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Livestock Wildfire Preparedness

By State Vet's Office

Wildfires in Arizona in the past few years have burned thousands of acres and cost millions of dollars in damage. Persistent drought coupled with dry grasses create favorable conditions for ignition and wildfire spread. While Arizona's wildfire season usually peaks May through July, wildfires in our state can and do occur year-round. Fires severely impact surrounding communities by damaging infrastructure, disrupting essential services, and even forcing both short and long-term evacuations. Smoke from wildfires can affect livestock, horses, pets, and wildlife. Livestock and wildlife are especially at risk of injuries from smoke inhalation, lack of feed or fresh water, or burns.

You can prepare in the event a wildfire breaks out in your community by:

- **Signing up for local emergency alerts.** Check with your county emergency management agency or local fire department.
- **Preparing an emergency kit for yourself and your animals.** Lists for emergency kit components for both small and large animals are on our website at: <https://agriculture.az.gov/animals/emergency-preparedness-and-response>.
- **Developing an evacuation plan for you and your livestock.** Determine what areas of your house and property

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Livestock Wildfire Preparedness *continued from page 1*

are easiest to exit in case of an emergency. Be sure to have vehicles filled with at least half a tank of fuel.

- **Creating a family communication plan.** Make sure family members know where to meet up in the event of an evacuation. Additionally, make an out of state relative or friend a point of contact for your family.
- **Creating and maintaining a space around your home to prevent fire spread.** Clear all debris within 30 feet of your home. Trim any branches that overhang on your roof. Remove any highly flammable material from your property.

Protect your livestock by:

- **Limiting exercise when smoke is visible.** Don't require animals to perform activities that substantively increase airflow into and out of the lungs.
- **Providing plenty of fresh water** near feeding areas.
- **Limiting dust exposure** by feeding low-dust or dust-free feeds and sprinkling or misting the livestock holding area.
- Planning to give livestock **4 to 6 weeks to recuperate** after the air quality returns to normal. Attempting to handle, move, or transport livestock may delay healing and compromise your animals' performance.
- **Having a livestock evacuation plan ready in advance.** If you don't have enough trailers to quickly transport all of your animals, contact neighbors, local haulers, farmers, producers, or other transportation providers to establish a network of reliable resources that can provide transportation in the event you need to evacuate your animals.

During a wildfire:

- **Stay informed.** Listen to the radio or tune in to your local television channel to stay up-to-date on the situation. Make sure to have your evacuation kits and livestock trailers ready to go.
- **If an evacuation order is given, leave immediately.**
- **Be sure to include halters, leads, feed, and water for 48-72 hours.** The staging area and/or animal shelter may not be determined immediately. Animals may be moved multiple times and supplies may not arrive immediately. Traveling with extra supplies of feed and water will ensure your animals are sustained until contingencies arrive.
- **Drive carefully and take health precautions.** Expect heavy traffic, possible debris on the roads, and limited visibility due to smoke. Wear an N-95 mask or put a dry cloth over your mouth and nose if possible.

After a wildfire:

- **Do not return home until the authorities authorize you to do so.**
- **Use caution when entering burn areas.**

For more information on preparing for wildfires, please visit the links below:

http://www.calfire.ca.gov/communications/downloads/fact_sheets/Animalevacuation.pdf

<http://www.readyforwildfire.org/Animal-Evacuation/>

<https://extension.psu.edu/readyag-workbook>

<https://www.avma.org/public/EmergencyCare/Pages/Wildfire-Smoke-and-Animals.aspx>

<https://www.avma.org/public/EmergencyCare/Pages/Large-Animals-and-Livestock-in-Disasters.aspx>



Nest Run Egg Producer vs Commercial Egg Producer

By Roland Mader, Dairy & Egg Program Manager



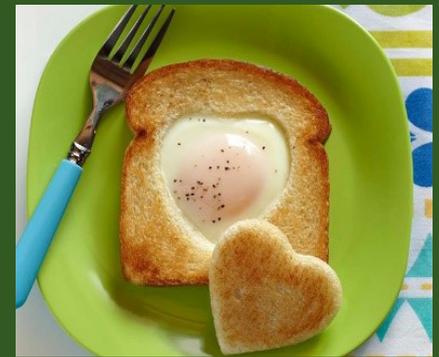
Eggs can be sold out of your own backyard production—all it takes is a simple registration as a Nest Run Egg Producer with the Department. There are few rules that have to be followed for the safety of you and your customers. Nest run eggs can be sold anywhere, but are most commonly found at farmer's markets. Nest run eggs are unwashed and ungraded—just how they come from the nest. This option is limited to an annual production of up to 750 dozens of eggs. This is a low cost option for an owner of a few hens.

If the annual production limit is reached, your production is shifting from a hobby to a small business. This means all eggs have to be washed, graded, and labeled to meet the USDA standards for shell eggs. This transition is something the producer should not treat lightly. The expansion of the business comes with certain expenses that the producer may not be aware of, such as

- Suitable processing room
- Egg washer and grading equipment
- Additional labor and insurance cost
- Packaging material

Producing food comes with responsibilities and expectations from your customers. Proper processing and learning how to clean eggs the right way is key to keeping your family and your customers from getting sick.

Cookie Cutter Toad-in-the-Hole



This month's recipe featured from [The American Egg Board](#) is simple, but one of my favorite ways to prepare eggs.

- 2 slices white OR whole wheat bread
- 2 tsp. olive oil
- 2 EGGS
- Salt and pepper

Directions

CUT OUT center of each bread slice, using a 2-1/2 to 3-inch heart, round or other shape cutter; reserve cut-outs. COAT large nonstick skillet lightly with oil. TOAST bread slices and cut-outs on one side in skillet over medium-low heat until golden, about 5 minutes. TURN bread pieces over. BREAK AND SLIP an egg into center of each bread slice. COVER pan and COOK SLOWLY until whites are completely set and yolks begin to thicken but are not hard, 5 to 6 minutes. SEASON eggs with salt and pepper. SERVE immediately with cut-outs.



State Vet's Office Welcomes its Newest Team Member Elizabeth Haluska

I am originally from Buffalo, NY and I have been living in Phoenix, AZ for ten years now. I graduated from the University of Arizona in December 2017 with a degree in Animal Science-Animal Industry. I am first generation agriculture in my family, and I love working with large animals, as well as learning more about the different fields in agriculture. Most of my experience has been working with cattle while in school, and I have been able to work with sheep and swine as well. I hope to attend Veterinary School in the future, and be able to work with livestock. My hobbies include hockey, music and cooking, as well as spending time with my family and friends.



Sophisticated Food: HTST Milk Processing

By Marisela Cruz, Dairy Inspector

HTST stands for High Temperature Short Time and is in reference to milk pasteurization. Milk is heated to at least 161 F° and held at that temperature for at least 15 seconds. An HTST pasteurizer system is a very complex but efficient system. It is very reliable for the destruction of pathogenic bacteria that is present in the milk. This type of system

is regulated by the State of Arizona who has adopted an FDA ordinance called the PMO (Pasteurized Milk Ordinance) for dairy processing plants producing Grade A milk products; such as chocolate milk, yogurt, or sour cream. These systems are also required to be tested for efficacy by state dairy inspectors every 3 months to ensure product safety.

An HTST system has many components and ranges from very intricate to more basic systems, which are still nonetheless quite mind-boggling. Lots and lots of pipelines and pumps run throughout an HTST system. Some lines are very hot and some are cold. A plate heat exchanger is a very important component of the system. It consists of many metal plates, compressed very tightly but channels in these plates allow milk to flow through between them. Cold raw milk is heated to the proper temperature and then cooled down by more incoming cold milk, which in turn is being pre-heated by the pasteurized hot milk. It is a very efficient method of transferring and saving energy, as well as effectively ensuring product safety through proper heating and cooling times.





A Slaughter Inspector's Day

By Rick Mann, MPI Manager

AZDA Meat and Poultry Inspection (MPI) inspectors perform inspection at slaughter and processing facilities everyday they operate. At slaughter facilities, AZMPI Inspectors are required to be on-site prior to the start of operations and remain until the last animal enters the cooler.

As required under the Meat and Poultry Inspection Act, inspectors are to conduct ante-mortem inspection on each and every livestock animal before slaughter to determine whether the animals are fit for human food. Thus, if an establishment does not present animals for ante-mortem inspection in accordance with 9 CFR 309.1, inspectors that conduct post-mortem inspection are not able to determine that carcasses are not adulterated

and, therefore, cannot permit the carcasses to be marked as "inspected and passed". There are certain animal health conditions that can only be assessed when the livestock are alive, central nervous system (CNS) disorders, ambulatory versus non-ambulatory, temperature, etc.

Humane handling of animals is also strictly enforced per the Humane Methods of Livestock Slaughter Act of 1978. The 1978 Act made mandatory the humane slaughter and handling of livestock in connection with slaughter of all food animals slaughtered in USDA/AZDA inspected establishments. This includes cattle, calves, sheep, goats, swine, and other livestock. Regulations require that livestock are rendered insensible to pain on the first application of the stunning device before being shackled, hoisted, cast, or cut. This means that the animal must be unconscious and unable to feel pain before it is "stuck" (veins and arteries severed so it bleeds out), before it is shackled and hoisted into the air, or before it is dropped onto a table/floor. Additionally the animals must have water at all times and food if kept more than 24 hours. Pens and runways must be kept in good repair to avoid injury to the animal and the animals must be treated humanely while being offloaded, moved to pens and into the knock box.

Post-mortem inspection covers the inspection of the

carcasses and parts of meat and poultry used for human food. It takes place after ante-mortem inspection and after the animal or poultry has been slaughtered, thus, the term "post-mortem," meaning "after death" in Latin. Post-mortem inspection covers the steps in the slaughter process that begin at stunning and ends at the step where the carcass is placed in the cooler. This is performed by observation of the carcass and viscera during the dressing process, palpating of lungs, liver and other organs, incision of lymph nodes throughout the



lymphatic system including the head, lungs, liver, etc. looking for any pathology or abnormalities that may exist. Screening for violative residue and collection of requested tissue is also performed. Sanitary dressing practices are also observed and enforced throughout the slaughter process. The purpose of post-mortem inspection is to protect the

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A Slaughter Inspector's Day

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public health by ensuring that the carcasses and parts that enter commerce are wholesome, not adulterated, and properly marked, labeled, and packaged. This means that any carcasses or parts that are unwholesome or adulterated, and thereby unfit for human food, do not enter commerce. In performing inspection methods, making regulatory decisions, documenting findings, and taking enforcement actions when appropriate, in relation to post-mortem inspection we are guided by applicable statutes, regulations, directives, and notices. If the animal passes post-mortem inspection the AZDA triangle mark of inspection is then applied to the carcass which allows the meat to be sold anywhere in Arizona.

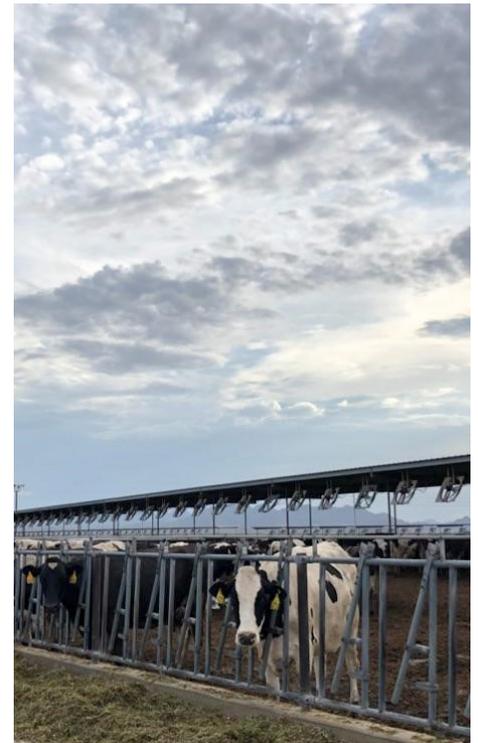


Emergency Management Training

By Cpt. Richard Shore,
Livestock Manager

The Department of Agriculture and its Livestock Officers attended a euthanasia class on November 26th, 2018. One of our responsibilities as Department of Agriculture employees is to prepare for major disasters in Arizona. If a major disaster occurred and there were numerous livestock injured to the point of needing to be put down, the Department wanted to make sure this could be done in the most humane manner as possible. I would like to thank Dr. Cody Egnor and Dr. Ryan Wolker for their expertise as veterinarians to make sure this training was conducted in a professional manner.

As part of the Governor's Emergency Management Plan, the Department of Agriculture puts on training for its inspectors and officers on a quarterly basis to prepare for all kinds of disasters in the state. These can include wild fires, floods, animal disease outbreaks and nuclear disasters, to name a few. The Department is doing its best to make sure that the state is secure and our employees receive training to keep themselves and the community safe.



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