lemon Juice Concentrate, Sunflower Lecithin, Pomegranate Fruit Powder, Beet Juice Extract

#2

Pea, Sweet Potato, Pea Protein, Pea Starch, Lentils, Flaxseed Meal, Sunflower Oil Preserved with Mixed Tocopherols, Calcium Carbonate, Vegetable Flavoring, Salt, Vitamins (Choline Chloride, Vitamin E Supplement, Vitamin A Supplement, Vitamin D3 Supplement, Calcium Pantothenate, Thiamine Mononitrate, Pyridoxine Hydrochloride, Riboflavin Supplement, Niacin, Folic Acid, Biotin, Vitamin B12 Supplement), Minerals

#3

Water, Soy Protein Concentrate, Coconut Oil, Sunflower Oil, Natural Flavors, 2% or less of: Potato Protein, Methylcellulose, Yeast Extract, Cultured Dextrose, Food Starch Modified, Soy Leghemoglobin, Salt, Soy Protein Isolate, Mixed Tocopherols (Vitamin E), Zinc Gluconate, Thiamine Hydrochloride (Vitamin B1), Sodium Ascorbate (Vitamin C), Niacin, Pyridoxine Hydrochloride (Vitamin B6), Riboflavin (Vitamin B2), Vitamin B12