

HIGHLIGHTING RESEARCH  
AND OUTREACH EFFORTS AT  
THE UNIVERSITY OF KENTUCKY

AUGUST 2021  
ISSUE #0017

# EQUINE SCIENCE REVIEW

[CA.UKY.EDU/EQUINE](http://CA.UKY.EDU/EQUINE)  
[@UKAGEQUINE](https://www.facebook.com/UKAGEQUINE) ON FACEBOOK/TWITTER

**UK, KHC LAUNCH KY EQUINE SURVEY, 3**  
In conjunction with industry partners, team will conduct a statewide equine survey in 2022.

**PREPARING FOR CATASTROPHIC FLOODING AS HORSE OWNERS, 4**  
Being prepared for inclement weather is critical.

**FALL ARMYWORM IN PASTURES AND HAYFIELDS, 7**  
Significant damage occurring from caterpillars across the state.

**FARM AND FACILITIES EXPO SEPT. 28, 10**  
Event will be from 3:30 - 8 p.m. EDT Tuesday, Sept. 28 at the famed Spendthrift Farm in Lexington.



College of Agriculture,  
Food and Environment

## WRITER, EDITOR AND LAYOUT

**Holly Wiemers, MA, APR** communications and managing director; UK Ag Equine Programs | [holly.wiemers@uky.edu](mailto:holly.wiemers@uky.edu)

## EDITORIAL ADVISORY BOARD

**Emma Adam, DVM, PhD, DACVIM, DACVS**, assistant professor, research and industry liaison, Gluck Center

**Craig Carter, DVM, PhD, Dipl. ACVPM**, director, UK Veterinary Diagnostic Laboratory

**Richard Coffey, PhD**, chair, Animal and Food Sciences

**Bob Coleman, PhD, PAS, Dip. ACAN**, associate professor and equine extension specialist, Animal and Food Sciences

**David Horohov, PhD**, chair, Veterinary Science, director; Gluck Center, Jes E. and Clementine M. Schlaikjer Endowed Chair, Gluck Center

**Laurie Lawrence, PhD**, professor, Animal and Food Sciences

**Krista Lea, MS**, coordinator, UK Horse Pasture Evaluation Program, Plant and Soil Sciences

**James N. MacLeod, VMD, PhD**, director, UK Ag Equine Programs and John S. and Elizabeth A. Knight chair, Gluck Center

**Martin Nielsen, DVM, PhD, Dipl. ACVIM**, Schlaikjer professor of Equine Infectious Disease, associate professor, Gluck Center

**Mick Peterson, PhD**, professor, Biosystems and Agricultural Engineering

**Laura Skillman**, director, Agricultural Communications Services

**Ray Smith, PhD**, extension professor, Plant and Soil Sciences

**Jill Stowe, PhD**, associate professor, Agricultural Economics

## DESIGN

**Jordan Smith**, marketing manager, UK College of Agriculture, Food and Environment

*Equine Science Review is a monthly College of Agriculture, Food and Environment newsletter that highlights important equine work happening at the University of Kentucky.*



*Photo courtesy Dr. Jimmy Henning.*

# UK, KHC LAUNCH 2022 KENTUCKY EQUINE SURVEY

The University of Kentucky College of Agriculture, Food and Environment and the Kentucky Horse Council (KHC), in conjunction with the Kentucky Thoroughbred Association and other industry partners, will conduct a statewide equine survey in 2022.

The Aug. 20 announcement by the Kentucky Agricultural Development Board provided a key piece of needed funding to help make the survey's execution possible. The survey has also received support from the UK Gluck Equine Research Center and the Kentucky Farm Bureau. Additional industry support is needed for the work, which will be coordinated by Jill Stowe, PhD, a professor within UK's Department of Agricultural Economics and equine industry economist, and implemented by the U.S. Department of Agriculture National Agricultural Statistics Service.

It's been a decade since UK Ag Equine Programs and KHC successfully partnered on a statewide equine survey, a critically needed study that helped provide a more accurate assessment of the number of horses (242,400) in Kentucky and their economic impact (\$3 billion), two fundamental pieces of information that had been unavailable to those who needed it. Prior to the 2012 study, the last time a comprehensive look had been taken at Kentucky's equine industry was in 1977, and an industry-wide economic impact study had never been conducted.

Fast forward 10 years from the 2012 Kentucky Equine Survey, and a lot has changed in the state and within its signature industry. A follow-up study is needed to provide an accurate snapshot of the state's equine industry and to identify changes that are happening over time.

"Data obtained from this study are important for the sustained strength and continued growth of Kentucky's equine industry," Stowe said. "Decision-makers



IMAGE COURTESY HANNAH WAROWAY.

such as entrepreneurs and business owners, equine health providers and policy makers can utilize this data to make sound, well-informed decisions on important issues facing the industry."

"Sincerest thanks go out to the KHC, KADB, KTA, Kentucky Farm Bureau and others for their support," said Nancy Cox, PhD, vice president for land-grant engagement and dean of the College of Agriculture, Food and Environment. "Without this support, there can be no accurate count of the animals that underpin a huge part of Kentucky's agricultural economy."

In addition to providing information about the number of horses in each county in Kentucky, their uses and the economic activity they generate, the study will also help provide critical data for disease surveillance, inform workforce development efforts and help identify emerging markets on which businesses can capitalize.

"As the KHC is a non-breed, non-discipline specific organization focused on the protection and development of the Kentucky equine community, the information gleaned from this survey will be invaluable," said Sarah Coleman, KHC executive director. "We're excited to learn more about the horses residing in the common-

wealth and how we can better assist them and their owners."

"Accurate and current data is the essential foundation that enables informed decisions and policies," said James MacLeod, VMD, PhD, professor of veterinary science and director of UK Ag Equine Programs. "Accurate medical surveillance, agricultural policies, economic planning and governmental programs will all be empowered by this very important study."

Click [here](#) to participate in the 2022 Kentucky Equine Survey. Questions can be directed to [equine@uky.edu](mailto:equine@uky.edu). Information about the 2012 Kentucky Equine Survey can be found [here](#). The 2022 Kentucky Equine Survey is supported by the Kentucky Department of Agriculture, the Office of the Kentucky State Veterinarian and Rep. Matt Koch. Interested in financially supporting this effort? Email Danielle Jostes, equine philanthropy director, at [danielle.jostes@uky.edu](mailto:danielle.jostes@uky.edu) or call 859-218-1176.

| *Holly Wiemers, MA, APR, is communications and managing director of UK Ag Equine Programs.*



# PREPARING FOR CATASTROPHIC FLOODING AS HORSE OWNERS

Seventeen inches of rain in 24 hours were recorded in McEwen, a small town in West-Central Tennessee over the weekend of Aug. 21. And no, 17 is not a typo.

While not yet official, this would break the all-time 24-hour rainfall record in Tennessee by more than [three inches](#). McEwen was one of many locations across this area that saw 8+ inches of rain

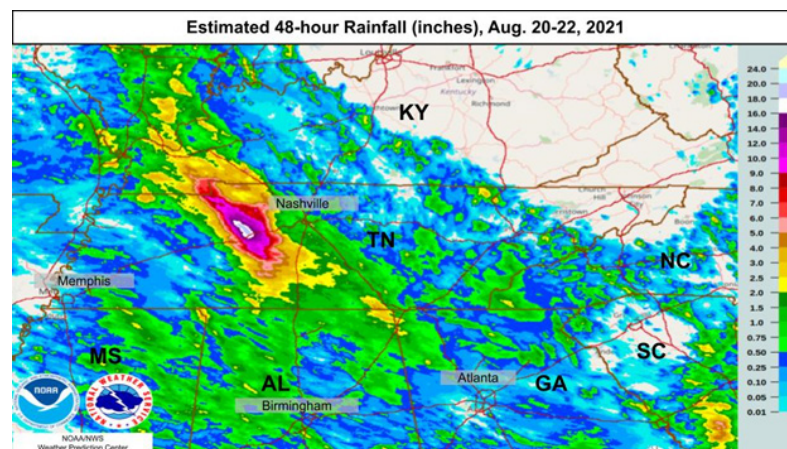
after some locations recorded [3-4+ inches of rainfall](#).

Kentucky also experienced historic flooding at the end of February when excessive rain fell across a stalled frontal boundary, leading to accumulations of 4-6+ inches across portions of South Central and Eastern Kentucky. Soils were already saturated from melting snow/ice and vegetation

your neighborhood.

The best thing to do is prepare. I've talked about flood safety in [previous columns](#), but being prepared for inclement weather, especially on a farm, is critical. There isn't much we can do about row crops, but safe passage through severe weather for families, animals and buildings takes planning. Think about all the scenarios that could happen and prepare for each, making a plan for both family and farm.

I've put together a list of recommendations and questions to consider when thinking about emergency preparedness in relation to flooding, but many apply to other disasters.



(map below).

As you can imagine, this resulted in catastrophic flooding across this region causing 21 deaths with many others still [missing](#). Property damage has also been immense, with homes lost and vehicles totaled. As the [Tennessee Crop Progress and Condition Report](#) summarizes, flooding left row crops and hay fields under water, tore down fences and damaged other infrastructure.

Like Tennessee, Kentucky has experienced its own share of catastrophic flooding this year and in the past. A few weeks ago, Governor Beshear issued a state of emergency following severe flooding across Nicholas County. While not as bad as the flooding in Tennessee, impacts included one death and severe property damage

was dormant, leading to excessive runoff into streams and rivers. Some rivers broke all-time record crests. Below is one image showing the town of Beattyville under water.

All of these examples demonstrate one thing: We need to be prepared.

I always remind students in my meteorology class that they have probably seen multiple tornado warnings in their lifetimes but have never seen an actual tornado. You still need to take shelter. You can't predict when the warning might turn into a tornado passing over your house. The same goes for flooding. You never know when a disaster like the flooding events in McEwen, Tennessee; Nicholas County, Kentucky; or Eastern Kentucky could occur in

1. **EXAMINE THE LANDSCAPE AND DETERMINE SAFE AREAS DURING A FLOOD EVENT (HIGHER ELEVATIONS) AND POTENTIAL EVACUATION STRATEGIES.** Be sure to prevent livestock from accessing flood-prone areas. Take into account the possibility of washed-out roads. Do you have a means for transporting animals? What if you have downed fence line, which happened in Tennessee? Will you have people (family, neighbors, employees,) you can count on to help?
2. **IDENTIFY HOW YOU WILL RECEIVE WARNING INFORMATION.** This could include television, weather apps, radio or local outdoor warning systems. How will you get news if there is a loss of electricity? I recommend everyone have a [NOAA Weather Radio](#). NOAA weather radios alert you to any warnings or watches

across the area from your local National Weather Service office. They can be picked up for as little as \$20-30 and can save your life. These devices also run on batteries. Of all the suggestions mentioned, I would make this one of the top priorities. Another thing you will need to consider is how will you send a warning in the case of communication failure. Do you have two-way radios available?

3. **MAKE AN EMERGENCY CONTACT LIST.** This may include neighbors, utility companies, local Cooperative Extension, veterinarians and emergency medical contacts. These contacts may be obvious to you, but what if you're not there? Consider creating a wallet-sized card (the size of a business card) with the farm's emergency contact information and distribute it to everyone on the farm.

4. **KEEP AN UP-TO-DATE LIST OF ON-FARM INVENTORY.** This can include farm machinery, livestock, acreage, electrical shutoff points and hazardous materials. Be sure that all animals can be clearly identified as your own.

5. **YOU MAY ALREADY HAVE A DISASTER SUPPLY KIT FOR YOU HOME, BUT WHAT ABOUT THE FARM?** It's always good to have some extra supplies on-hand for the unknown. I suggest planning for a week at a minimum, longer for drought scenarios. Your disaster kit might include alternative power supplies, extra fuel, dry bedding, additional feed for livestock, fence supplies and alternative sources of clean water. Also, fire extinguishers are a must for every building.



6. **REVIEW YOUR EMERGENCY PLAN PERIODICALLY.** Things change and it's best to account for all those changes before the next disaster. Replenish supplies, update contact information and learn from the past.

In the end, my advice is plan and prepare so you stay safe. While we've had our fair share of localized flooding disasters over the past several years, we can't rule out even worse flooding in the years to come. Tennessee's disastrous flooding is an eye-opener.

To drive home the danger of flooding, I want to take you back to 1937, arguably the worst flood in recorded history for the state of Kentucky. The National Weather Service in Louisville has a great [writeup on the event](#), with eye-popping statistics. Overall, Louisville saw 15 inches of rain in 12 days (which shows how severe the Tennessee flood was) during the middle of January. Seventy percent of the city was underwater, and the flooding caused an estimated \$3.3 billion in damage in today's dollars. The flood crested 30 feet higher than flood stage. Below, I've included a picture that has stuck with me through my meteorological career. This poor horse got swept up in flood waters



and eventually became entangled in a tree, where it died. Using the men as reference, it would roughly be 18 feet to the hind legs of the horse and 24 feet to the head. Fortunately, we do have much better infrastructure and flood control than what they did in 1937, but this picture tells an important story about the danger of flooding.

| *Matt Dixon is the senior meteorologist in the UK Agricultural Weather Center, which is part of the Department of Biosystems and Agricultural Engineering.*



# RACECOURSE MANAGER CERTIFICATION PROGRAM LAUNCHES; “GRADER SCHOOL” SEPT. 13-15 AT KEENELAND RACECOURSE

The newly launched Racecourse Manager Certification Program: Grader School is focused on educating the next generation of racecourse managers.

The Racecourse Manager Certification Program: Grader School, which will be held Sept. 13-15 at Keeneland Race Course, offers early career professionals the opportunity to develop highly focused, hands-on expertise that will allow them to adapt and excel to the changing demands of horse racing surfaces in Kentucky as well as around the world.

The most common surfaces used for Thoroughbred racing are dirt and synthetic surfaces. One of the highest priorities and the most difficult part of maintaining a racecourse is the accurate grading of dirt and synthetic racing surfaces. The second session of the continuing education program for equine professionals is the Grader School, which offers combined theory and practice sessions on the grading of racing surfaces. This program is a combined effort of the National Thoroughbred Racing Association (NTRA) Safety and Integrity Alliance, the University of Kentucky College of Agriculture, Food and Environment and the Racing Surfaces Testing Laboratory.

The Grader School will consist of online lectures and examinations in preparation for a two-day intensive workshop at Keeneland. Taught by superintendents of two of the leading racecourses in the United States, Alfredo Laureano and Dennis Moore, the class will include the operation of both a state-of-the-art and an older model grader. Practice sessions will include measuring grades on turns and straights and the proper operation of a grader on dirt and synthetic surfaces.



IMAGE COURTESY DR. MICK PETERSON.

The initial class is limited to six students. Both the hands-on workshop and online training will be expanded as demand increases. The Sept. 13-15 session requires completion of an application form and a letter of recommendation from an experienced racecourse manager. Priority will be given to younger full-time track maintenance personnel who demonstrate an interest in a career in racetrack maintenance. Applications may be obtained by emailing a request to [info@racingsurfaces.org](mailto:info@racingsurfaces.org).

Information about the overall program, including the turf program, is available [here](#). The recorded courses can be watched for free on the UK Ag Equine Programs YouTube channel. The University of Kentucky will be administering the certification program. The Racecourse Manager Certification Program is sponsored by John Deere, Duralock, Horsemen's Track and Equipment, Inc. and Equinox Racing.

If you are interested in this or future programs, please sign up to receive email updates [here](#).

## ABOUT THE NTRA

The NTRA, based in Lexington, Ky., is a broad-based coalition of more than 100 horse racing interests and thousands of individual stakeholders consisting of horseplayers, racetrack operators, owners, breeders, trainers and affiliated horse racing associations, charged with increasing the popularity, welfare and integrity of Thoroughbred racing through consensus-based leadership, legislative advocacy, safety and integrity initiatives, fan engagement and corporate partner development. The NTRA owns and manages the NTRA Safety & Integrity Alliance; NTRA.com; the Eclipse Awards; the National Horseplayers Championship (NHC); NTRA Advantage, a corporate partner sales and sponsorship program; and Horse PAC®, a federal political action committee. NTRA press releases appear on NTRA.com and social media.

| *Source: edited news release.*

# FALL ARMYWORM IN PASTURES AND HAYFIELDS

We have had numerous reports of fall armyworm egg masses in pastures and hayfields in Kentucky in mid-August and now significant damage is occurring from the caterpillars across the state.

Therefore, keep a close watch on your pastures and hayfields for these armyworms over the next few weeks. If you have two to three caterpillars per square foot or more, then you should consider spraying. In other words, these numbers will likely mean you will have considerable damage to late summer/fall growth in your pastures and hayfields.

One of the most effective insecticides is Besiege from Syngenta. This insecticide has dual modes of action and is systemic, resulting in a higher chemical cost per acre (\$25 per acre). A considerably less expensive option (\$5 per acre) that can be effective on smaller armyworms (less than ¾ inches) is Warrior II from Syngenta. Both insecticides have a 0-day grazing restriction and a 7-day harvest restriction for hay. Below is the full list from [UK publication ENT-17](#).

Fall armyworms are easiest to kill when small and pyrethroid (pyrethrin) insecticides like Warrior (or generic versions of this product) are effective at this stage and considerably less expensive. An alternative to insecticide



Blake Layton MSU-ES

application for hay crops near harvest stage, is to mow the crop IMMEDIATELY. Unfortunately, waiting two to three days for good curing conditions is not an option since armyworm defoliation is so rapid. Once cut, the conditions in the mowed forage become less conducive for the armyworm. Please see recent articles in the [Kentucky Pest News](#) from our Kentucky entomologists in Lexington and Princeton for more information on fall armyworm:

| *Ric Bessin, PhD, Ray Smith, PhD, Chris Teutsch, PhD, and Jimmy Henning, PhD, all forage extension specialists within University of Kentucky's Department of Plant and Soil Sciences provided this information.*

[Scouting and control](#)

[Trap counts, egg masses and potential for persistence](#)

Insecticides	MOA Group	Harvest or Graze – days Interval/ REI*
Carbaryl - Sevin XLR, Sevin 4F, etc.	1A	May temporarily bleach tender foliage. 7 / (12 hrs) Armyworms
Malathion – Malathion SEC, Cythion SEC	1B	For grasshoppers, 0 / (12 hrs)
<i>b</i> -Cyfluthrin - <b>Baythroid XL</b>	3A	7 / (12 hrs)
<i>Pyrethrins</i> - <i>PyGanic</i>	3A	0 / (12 hrs)
Bt products - Agree WG, Biobit HP, Dipel DF, Javelin	11	For armyworms, 0/ (4 hrs)



# HOW SOIL FERTILITY AND HISTORY COMBINED TO MAKE KENTUCKY'S INNER BLUEGRASS REGION THE "HORSE CAPITAL OF THE WORLD"

Recently I was asked by a reporter to comment on the often-told story about why horses are so prominent in Kentucky's Bluegrass Region.

The story goes something like this. The high phosphorus and calcium in our soils result in grasses and other forages high in these nutrients, and as a result horses pastured here have stronger bones than horses from other regions.

Like most stories, this one has some truth to it, but the real contribution of our soils to the horse industry is probably a little more complicated. A unique mixture of geology, human history and soil fertility combined to establish the Bluegrass Region as the world's horse capital. There's no doubt that calcium and phosphorus are important components of a balanced equine diet and the central Bluegrass Region has soils naturally high in both.

The Bluegrass Region in general, and the Inner Bluegrass in particular, consists of deep, residual soils formed from phosphatic limestone. Examination of soil test results generated by the University of Kentucky Soil Testing Lab (UKSTL) demonstrate the difference between Bluegrass soils and other regions of Kentucky.

From 1990 to 2010, 66% of the samples submitted to the UKSTL from the Bluegrass Region tested high (greater than 60 lb/acre) for phosphorus compared to 42% from all other Kentucky regions

combined. Conversely, only about 12% of Bluegrass samples tested low or very low (less than 28 lb/acre) for P, while 25% of samples from other regions fell in these categories. These figures are even more surprising when we consider



IMAGE COURTESY UK COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT.

that most of these samples likely came from soils that had been managed and fertilized for decades if not centuries. Regardless, the high soil calcium and phosphorus in the Bluegrass probably didn't directly lead to better horse bones and the rise of the Kentucky horse industry.

The Bluegrass Region of Kentucky was uniquely located on the path of European settlers' western expansion. The post-Revolutionary war era in the U.S. was a period of rapid population growth and industrialization largely supported and powered by animals. White farmers (some subsistence but many participating in global markets) were moving to Kentucky in significant numbers in the late 18th Century, but this increased

significantly in the first half of the 19th Century.

This movement was due in part to soil exhaustion in the "Old South" states of Virginia and the Carolinas (chiefly, slave-raised cash crops like tobacco and cotton). Colonial farmers from Virginia and the Carolinas came from a tradition of horse production. Therefore, an increasing demand for horses to support the agricultural and industrial activity of the U.S. coincided with the settlement of Kentucky by "horse people." However, that's only part of the story. There were other regions west of the Appalachians being

settled at the same time and we have to ask why one of those regions didn't become the "Horse Capital of the World?"

Plants take up calcium passively, so feed grown on high calcium soil will likely have higher Ca content than feed grown on lower calcium soils. However, I would suspect that many soils across the U.S. in the 18th and 19th Centuries produced feed with adequate Ca nutrition. The phosphorus in the Bluegrass Region was likely more important, but not because of its nutritional value for the horses. Instead, the Bluegrass soils with their high phosphorus content likely supported higher forage yields than soils in the surrounding regions, which had lower soil phosphorus contents.

At the time Kentucky was settled, soil organic matter built in



the soil over eons, legume crops and manures provided nitrogen to crops across the settled areas of North America. Similarly, native soil minerals in many regions had sufficient potassium to support adequate crop production. However, most soils across North America are limited in their natural ability to support crop phosphorus requirements. The naturally high phosphorus content of the Bluegrass Region soils, resulting from the geology that produced these soils, is unique. Crop and forage yields in 18th and early 19th Century America (and globally) were largely limited by soil phosphorus availability. It wasn't until the mid-19th Century that soil chemists in Germany began to understand and promote the concept of essential elements required for crop growth and the necessity of fertilizing with phosphorus (along with the other essential mineral nutrients elements like nitrogen and potassium).

Simply put, at a time when we did not understand fertilizing crops with phosphorus, the Kentuckians landed in a spot that was unique in that it did not require phosphorus fertilizer and their arrival coincided with the advent of the industrial revolution and its complimentary high demand for horses. The Central Bluegrass probably represented the largest region with high soil phosphorus that was well suited to horse production, and was easily connected to population, industrial and agricultural centers of the U.S. Generally it's a story at the intersection of history, soil fertility and economics, not just an animal nutrition story.

This is just my theory, but it's an interesting question that would be fascinating to see explored jointly by historians and soil scientists.

| *Joshua M. McGrath, PhD, associate professor and extension specialist, University of Kentucky Department of Plant and Soil Sciences, provided this information.*

## EQUINE INNOVATORS PODCAST: THE HORSE PATHOLOGIST'S PERSPECTIVE



In this month's podcast, Learn from Jennifer Janes, DVM, PhD, associate professor of veterinary anatomic pathology in the Department of Veterinary Science, part of the University of Kentucky's CSI team for horse diseases, conditions and poisonings.

[This podcast](#) is the 10th episode in our "Equine Innovators" podcast series, brought to you by Zoetis. You can find "Equine Innovators" on TheHorse.com, Apple Podcasts, Spotify, Stitcher, and Google Podcast.

### About the researcher:

Jennifer Janes, DVM, PhD, graduated from Vanderbilt University in 2002 with a Bachelor of Music degree focused on piano before heading to the University of Tennessee College of Veterinary Medicine. After graduation, she completed a one-year rotating internship at Wisconsin Equine Clinic and Hospital. Developing interests in equine musculoskeletal disease lead her to the University of Kentucky, where she completed a dual anatomic pathology residency and



PhD program in the Department of Veterinary Science, finishing in 2014. Since 2015 Jennifer has been on faculty there at the Veterinary Diagnostic Laboratory (UKVDL) and is currently associate professor of veterinary anatomic pathology in the Department of Veterinary Science.

# UK EQUINE FARM & FACILITIES EXPO SEPT. 28

University of Kentucky Co-operative Extension Service and Ag Equine Programs will host the annual Farm and Facilities Expo from 3:30 - 8 p.m. EDT Tuesday, Sept. 28, at the famed Spendthrift Farm, 247 Swigert Ave., Lexington. The event is free and open to the public. A meal will be provided for those in attendance.

Farm managers and horse owners will have the opportunity to explore visitor booths and see displays for every aspect of horse farm management. Speakers will provide educational talks about farm layout and planning, establishing new pasture and spray options for farms of all sizes. Additionally, Spendthrift Farm personnel will talk about engaging non-horsemen in the racing industry.

“We have held this annual field day for the last 12 years and this year’s event promises to be one of the best. Not only will you be able to tour a premier horse farm, but you will see the results of excellent pasture management,” said Ray Smith, PhD, forage extension specialist with UK’s College of Agriculture, Food and Environment.



IMAGE COURTESY UK COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT.

“A priority for the field day will be to show each participant how they can implement the practices at Spendthrift on their own operation, whether large or small.”

“In 2019, Spendthrift made the decision to completely re-establish some areas in cool season pasture. This is the best way to have a good pasture, and despite some heavy drought, this farm had great success with it,” said Krista Lea, MS, research analyst and coordinator of the UK Horse Pasture Evaluation

Program.

Please RSVP for food planning purposes. Please email [equine@uky.edu](mailto:equine@uky.edu) to register. All current COVID protocols will be followed. Please note the 247 Swigert Avenue entrance, not any of the Spendthrift entrances off Iron Works Pike. Those gates will be locked.

| *Holly Wiemers, MA, APR, is the communications and managing director for UK Ag Equine Programs.*

## RACECOURSE MANAGER CERTIFICATION COURSE RESOURCES

[“Turfgrass as an Equine Surface” Course](#)

[Racecourse Manager Certification Program](#)

[“Turfgrass as an Equine Surface” Course](#)

[Free access to videos and presentations](#)

[Sign up for RMCP news](#)

Follow the Equine Sports Turfgrass Alliance: [@equineturfgrass](#)



# THE JOCKEY CLUB MEDALS AWARDED TO UK DEAN, FORMER NATIONAL BASEBALL PRESIDENT

Nancy Cox, University of Kentucky vice president for land-grant engagement and dean of the College of Agriculture, Food and Environment, and Len Coleman, former president of the National League of Professional Baseball Clubs are recipients of The Jockey Club Medal.

Through the years, the stewards of The Jockey Club have bestowed the medal upon a select group of individuals in recognition of exceptional contributions to the Thoroughbred breeding and racing industry. The medal is not given every year. The club only bestows it when they think there are people who have done an extraordinary service to the industry.

Cox and Coleman received the medals for their exceptional work in co-chairing the nominating committee of the Horseracing Integrity and Safety Authority.

“The Horseracing Integrity and Safety Authority was a road none of us had traveled before. For our industry, this was an important moment. As the co-chairs of the committee, Nancy and Len performed an incredible service for our industry,” said Stuart S. Janney III, The Jockey Club chairman. “They got through the whole process, dodging any number of sharks swimming in the water waiting to pounce, depending on the nominations. The outcome and reception has been great.”

Congress established the

Authority in 2020 as an independent, non-governmental regulatory body, run by an independent board, responsible for standardizing regulations and safety rules nationwide. The nominating committee led by Cox and Coleman completed their work in May with the selection of the Authority’s board of directors.

“It is distinct honor to receive this award,” Cox said. “The whole

“Horse racing has been a passion of mine since I was 18,” he said. “The public perception of the integrity of the sport is crucial to the sport’s well-being. HISA is a huge step forward in instilling public confidence.”

The Jockey Club awarded the medals earlier this month during its 69th annual Round Table Conference on Matters Pertaining to Racing.

Through the years, the Stewards of The Jockey Club have bestowed The Jockey Club Medal upon a select group of individuals in recognition of exceptional contributions to the Thoroughbred breeding and racing industry. The medal was presented annually from 1984 through 1994 and periodically since then. The list of honorees includes:



NANCY COX AND STUART S. JANNEY, III, CHAIRMAN OF THE JOCKEY CLUB, AUG. 14, AT THE JOCKEY CLUB CHAIRMAN’S DINNER AT THE NATIONAL MUSEUM OF RACING AND HALL OF FAME. PHOTO CREDIT: THE JOCKEY CLUB/GREGORY FISHER.

process of working on the nominating committee with Len and the other members was a pleasure. It was a lot of hard work. We reviewed over 160 nominations and came out with a very diverse and effective group. That group of individuals on the board and sub-committee have a passion and will carry through with great success, I’m sure. I would also say that The Jockey Club deserves a huge thanks for the years of striving for what led to the Horseracing Integrity and Safety Act.”

Coleman, who is now a member of the Authority’s board, said he appreciates the award.

- 1984 Daniel G. Van Clief Jr.
- 1985 Jean Romanet
- 1986 Richard L. Duchossois
- 1987 Jack Van Berg
- 1988 Dennis Swanson
- 1989 Joe Hirsch
- 1990 Dr. Charles Randall
- 1991 Dr. Manuel A. Gilman
- 1992 R. Richards Rolapp
- 1993 Kenneth Noe Jr.
- 1994 Dr. Larry Bramlage
- 1998 Alan Marzelli & Nick Nicholson
- 2003 Hans J. Stahl
- 2007 Louis Romanet
- 2014 Tom Durkin
- 2015 Ogden Mills Phipps
- 2016 Pierre “PEB” Bellocc

| Source: *edited news release.*

# PASTURE RENOVATION IMPROVES FORAGE QUALITY FOR SCHOOL'S HORSES



PHOTO BY KATIE PRATT, UK AGRICULTURAL COMMUNICATIONS.

Horses at a Central Kentucky career and technical high school have lush paddocks to graze on this school year thanks to help from the University of Kentucky College of Agriculture, Food and Environment.

Locust Trace AgriScience Center is a school in Lexington that introduces high school students in Fayette and Woodford counties to many agriculture disciplines. Equine science is one of the more popular areas. During the school year, horses on loan to the school graze the four on-campus paddocks when they are not interacting with students. But with more horses than paddocks, the fields were overgrazed, and it was time to improve them.

“Last year, I served as the farm manager, and I knew these paddocks were pretty thin on forages for our horses,” said Nicki Jones, Locust Trace co-op facilitator. “With no students being on campus, we saw it as the prime

opportunity to call on the people at UK to walk us through a renovation.”

The school contacted Krista Lea, MS, UK horse pasture evaluation program coordinator, and Jimmy Henning, PhD, UK forage extension specialist. They advised the school personnel to kill out the existing vegetation and guided them through reseeding the pastures and managing them for the future.

Lea suggested they reseed the paddocks in a tall fescue that could handle the high grazing pressure. Through a donation from Pennington Seed, they secured Lacefield Max Q II, a tall fescue variety developed at UK that contains a novel endophyte. The novel endophyte allows animals to graze the grass without having adverse health effects. Gabriel Roberts, UK field technician, helped the school sow the grass seed.

“I like the fact that I can look out and I can see that the horses

we have are on good grass,” said Fallon Jackson, Locust Trace equine sciences instructor. “They are getting what they need, and I don’t have to worry about body condition scores going down because the forage that they are eating is not good enough.”

Lea continues to advise the school on ways to use pasture rotation to give the pastures ample time for recovery and regrowth.

“Each pasture will have a fair number of horses on it with pretty high grazing pressure for a couple of weeks. Then the horses will be rotated off for two to four weeks, and hopefully that will give the pastures plenty of time to regrow,” Lea said. “Even though they are going to have high grazing pressure, by using good management, a dry lot and even feeding some hay in stalls, they should be able to maintain it reasonably well. “

The new grass also will provide teaching opportunities on the importance of quality forages to equine health.

“I think it will be a good opportunity to teach the students about the importance of rotation and not overgrazing and that what you do in the wintertime is going to affect what happens in the spring,” Jones said.

| *Katie Pratt is an agricultural communications specialist with University of Kentucky's College of Agriculture, Food and Environment.*



## AMERICAN HORSE PUBLICATIONS EQUINE INDUSTRY SURVEY DEMONSTRATES STABILITY BASED ON NUMBER OF HORSES OWNED/MANAGED

# COMING ON HEELS OF COVID-19 PANDEMIC, SURVEY CAN SERVE AS IMPORTANT BENCHMARK ON HEALTH OF INDUSTRY NOW AND IN FUTURE.

Despite the challenges posed by the COVID-19 pandemic, the equine industry is stable based on the number of horses owned/managed, according to the results of a survey by American Horse Publications (AHP) sponsored by Zoetis. The survey, which includes responses from 7,267 horse owners/managers, found that the top three issues facing the industry are land use issues, horses in transition or at risk and the increased cost of horsekeeping. And, while vaccination rates are stable, survey respondents indicated they are following updated deworming recommendations and adjusting their frequency if needed.

“The results from the 2021 AHP Equine Industry Survey reveal overall stability in the U.S. equine industry in spite of unique challenges posed by COVID-19,” said Jill Stowe, Ph.D., professor of agricultural economics at the University of Kentucky, who analyzed the data and consulted on the results. “Based on respondents’ input on management and issues facing the industry, our leaders have helpful information to guide strategic planning and decision-making for the long-term benefit of the industry.”

The survey, which was conducted from January 18 through April 9, 2021, has three primary objectives: to gauge participation trends and management practices in the U.S. equine industry, to

identify critical issues facing the equine industry as perceived by those who own or manage horses and to better understand approaches to horse health care. AHP conducted similar surveys in 2009-2010, 2012, 2015 and 2018.

### STABILITY THROUGH THE PANDEMIC

The average respondent owns/manages about six horses. 75.2% of respondents indicate that the number of horses they currently own/manage is the same as in 2020, and 10.4% own/manage more horses than they did in 2020. When asked about future expectations of ownership, 73% expect to own/manage the same number of horses in 2022, 17.3% expect to own/manage more horses and 9.7% expect to own/manage fewer horses. Comparing this to the 2018 survey, we see an increase in expected stability regarding the number of horses owned/managed.

### HORSE OWNERSHIP

Growth in the number of horses owned/managed is more prevalent among respondents in the youngest age group as compared to the oldest group. Similar to previous studies, the frequency of owning/managing more horses in the survey year (2021) than in the previous year (2020) is decreasing with age; 21.8% of respondents in the 18-24 age category report owning/managing more horses in 2021 than in 2020, while only 5.4% of respondents in the 65+ age category

report owning/managing more horses. This pattern is also consistent with expectations on horse ownership/management one year in the future: 31.1% of respondents in the 18-24 age category expect to own/manage more horses in 2022 than they do this year, while only 10.2% of respondents in the 65+ age category report the same expectation.

### EVENT PARTICIPATION

Survey participants indicate that they expect to compete in an average of 4.3 events in 2021, which is less than the 5 competitions reported in the 2018 study. More than 45% of the respondents do not plan on competing at all in 2021, up from 38.7% in 2018.

### Horsekeeping Costs

Feed (including both hay and concentrates) continues to be the most frequently identified area in which horsekeeping costs have increased. This is followed by costs of veterinary services (41%) and animal health products (39%), which are stable from the 2018 study.

However, the cost of barn supplies has significantly increased since 2018, from 12.2% to 22%. Frequently mentioned sources of increased costs in the “other” category were fencing, building materials and insurance. In addition, 22.2% of respondents identified fuel/transportation as a primary source of increased horsekeeping

costs. It is important to note that if this survey had been conducted later in 2021, when there was a sharp increase in gas and lumber prices, this percentage may have been higher. The rise in horsekeeping costs could force businesses to raise prices even if they don't want to.

Looking at how to accommodate for horsekeeping costs, most respondents reported they will reduce expenditures in other areas of their lives (60%), attend fewer competitions (22.2%) and pursue other income opportunities (21.3%).

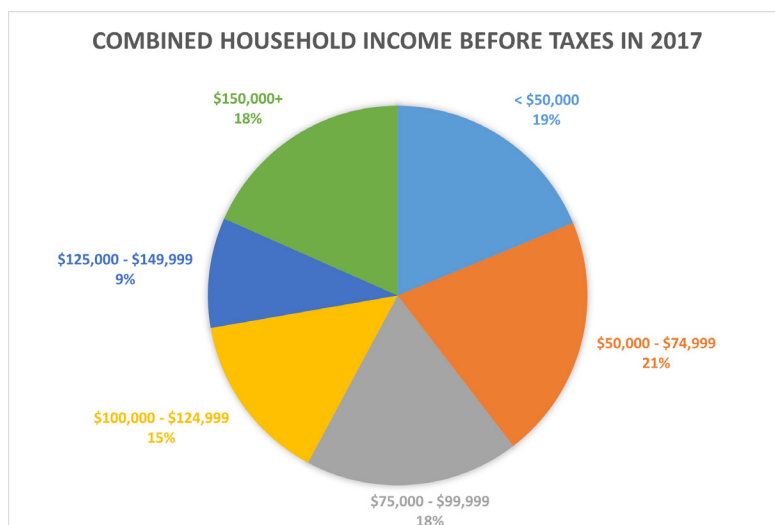
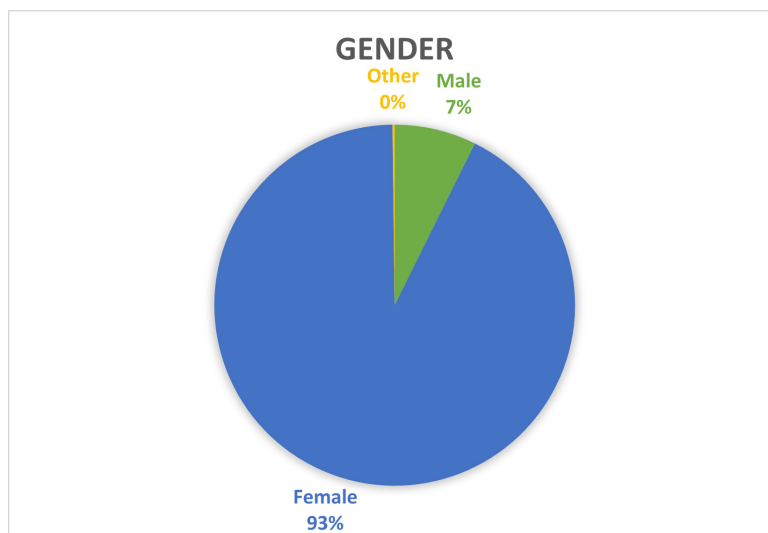
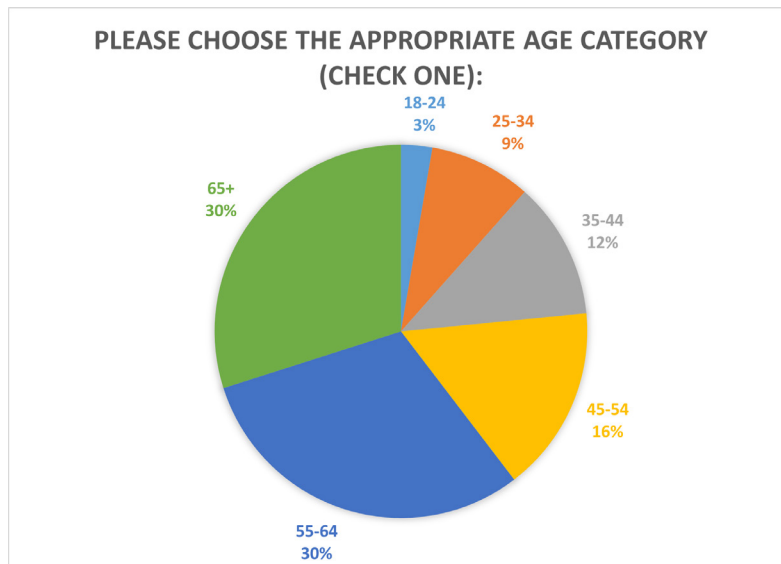
### ISSUES FACING THE EQUINE INDUSTRY

The most frequently selected issue facing the equine industry was land use issues (43.5%), followed closely by horses in transition or at risk (43.1%), and cost of horsekeeping (42.8%). Frequently mentioned issues in the "other" category include animal rights activists, competition costs, liability and over-regulation.

Although there are overarching issues that span the entire equine industry, there are certain issues of heightened concern in particular areas of the country. For example, zip code regions 4 (Indiana, Kentucky, Michigan and Ohio) and 7 (Arkansas, Louisiana, Oklahoma and Texas) had the highest percentage of respondents selecting illegal medication of performance horses and ineffective welfare laws. Respondents in zip code region 3, which includes Alabama, Florida, Georgia, Mississippi and Tennessee, were most likely to select the practice of soring as a key issue.

### HORSE HEALTH CARE

Veterinarians administer vaccines for 65.4% of respondents' horses, continuing a gradual upward trend from previous surveys (58.2% in 2012, 61.4% in 2015 and 63% in 2018). The percent of respondents who administer the vaccines themselves continues to



GRAPHICS COURTESY AMERICAN HORSE PUBLICATIONS.



decrease, standing at 28.5% compared to 29.7% in 2018, 31.5% in 2015 and 34.7% in 2012.

Of vaccination-related issues discussed with the veterinarian, the most common is what the horse is being vaccinated for (63.7%), followed by American Association of Equine Practitioners (AAEP) vaccination recommendations (40.6%). Since the 2018 survey, horse owners and veterinarian conversations surrounding vaccination protocols have decreased.

More than 72% of respondents indicate that their veterinarian is the leading influence for where they purchase their equine vaccines, with price being the second leading influence (13.3%).

### DEWORMING

Respondents indicate that they are adhering to new deworming recommendations. The percentage of horse owners who are deworming one to three times a year has increased, while the percentage of those who are deworming up to six times a year has decreased.

More than half of respondents (54.4%) indicate their veterinarian is involved in developing their horses' deworming schedules—the first time this figure has eclipsed the 50% mark. Survey results indicate that just under 60% of respondents report their veterinarians recommend a fecal egg count test, declining from nearly 78% in 2018.

Respondents indicate that they purchase dewormers from chain stores, local feed stores and online. Veterinarians are reported to have the most influence on dewormer purchasing decisions and their role has become more prominent than indicated in previous studies.

### TIMING OF SURVEYS CAN BE MEANINGFUL

The 2021 AHP Equine Industry Survey continues to build upon the first four surveys (2009-2010, 2012, 2015 and 2018) to help understand dynamics within the

equine industry. The initial survey was conducted as recovery from the Great Recession in '08 and '09 was underway, and the following two surveys were able to track recovery in the equine industry.

“The timing of the 2021 survey is fortuitous because it comes on the heels of a worldwide economic slowdown due to the global COVID-19 pandemic—a health event not seen in more than a century,” said Stowe. “Accordingly, it can serve as an important benchmark in the health of the equine industry now and in the future.”

### ABOUT THE SURVEY

The 2021 survey was limited to those who currently own or manage at least one horse, are 18 years of age or older and live in the United States. The survey collected 8,029 responses, of which 7,267 were useable.

“Zoetis is proud to support the ongoing work of American Horse Publications and its significant efforts to understand the trends impacting our industry,” said Jen Grant, head of marketing for U.S. equine, Zoetis. “To see a stable U.S. horse population despite the many challenges of COVID-19 is a testament to the powerful connection between horses and their caregivers—a bond we are committed to nurturing now and into the future through our trailblazing portfolio of horse care products.”

“AHP is grateful for its partnership with Zoetis to provide ongoing and vital data on the trends in horse care, management and welfare of horses in the U.S.,” said Christine W. Brune, AHP executive director. “We appreciate the cooperation of our members in promoting the survey and the expert analysis of Dr. Jill Stowe.”

### About American Horse Publications

AHP has united equine-related publishing media, businesses, professionals, colleges, and students for over 50 years. The non-profit professional

association promotes excellence in equine publishing media and encourages relationships and communication to increase interest in the horse industry. For more information, visit [www.americanhorsepubs.org](http://www.americanhorsepubs.org).

### About Zoetis

As the world's leading animal health company, Zoetis is driven by a singular purpose: to nurture our world and humankind by advancing care for animals. After nearly 70 years innovating ways to predict, prevent, detect, and treat animal illness, Zoetis continues to stand by those raising and caring for animals worldwide—from livestock farmers to veterinarians and pet owners. The company's leading portfolio and pipeline of medicines, vaccines, diagnostics, and technologies make a difference in over 100 countries. In 2020, Zoetis generated revenue of \$6.7 billion with ~11,300 employees. For more, visit [www.zoetis.com](http://www.zoetis.com).

Zoetis has been committed to providing horse care you can count on for more than 65 years. Our team includes numerous equine veterinarians and other experts who are inspired daily by the opportunity and profound responsibility to support horses, the owners who love them, and the equine veterinarians and other care team members who safeguard their wellbeing every day. Whether at the clinic or in the field, Zoetis is always by your side with a comprehensive, innovative portfolio of products and services for horses at every step of a horse's care and throughout the journey of a horse's life.

| *Source: 2021 AHP Equine Industry Survey sponsored by Zoetis.*

*Information from the July 26 American Horse Publications News Release. More information can be found at the AHP website: <https://www.americanhorsepubs.org/2021-equine-survey/>.*