



Cheeps & Chirps

..... *Points for Poultry Profitability*

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INSIDE THIS ISSUE:

New KY State Veterinarian 1

Be prepared: Composting HPAI mortality 2

Avoiding fires in poultry litter dry stack sheds 3

HPAI reappears in Canadian 3

HPAI vaccinations may be used in Europe 4

To vaccinate for HPAI or not 4

Kentucky 4-Hers to compete in national events 5

Dietary definitions 5

NEW KENTUCKY STATE VETERINARIAN

Dr. Katie Flynn stepped down as State Veterinarian at the end of February 2023 when she took a position as staff veterinarian at the US Equestrian Federation. A search for a new state veterinarian began, with Jamie Guffey from the Kentucky Poultry Federation serving on the committee. The Kentucky State Board of Agriculture (SBOA) unanimously selected Dr. Steve Velasco III to serve as the new State Veterinarian. He started the position in June.

Dr. Velasco was born and raised in San Antonio, TX. He grew up participating in 4-H horsemanship and competing in high school rodeo. Upon graduation from high school he attended the University of Texas at San Antonio. He received his Bachelor of Science degree in Chemistry and a Master of Business Administration from the University of Texas at Austin. He later attended Texas A&M University where he received a Bachelor of Science in Veterinary Science and a Doctor of Veterinary Medicine with an emphasis in large animals.

Dr. Velasco previously served as a region director at the Texas Animal Health Commission. In his role he managed and directed regulatory programs, along with full time field and office staff. The position also required him to perform field work and, as necessary, manage regional emergency disaster requirements, perform outreach and

education programs for producers and the public.

The Office of the State Veterinarian enforces state and federal regulations on livestock and poultry movement, administers animal health programs, responds to disease outbreaks, licenses stockyards and livestock dealers, and performs numerous other duties.

The State Veterinarian is an agent of the State Board of Agriculture and leads the KDA's Office of State Veterinarian in its statutory and regulatory activities to prevent, control, and eradicate communicable diseases in the agricultural animal health sector.

Specific duties of the Kentucky State Veterinarian include:

- » Serve as the Executive Director of the Office of State Veterinarian;
- » Oversee all functions of the Office of State Veterinarian;
- » Ensure that statutes and regulations are enforced;
- » Participate on the Commissioner of Agriculture's executive team;
- » Advise the Commissioner on issues involving animal health and other issues as requested;
- » Testify to legislative committees as requested;
- » Serve as a liaison to livestock and poultry organizations and leaders; and
- » Participate on the Board of Directors of the United States Animal Health Association, the National Institute for Animal Agriculture, Southern Animal Health Association, and other animal health organizations.



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BE PREPARED: COMPOSTING HPAI MORTALITY

The HPAI upbreak continues. It is important to be prepared in the event that your farm is infected. In 2016, mortality protocol were developed for HPAI infected flocks. You can find it at

https://www.aphis.usda.gov/animal_health/emergency_management/downloads/hpai/mortalitycompostingprotocol.pdf

The keys to successful mortality composting include

1. A qualified composting expert to guide windrow construction
2. Trained equipment operators
3. Sufficient carbon source (i.e, sawdust, litter, wood shavings, corn stover, active compost, seed and nut hulls, wood chips, etc.), water, and space

The Cornell Waste Management Institute have a publication available online at

<https://ecommons.cornell.edu/bitstream/handle/1813/11722/aifs-revised-2016.pdf>

It is titled “Natural rendering: Composting poultry mortality—The emergency response to disease control.” They make



comments regarding experiences with previous outbreaks. Interestingly, from an early Canadian experience (in British Columbia) they concluded that: it was important to plan for worker protecting challenges.

Challenges related to worker protection:

- » A large number of birds required disposal crews to work in barns where culled chickens had been dead for a week.
- » Workers were often covered in feces and chicken parts working in barns where manure pits had not been cleaned for seven years.
- » Heat and humidity in the barns made N-95 respirators and plastic overalls very uncomfortable. They recommended switching to cotton coveralls. They tried half-face respirators but switched to full-face respirators because a drinking tube could allow responders to rehydrate without risking contamination while doffing PPE.
- » They noticed that PPE compliance needs monitoring since it could be poor a times. Veterinarians in particular did not wear protective gear or take the anti-viral drugs offered.
- » Extra PPE is needed to replace any that are shredded or torn while working around cages and coops.

Make sure you know ahead of time who to call if the need should arrive.



AVOIDING FIRES IN POULTRY LITTER DRY STACK SHEDS

There have been several people asking online on how to avoid fires in their stored litter. Mississippi State University has a good publication on the topic at:

<https://extension.msstate.edu/publications/avoiding-fires-poultry-litter-dry-stack-sheds>

A summary of what they wrote about is as follows:

In order to get the most value from poultry litter it is important that it be stored until the appropriate application time. This time is based on the time for ideal plant nutrient uptake with reduced environmental impact. A storage facility should protect the litter from weather, preserve nutrients in the litter, and lessen the threat of runoff and water pollution.

While dry stack litter sheds are an essential component of a farm waste management plan, producers should also be aware of the fire danger

associated with them. As microbial activity occurs within the stored litter, heat and methane gas are produced. The boundary layer between moist and dry litter in the pile is also associated with heat production.

Spontaneous combustion in a litter pile can occur from the build up of heat and methane. Fires can also occur if litter is stacked too closely to the wooden walls of the shed. The process is similar to spontaneous combustion of hay bales or silage stored in barns or silos. Never drive a tractor on stored litter since this can compact the litter and increase the likelihood of a fire.

There are several common risk factors for fires in litter storage sheds:

1. **Moisture**—Dry litter does not generate heat well but wet litter does. Moisture should be less than 40%.

2. **Pile size**—Height and width are more important than length of the pile. The larger the pile size, the greater the chance for excess heat and fire. Litter should not be stacked more than seven feet high at the center of the pile.
3. **Compaction**—Compacting litter traps heat in the pile and lessens the available pore space for dissipating heat and methane.
4. **Layering**—Only dry litter should be added to litter already in the shed. Putting new, moist litter on top of old, dry litter creates a dangerous, heat-producing situation.
5. **Caked litter**—Caked litter is often wet litter with a high moisture content and can increase the risk of litter storage fires. It is best to separate caked litter from dry litter in the shed until the caked litter has dried.

HPAI REAPPEARS IN CANADIAN PROVINCES

Five Canadian provinces have confirmed detections of Highly Pathogenic Avian Influenza in commercial flocks in 2023. They are Saskatchewan, Alberta, Quebec, British Columbia, and Ontario. Those five provinces, along with Manitoba and Nova Scotia, all had confirmed HPAI cases in commercial poultry in 2022.

HPAI first appeared at an exhibition farm in Newfoundland and Labrador in December 2021. Since then, HPAI appeared in every Canadian province and territory has had some sort of confirmed HPAI case, whether in commercial poultry, backyard poultry, or wild birds. Alberta has also had confirmed cases in non-commercial flocks.

Current Canadian HPAI cases can be found at:

<https://inspection.canada.ca/animal-health/terrestrial-animals/diseases/reportable/avian-influenza/latest-bird-flu-situation/investigations-and-orders/eng/1688503773556/1688503774196>

It is clear that the HPAI outbreak caused by H5N1 that began in late 2021 has persisted through to 2023. It has shown unprecedented spread through wild birds, poultry, and mammals in North America and internationally. There have been a few human infections that have

occurred in the current outbreak, but none in North America. However, it is important to have continued vigilance to prevent any possible spillover to humans.

The H5N1 strain currently circulating in North America is an environmental health concern since it is very persistent. It is not following typical seasonal trends. It has adapted to infection in mammals, including domestic pets. There is a risk that the virus could become endemic in the Americas which presents challenges for managing continuing risks to poultry and wildlife in Canada.



Migratory flyways. Map by ABC.

HPAI VACCINATIONS MAY BE USED IN EUROPE

In a APHIS press release September 29, 2023, restrictions were announced for the importation of poultry from France. There are also now restrictions on the import of live ducks, duck eggs, and unmitigated/untreated duck products from the APHIS-recognized European Poultry Trade Region (EPTR, excluding Great Britain) as well as Iceland, Switzerland, Liechtenstein, and Norway.

The restrictions were imposed because of the World Organization for Animal Health's definition of poultry and are the result of France's decision to vaccinate commercial meat ducks against HPAI. APHIS considers vaccinations to present a risk of introducing HPAI into the United States.

The United States does not allow the import of poultry from countries that are affected with HPAI or from flocks that have been vaccinated by HPAI. The problem with vaccinations is

that they may mask HPAI virus that can be circulating in the birds. Vaccinated birds may not show signs of HPAI infections, which could lead to the export of infected live animals or virus-contaminated products to the United States.

When the European Poultry Trade Region (EPTR) was established, European countries were not considering vaccinating against HPAI. With the way poultry moves under the EPTR, it was decided that the US cannot be assured trading countries can reliably certify that exports do not originate from European countries that vaccinate poultry for HPAI. APHIS is engaged in ongoing discussions with the European Commission about HPAI vaccination programs in the EU.

TO VACCINATE FOR HPAI OR NOT

Vaccination of poultry for the avian influenza virus (AIV) is a complex topic. There are numerous technical, logistic, and regulatory aspects that need to be considered. HPAI control, the US still uses eradication and stamping out when outbreaks occur. After the spread of H5N1 Highly Pathogenic AIV from Asia it has become enzootic so vaccination has been used on a long-term basis for some countries to control the virus. Other countries have used vaccination as a temporary measure to aid eradication efforts.

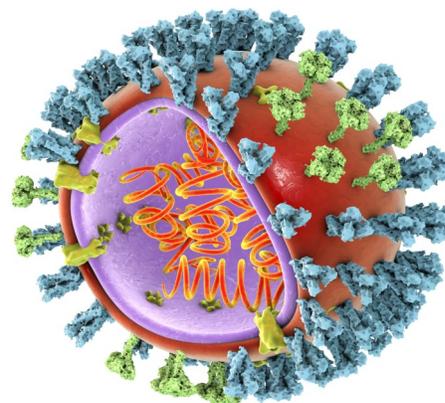
France has a large duck fattening industry. They have had outbreaks of HPAI over the last decade. Domestic ducks play an important role in the spread of H5N1 HPAI viruses. As a result, successful control of H5N1 HPAI in ducks is important in the eradication of the disease in poultry and in preventing infections in humans.

Domestic ducks include different species and breeds and susceptibility to infection, disease, and response to vaccination can vary depending on the species and age of the duck. Although vaccination has proven effective in protecting ducks against HPAI, shedding of the virus still occurs in clinically healthy vaccinated populations. As result, vaccination programs must take into account the susceptibility of ducks to circulating viruses and the particular

production systems and husbandry practices in the country. Vaccination programs must be implemented as part of a comprehensive control strategy that also includes biosecurity, surveillance, education and elimination of infected poultry.

The development of vector vaccines may provide protection against HPAI will preventing virus shedding from vaccinated birds. Such vaccines are currently under development.

Vector vaccines use a portion of the virus inserted into a non-pathogenic virus. This initiates an immune response against that portion of the virus. Such a vaccine does not require the use of an entire vaccine so the threat of virus shedding is eliminated.



KENTUCKY 4-Hers TO COMPETE IN NATIONAL EVENTS

The National 4-H Poultry and Egg Conference holds five 4-H national poultry-related contests. Kentucky has held the state qualifying contests and will be sending representatives to participate.

In the culinary-related events:

⇒ Lance Munday from Montgomery County will be competing in the Turkey BBQ contest. Lance competed in the National Chicken BBQ contest three years ago, placing third overall.

⇒ Andrew Mattingly from Marion County will be competing in the Chicken BBQ contest. This will be his first time attending nationals.

⇒ Anna Sink from Trigg County will be competing in the Egg Chef Challenge Contest. As with Andrew, this is her first time competing nationally.

In the Turkey BBQ contest, each participant receives two lbs. of ground turkey and must hand in two turkey patties (minimum of 1/4 lb. pre-cooked weight and 75% turkey meat) for sensory evaluation.

In the Chicken BBQ contest, each participant receives four chicken thighs and must hand in three for sensory evaluation.

In the Egg Chef Challenge, the participants must demonstrate how to prepare an egg-containing dish while discussing the nutritional and economical benefits of eggs as well as proper egg storage and handling for preventing food-borne illness.

There are two team events. The first is the 4-H poultry judging contest. It has three divisions—Past Production Hens; Market Eggs; and Market Poultry. Kentucky will be sending a four member team. All the members are from LaRue County.

⇒ Isabella Day

⇒ Cash Lee

⇒ Jake Marksbury

⇒ Ella Thomas

The other team event is Avian Bowl. This is a double-elimination knowledge bowl focusing on avian sciences and poultry production. Kentucky's four person team is:

⇒ Jonas Hosay, Warren County

⇒ Christopher Sweets, Warren County

⇒ Emily Normington, Scott County

⇒ Cameron Huggins, Simpson County

The 4-Hers are all working hard to prepare for the national events which be held November 15 in Louisville, KY.

DIETARY DEFINITIONS

A lot of alternative meat products have been hitting the market in the last few years. It has led to the debate on what can be called meat, but that is a topic for a different time. I have been fascinated with the different terminology out there these days.

We have heard of **vegetarianism**, but there are many different kinds of vegetarianism which can muddy the waters. Vegetarianism is the practice of abstaining from the consumption of meat (red meat, poultry, seafood, insects, and the flesh of any other animal). It may also include abstaining from eating all by-products of animal slaughter.

There are also **semi-vegetarianism**. This is sometimes referred to as **flexitarianism**. It could be defined as consumption of a plant-based but sometimes including meat or fish in the diet. **Pollotarianism** is the practice of adhering to a diet that incorporates poultry as the only source of meat in an otherwise vegetarian diet. **Pescatarianism** is the practice of incorporating seafood into an otherwise vegetarian diet. They may or may not consume eggs and/or dairy products.

Lacto-ovo vegetarianism or **ovo-lacto vegetarianism** is a type of vegetarianism which does not allow for the consumption of animal flesh, but does allow for the consumption of animal products like dairy and eggs. It does not include fish or other seafood. As such, **lacto vegetarianism** would allow for the consumption of dairy products and **ovo vegetarianism**, eggs.

Veganism is the practice of abstaining from the use of animal products, especially in the diet. They reject the commodity status of animals. There are different types of veganism. **Dietary vegans** are strict vegetarians. An **ethical vegan** is someone who not only excludes animal products from their diets, but also tries to avoid using animal, animal products, and animal-tested products when practical. **Environmental vegans** avoid animal products because they believe 'industrial' farming of animals is environmental damaging and unsustainable.

A locavore is someone who, regardless of what they eat, is committed to eating food that is grown or produced within their local community or region.

Then there are the dietary fads. A ketogenic diet is a high-fat, adequate-protein, and low carbohydrate diet. Aside



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DIETARY DEFINITIONS *continued*

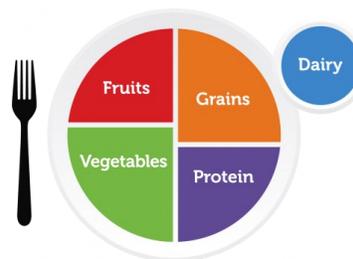
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from weight loss, it is also used in conventional medicine therapy to treat hard-to-control epilepsy in children. The diet forces the body to burn fats rather than carbohydrates.

The **paleolithic diet** (also known as Paleo diet, caveman diet, or stone-age diet) is a modern fad diet consisting of foods thought by its proponents to mirror those eaten by humans during the Paleolithic era.

There are lots of fad diets on the internet. Examples include the South Beach Diet, the Complete Scarsdale Medical Diet, the Grapefruit Diet (also called the Magic Mayo Diet or Mayo Clinic Diet), the 3-day Diet, the Dr.

Atkins Diet Revolution, Dr. Sears' Enter the Zone Diet, etc.



Following the MyPlate put out by the United States Department of Agriculture, is the healthiest way for most Americans. It provides all the nutrients needed in a balanced diet. And, of course, poultry and poultry products make

great menu items when meal planning.

What do you want to read about?

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