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UK Veterinary Diagnostic Laboratory Welcomes New Scientist

The University of Kentucky Veterinary Diagnostic Laboratory (VDL), formerly named the LDDC, recently welcomed scientist Erdal Erol, DVM, MSc, PhD, as the new head of diagnostic microbiology.

Originally from Turkey, Erol's unique background in both field veterinary medicine and a variety of microbiology disciplines made him a rare candidate for the position, according to VDL director Craig Carter, DVM, PhD, Dipl. ACVPM.

"We are extremely fortunate to recruit Dr. Erol, as he brings us strong research and service experience in microbiology and rich clinical experience as a veterinarian," Carter said. "He's a very valuable person because he not only has postgraduate training and experience but also is a veterinarian and can bring the clinical picture together. He has both sides of that equation."

Dr. Erdal Erol

At the VDL Erol oversees bacteriology, virology, and molecular genetics departments, working with the scientists and technicians in each area to provide timely and accurate test results for clients and farmers. He is also developing and validating new tests that can be offered to help diagnose and treat various animal diseases.

Since he joined the VDL faculty in July, Erol has made available a new real-time polymerase chain reaction assay for leptospirosis, a serious disease of horses that can cause abortion and eye problems. The new test will identify carrier animals as well as those with active infections.

Erol said he recently validated tests for *Salmonella* spp. and *Rhodococcus equi*, major infectious agents in horses.

"I believe that my clinical training and experience combined with my laboratory expertise will greatly aid the VDL in improving current diagnostic technologies in support of the Kentucky animal industries and to help protect the U.S. from infectious agents found in animals," Erol said.

Erol spent six years as a field veterinarian in Turkey working with large and small animals in an environment he said allowed him to observe a huge variety of diseases.

"Turkey is a kind of a bridge between East and West," Erol said. "We were having so many

ARTICLES OF INTEREST

(NEW SCIENTIST ...)

infectious agents coming from Asia to Europe. I had a very good opportunity to see [the infectious agents] firsthand."

These experiences served to sharpen Erol's curiosity about microbiological agents. As a result, he returned to school to expand his knowledge by earning an MSc degree at the University of Missouri and a PhD from Texas A&M University, both in microbiology. Erol then accepted a job at the Texas Veterinary Medicine Diagnostic Laboratory (TVMDL) to develop testing methods for different types of infectious agents, as well as proficiency tests for pathogenic infectious agents for the USDA. Furthermore, he helped establish a Biosafety Level 3 laboratory (BSL-3) at TVMDL.

"This is a specialized laboratory facility that makes it safe to work on highly infectious agents and prevents dangerous microorganisms from leaving the laboratory," Erol explained.

Erol has been a consultant for the USDA and the European Union. He also is an expert on avian influenza, and he has trained many veterinary scientists on proper testing procedures for the disease. UK

Natalie Voss is a UK equine communications intern and recent graduate in equine science and management.

SPOTLIGHT EQUINE

UK Animal Genetic Testing and Research Laboratory Offers Tests to Public

Genetics is one of the many research focus areas at the University of Kentucky's Gluck Equine Research Center. A subset of this emphasis area is the Animal Genetic Testing and Research Laboratory (AGTRL), which allows horse owners to investigate their horses' DNA and offers a range of tests to the public, including those for genetic disorders and coat color patterns.

The AGTRL is one of only three such laboratories connected with public universities in the United States; the others are located at the University of California, Davis, and Texas A&M University.

The AGTRL was founded in 1986, before DNA tests were widely used. The Department of Veterinary Science had begun regularly conducting blood type testing to verify parentage for Standardbred registrations across the country when scientists became aware of a condition called neonatal isoerythrolysis, or foal jaundice, present in about 2% of Standardbreds. The condition occurs in healthy foals and is caused by an incompatibility of blood types between a mare and her foal, which causes a destruction of the foal's red blood cells. The AGTRL research team studied the condition and discovered a way to test a mare and stallion to see if a cross would result in neonatal isoerythrolysis.

Dr. Kathryn Graves

"It was a bigger problem in Standardbreds because of the variability in their blood types … Thoroughbreds had a lower incidence because they were much less variable," said AGTRL director Kathryn Graves, PhD.

Graves said the test can also be conducted before the birth of a neonatal isoerthrolysis foal and allows farms to place affected foals with nurse mares.

Around 1994, DNA technology came into greater use and replaced blood typing for parentage analysis. DNA then became easier for owners to sample and for the lab to test, and genetic markers were established as comparisons to verify parentage or identification.

It was easier to pull hairs from a horse's mane or tail

than to have an area veterinarian draw blood when a horse needed to be registered, Graves said. Now there is also no need for temperature regulation of the samples, and shipping time is less of a concern.

With the ease of sampling came the development of more tests for genetic diseases such as junctional epidermolysis bullosa (also known as JEB, commonly found in Saddlebreds) and overo lethal white syndrome (OLWS, a concern in Paint horses). The test for JEB was developed at the AGTRL.

Also available at the AGTRL are tests for the presence of genes linked to coat color. Scientists can test for the *e locus* gene, which controls presence of red or black hair; the agouti gene, which determines whether a horse is bay or black; the cream dilution gene, responsible for palominos and buckskins; champagne dilution; silver; gray; sabino; and tobiano. The champagne dilution, tobiano, and sabino tests were developed at the Gluck Center in the laboratory of Ernie Bailey, PhD, professor in the Department of Veterinary Science.

While these tests do not tell breeders exactly what color a foal will be, they do allow scientists to present the possibilities and their probabilities based on the genetics of both parents.

Graves said most tests are submitted by breeders, many of whom are hoping to learn their horse carries two copies of the gene for tobiano coat color, which always results in spotted offspring.

Others are curious about whether their horse carries two copies of a gene to make him or her palomino or cremello. For many, the value of their breeding stock depends on the horses' genetic makeup, and stallions are advertised based on their ability to produce uniquely colored foals.

However, Graves said testing has decreased over the past few years due to a decline in horse breeding because of the economic downturn. Despite the drop in samples submitted, Graves has bright hopes for the future of the lab.

"Right now we're in the 'baby phase' of genetic testing. [We have tests for] things that are easy to find mutations for and simple mutations

WEED OF THE MONTH

Common name: Broadleaf Plantain
Scientific name: *Plantago major L.*
Life Cycle: Perennial
Origin: Eurasia
Poisonous: No

Broadleaf Plantain

Broadleaf plantain is widespread across North America and is a commonly occurring plant in all types of pastures and rough turf. It readily survives overgrazing and compacted horse pastures, especially when rainfall is limited. Leaves can grow up to four inches wide and two to 10 inches in length, depending on the growing conditions. Each leaf has three to seven prominent veins. The flower stalk usually grows 10-20 inches high, and the flower-containing spikes can measure from six to 10 inches. Both flowers and fruits bloom from May through September or October. Broadleaf plantain is spread primarily by seeds.

This weed has a fibrous root system and an underground root crown from which leaves and flower stalks arise. This structure allows broadleaf plantain plants to survive mowing several times during the year. Broadleaf plantain is relatively easy to control with several herbicides; however, mowing in pastures is generally ineffective. Hoeing or digging the taproot (the main root that grows vertically downward) is successful and should be done before the seed heads are formed. Consult your local Cooperative Extension Service personnel (www.csrees.usda.gov/Extension) for herbicidal control in your area. UK

William W. Witt, PhD, a researcher in the department of plant and soil sciences at the University of Kentucky, provided this information.

(SPOTLIGHT EQUINE ...)

that have an obvious effect on the phenotype appearance of the horse," she said. "We've had the completion of the horse gene map, which is very exciting because we now know the location of all the genes in the horse and can begin testing for the locations of other traits, not just for diseases. We can start developing tests for desirable traits like performance traits and conformation."

The AGTRL uses its revenue for genetic research projects and works with breed registries to identify genetic issues within specific breeds.

To request a series of tests, owners, breeders, and veterinarians can visit the AGTRL website at www.ca.uky.edu/gluck/AGTRL.asp. UK

Natalie Voss is a UK equine communications intern and recent graduate in equine science and management.

UK's Veterinary Diagnostic Laboratory Changes Potomac Horse Fever Testing Requirements

The University of Kentucky Veterinary Diagnostic Laboratory (VDL), formerly named the Livestock Disease Diagnostic Center, recently announced a change in the type of samples required to perform a test for *Neorickettsia risticii*, the organism that causes Potomac horse fever.

In addition to blood samples, the VDL now requires a feces sample or fecal swab. Charges for the test remain the same at $35 for in-state samples and $52.50 for out-of-state samples.

The change comes in response to unpublished data from the University of California, which suggest the additional testing could uncover positive results that could go undetected in blood.

VDL director Craig Carter, DVM, PhD, Dipl. ACVPM, said the change in procedure is intended to improve the sensitivity of the *Neorickettsia risticii* test.

Although Potomac horse fever is not a widespread problem in Kentucky, Carter said it could occur near water. Experts believe the *rickettsia* organism is transmitted by flukes (parasitic flatworms) and passed on to snails living in creeks or ponds.

"[The organisms] don't usually cause a massive outbreak," Carter said.

Often, he said, the symptoms of Potomac horse fever resemble a mild viral infection and include fever, depression, mild colic, and diarrhea. In severe cases laminitis, abortion, and eventual death can result, but many horses can clear the disease with few symptoms.

"The owner generally wants to know what causes (a horse's clinical signs)," Carter said. "(The test) is part of the diagnostic procedure, and it's better if [the disease] is caught early."

For more information, visit www.lddc.uky.edu. UK

Natalie Voss is a UK equine communications intern and recent graduate in equine science and management.

LLOYD'S OF LONDON AND UK DEPARTMENT OF VETERINARY SCIENCE PARTNERSHIP

Global insurance market Lloyd's of London recently presented a $45,000 check to the University of Kentucky, continuing almost three decades of support for the university's *Equine Disease Quarterly* publication.

Produced by UK's Department of Veterinary Science, the *Quarterly* is an award-winning equine health research publication that provides timely research-based reports on some of the most important health issues facing the equine industry. The publication currently reaches more than 18,000 readers in 93 countries and is translated into several languages. Its articles are available on the Internet and are regularly abstracted by a variety of scientific and lay equine publications worldwide.

"After 29 years and contributions nearing the $1 million mark, Lloyd's remains committed to equine health and the support of Kentucky's signature horse industry," said Julian Lloyd, Chair of the Livestock Committee for Lloyd's Underwriters. "We are very pleased to remain steadfast partners with the University and the Commonwealth."

In addition to ongoing research and other projects, the Department of Veterinary Science, the Gluck Equine Research Center, and the University of Kentucky Veterinary Diagnostic Laboratory (formerly the Livestock Disease Diagnostic

(LLOYD'S OF LONDON ...)

Lloyd's of London presents a $45,000 check to the University of Kentucky. Among those at the presentation were (left to right) Chuck Fischesser, Dr. Mats Troedsson, Dean M. Scott Smith, Dr. Peter Timoney, Pat Talley, and Charlie Moore.

Center) all had active roles in the 2010 Alltech FEI World Equestrian Games.

The Department of Veterinary Science served as a resource for veterinary diagnostics and emergency response for the Games. The UK Veterinary Diagnostic Laboratory was available throughout the Games for any necessary diagnostic services. The Gluck Equine Research Center provided expertise in case of a disease outbreak and worked closely with the Kentucky state veterinarian's office, official FEI veterinarians, and the UK Veterinary Diagnostic Laboratory. In addition, Roberta Dwyer, DVM, MS, Dipl. ACVPM, at the Gluck Center was involved in emergency management preparations to evaluate multiple response capabilities for traditional first responders.

"UK's prominent involvement with the World Equestrian Games further demonstrates the University's unparalleled reputation in the equine field, and Lloyd's remains their proud partner in championing this great industry," said Pat Talley, Lloyd's U.S. central region director.

Published four times yearly, the *Quarterly* is available to subscribers at no charge. It is co-edited by Dwyer, Peter Timoney, MVB, PhD, FRCVS, and Neil Williams, DVM, PhD, Dipl. ACVP, from the UK Department of Veterinary Science.

The current version of the *Equine Disease Quarterly* is located online at www.ca.uky.edu/gluck/q_oct10.asp. For more information about the Department of Veterinary Science and the Maxwell H. Gluck Equine Research Center visit www.ca.uky.edu/gluck/index.htm. UK

Roberta Dwyer, DVM, MS, Dipl. ACVPM, is a professor in the Department of Veterinary Science at the University of Kentucky.

GLUCK CENTER'S TIMONEY NAMED INTERNATIONAL PREQUID GROUP CHAIR

Peter Timoney, MVB, PhD, FRCVS, Frederick Van Lennep Chair in Equine Veterinary Science at the University of Kentucky's Gluck Equine Research Center, was named the acting chair of the international Prevention of Equine Infectious Disease Guidelines Group (PrEquID) in September.

According to its mission statement, PrEquID was "set up to compile guidelines for the prevention and management of major equine infectious diseases based on current scientific knowledge and available vaccines." The group, which is comprised of international veterinary experts that specialize in immunology, vaccinology, and/or equine medicine, was established in fall 2009 under the founding chairmanship of Marian Horzinek, professor emeritus at the University

(PREQUID ...)

of Utrecht in the Netherlands. The University of Kentucky co-organized the meeting where the group was formed.

"The equine industry worldwide is facing an unprecedented threat from the challenge of infectious diseases," Timoney said. "It's a huge industry involving a complex range of stakeholders, including veterinarians, owners, breeders, trainers, shippers, and regulators."

PrEquID was initially supported by Fort Dodge Animal Health and more recently is supported by Pfizer Animal Health. Since the group was formed it has met three times—in Athens, Greece, in November 2009; in Marrakech, Morocco, in March; and in Birmingham, United Kingdom, in September. During these meetings the group has drafted guidelines for preventing and managing equine influenza, equine herpesvirus 1- and 4-related diseases, strangles, tetanus, and African horse sickness.

Timoney said the objectives of PrEquID are to establish a rational basis for prevention of infectious diseases through the use of vaccines and appropriate management strategies, increase awareness of the risks of pathogen spread through horse movements, and emphasize the importance of monitoring, surveillance, and reporting at a national and international level in achieving greater disease control.

"We must set aside individual and national agendas and concentrate on the bigger picture if we're to achieve greater international control over the spread of equine diseases and protect

our industry for the future," Timoney said.

The first set of guidelines by PrEquID will be published near the end of this year.

PrEquID members are Timoney; Horzinek; Ann Cullinane, MVB, PhD, MRCVS, Irish Equine Centre, Ireland; James Gilkerson, BVSc, BSc(Vet) Hons, PhD, University of Melbourne, Australia; Alan Guthrie, BVSc, PhD, University of Pretoria, South Africa; Paul Lunn, MRCVS, BVSc, PhD, Dipl. ACVIM, Colorado State University, USA; Richard Newton, BVSc, MSc, PhD, Dipl. LSHTM, ECVPH, FRCVS, Animal Health Trust, United Kingdom; Klaus Osterrieder, DVM, University of Berlin, Germany; and Paul-Pierre Pastoret, DVM, PhD, World Organisation for Animal Health.

For more information on PrEquID and full guidelines once available, see www.prequid.org. UK

Jenny Blandford is the Gluck Equine Research Foundation assistant at the Gluck Center.

Managing Horse Pastures Through Winter and Following Drought

Winter can be a difficult time for pasture management. Horse pastures often are abused by the stress of winter, especially following a drought like the one Central Kentucky and surrounding states experienced this fall. However, there are a few simple steps horse owners can follow to minimize winter damage to pastures and encourage better plant growth for grazing next spring.

Rest Pastures to Encourage Spring Recovery

Many Kentucky farms have suffered from drought conditions and overgrazing this fall. Therefore, it is important that pastures be given a rest. Grazing stressed pastures all winter severely hinders the ability of plants to rejuvenate in the spring and could result in plants dying out. The trampling that results from feeding hay in paddocks also makes it difficult for grasses to come back in the spring. Therefore, resting paddocks and establishing a sacrifice area for turnout and hay feeding is a key to managing horse pastures through the winter.

Nitrogen Application to Boost Pasture Recovery

Fall is the best time to apply nitrogen (to improve forage density) to a horse pasture. Late fall applications in November through mid-December should be limited to about 30 pounds of actual nitrogen per acre (or

(MANAGING PASTURES ...)

100 pounds per acre of ammonium nitrate). This might result in a slight increase in grass production this fall, depending on rainfall, but most importantly, pasture grasses will use this nitrogen for early winter root growth and new below-ground shoot development, both of which stimulate quicker recovery in spring.

Late Winter/Spring Preparations

Early fall is normally the ideal time to seed a horse pasture; however, the current drought has likely caused many fall pasture seedings this year to fail. Therefore, spring seeding of desirable grasses is recommended for thin pastures. Remember that the longer horses are kept off a seeded pasture, the better the chances of a successful establishment. Seeding should begin when daytime temperatures are above 50°F (usually early March).

Grazing stressed pastures all winter hinders plant rejuvenation in spring.

Nitrogen applications in the spring also can help boost recovery from a difficult winter on mature pastures or strengthen a spring seeding. These applications should be in the range of 40-50 pounds of actual nitrogen per acre and can follow spring seeding once seedlings begin to emerge. Spring seeding and nitrogen applications are especially recommended for sacrifice areas that might be very damaged after winter.

Weed control in the spring is a concern to many horse farms. Spring herbicide applications are often beneficial; however, it can be difficult to spray and seed the same field in one spring. For this reason, managers should decide whether spraying or seeding is the greater priority. If fields are primarily thin, managers should seed and apply nitrogen. However, if weeds are the primary concern, managers might consider using a broadleaf herbicide. Spray when three days of daytime temperatures above 50°F are forecast and nighttime temperatures are not dipping below freezing. Any new seeding must be held off at least six weeks after herbicide application; therefore, a spring spraying usually dictates that seeding must wait until the fall (check herbicide label for the recommended spray rate and wait period). For more information on managing horse pastures or other forage information, visit www.uky.edu/Ag/Forage/HorseLinks.htm. UK

Ray Smith, PhD, forage extension specialist, and Krista Cotten, pasture evaluation associate, both from UK's plant and soil sciences department, provided this content.

Gluck Center Receives $500,000 Gift for Musculoskeletal Research

The University of Kentucky's Maxwell H. Gluck Equine Research Center received a $500,000 gift from The Lourie Foundation to support studies on the repair of cartilage, tendon, and ligament injuries.

"Serious musculoskeletal injuries limit the athletic careers of many horses," said James MacLeod, VMD, PhD, John S. and Elizabeth A. Knight Chair, a professor of veterinary science at the Gluck Center and director of the UK Equine Initiative. "Promising new data in the field of regenerative medicine indicate the potential for much more complete healing of tendon, ligament, and even articular cartilage injuries."

The gift will fund research programs on the cellular and molecular mechanisms of tissue repair.

"Basic knowledge on the underlying biology is very important," MacLeod said. "It enables both the development and optimization of new equine therapies. We are extremely grateful for this support from The Lourie Foundation."

"This gift will allow us to expand our research effort in an emergent and very exciting area of musculoskeletal research," said Ed Squires, PhD, Hon. Dipl. ACT, executive director of the Gluck Equine Research Foundation and director of advancement and industry relations at the Gluck Center.

To make a donation to fund equine research, visit www.ca.uky.edu/gluck/DonateNow.asp. UK

Jenny Blandford is the Gluck Equine Research Foundation assistant at the Gluck Center.

TOXIN TOPIC / JOHNSONGRASS

Johnsongrass Poisoning in Horses

The drought that has affected many regions of Kentucky this year has some horse owners worried about Johnsongrass poisoning. Johnsongrass (*Sorghum halepense*) is a drought-tolerant noxious weed that can infiltrate pastures and hayfields. In pastures that are not mowed and maintained, drought conditions can cause a dying off of many grasses while Johnsongrass survives and flourishes. Horses grazing these fields can potentially ingest large amounts of Johnsongrass if supplemental hay is not provided.

All sorghums, including Johnsongrass, can be associated with four major disease syndromes:

1. Neuropathy (nerve damage) and teratogenesis (damaging effects to a fetus);
2. Photosensitization;
3. Nitrate intoxication; and
4. Acute cyanide poisoning.

For cattle, nitrate and cyanide poisoning are the major risks associated with Johnsongrass. However, for horses, neuropathy and teratogenesis are the most important risks, and rarely, if ever, do photosensitization, nitrate intoxication, or acute cyanide poisoning occur with Johnsongrass ingestion.

Johnsongrass

In horses, clinical signs of poisoning can occur after a few weeks to months of continuously grazing Johnsongrass or other sorghums, at any growth stage of the plant. Hay containing sorghums also has been incriminated. Affected horses gradually develop ataxia, incoordination, difficulty backing, and dribbling urine, progressing to flaccid paralysis of the tail and hind legs. Mares repeatedly open and close the vulva as if in heat and have continuous urine dribbling and scalding of the hind legs. Abortions and fetal malformations such as arthrogryposis (fused joints) can occur during any stage of pregnancy. Males exhibit an extended and relaxed penis and urinary incontinence in addition to ataxia and incoordination.

The mechanism by which sorghums cause these problems is not well understood, but involves spinal cord damage and problems with innervations to the bladder and hind end. Inflammation of the bladder, and sometimes the kidneys, occurs. The condition is sporadic, and not all horses eating sorghums are affected. The amount of sorghum that needs to be ingested for clinical signs to occur has not been established, but poisoning generally requires continuous exposure to large amounts of sorghum for several weeks or longer.

There is no specific treatment for the condition, but if sorghum is removed from the diet and treatment for bladder and kidney problems is initiated soon after signs appear, some horses can improve. However, the nerve damage is permanent, and once ataxia and incoordination occur, the prognosis is poor. Prevention is important and includes minimizing exposure to Johnsongrass and other sorghums by controlling these plants in hayfields and pastures and by not feeding hay containing sorghums. Johnsongrass can be controlled in pastures by mowing and close grazing; control in hayfields is more problematic. Consult a weed extension specialist or your local Cooperative Extension Service personnel (www.csrees.usda.gov/Extension) for more information on controlling Johnsongrass. UK

Cynthia Gaskill, DVM, PhD, clinical veterinary toxicologist at the University of Kentucky Veterinary Diagnostic Laboratory, provided this information.

KENA Holds Successful Second Meeting

The Kentucky Equine Networking Association (KENA), a newly formed networking and educational group for equine professionals involved in pleasure and performance horse breeds, held its second meeting Nov. 16 in Lexington, Ky.

The dinner meeting featured speakers John Nicholson, executive director of the Kentucky Horse Park, and Rich Wilcke, director of the University of Louisville Equine Industry Program.

Nicholson congratulated the group on its efforts in helping make the recent 2010 Alltech FEI World Equestrian Games successful. As executive director of the Games' hosting venue, Nicholson had much to say about the event's impact on Kentucky.

"The (Games) were a reflection of the success of the Kentucky Horse Park, not the other way around," he said.

Nicholson particularly noted the contributions of the Gluck Equine Research Center, the state veterinarian's office, and the Kentucky Horse Council for their collective efforts in convincing Games' organizers that the competitions should be held in Kentucky and described the results of hosting the Games as "nothing less than a renaissance.

"For many of us, (horses) are beyond a business … this is an affair of the heart," he said.

Wilcke then took over as the dinner's featured speaker and talked about principles in making horse businesses successful. Wilcke stressed the importance of business planning in all endeavors and noted 99% of all new businesses fail, many in the first three years—a sobering statistic that is true across all markets.

He went on to describe the perceived risk in equine operations by banks and insurance companies, which often do not understand the economics specific to the horse industry and are consequently hesitant to invest and take risks with horse operations.

"That means you don't just have to have a business plan, you have to have a very, very good business plan," Wilcke said, remarking on how an equine business can secure those investments.

He acknowledged the nature of many horse people is to be hands-on with their operation, but many forget to be proactive in planning their operations. He urged the group to spend more time working on their business instead of in their business.

"Fretting about it when you're driving along in your pickup truck is not the same thing as planning," he said. "It's much better to think about the what ifs when you're sitting at your desk and it hasn't happened yet."

Wilcke suggested managers of horse operations take the time to outline their strengths, weaknesses, opportunities, and threats as part of their business plan construction process.

In conclusion, Madelyn Millard, past president of the Kentucky Horse Council board of directors, thanked speakers and sponsors and invited all to the next KENA meeting Jan. 20.

More than 140 people attended the meeting, many of whom had attended the inaugural KENA meeting in September. That kind of continued interest is exactly what organizers said they hoped for.

"I was pleasantly surprised … we had people from all different breeds and all different parts of the industry, which is exactly what we wanted," said Ed Squires, MS, PhD, Hon. Dipl. ACT, executive director of the Gluck Equine Research Foundation and director of advancement and industry relations at the Gluck Center.

KENA was created as a joint effort between the Kentucky Horse Council and the University of Kentucky as an opportunity to unite nonracing breed industries in Central Kentucky. UK

Natalie Voss is a recent graduate in equine science and management and an equine communications intern for the UK Equine Initiative.

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YOUR GUIDE TO EQUINE HEALTH CARE

Time to Inventory, Purchase Hay

Due to dry conditions, many horse owners and livestock producers across Kentucky and surrounding areas are already into their winter feeding programs, with some beginning as early as September. Horse owners need to inventory their hay supplies now to ensure they have enough to last through the winter.

This can save owners a lot of headaches later, said Tom Keene, hay marketing specialist with the University of Kentucky College of Agriculture.

The good news is Kentucky forage producers had prime haymaking weather earlier this year and were able to get good yields due to adequate springtime moisture.

"During a normal season, we would have had a surplus of hay," Keene said.

However, the timely rains diminished in July for some areas of the state and haven't returned in significant amounts in most places since then. According to the most recent Kentucky Weekly Crop and Weather Report, about 90% of the state's pastureland was rated either poor or very poor.

"Even if we got some much needed rain, it is unlikely that pastures will recover enough to provide very many grazing days before cold weather sets in during December and January," Keene said. "So those currently feeding hay will probably be doing so through March of 2011."

When calculating whether additional hay is needed, horse owners should consider their current supply, how much they feed their animals daily, and account for feeding and storage losses. If people have trouble determining these calculations, they can get assistance from their county extension agents for agriculture and natural resources.

Inventory hay supplies now to ensure you have enough to last through winter.

If the calculations reveal a need for additional hay, owners should go ahead and purchase some, Keene said.

"By buying hay now, producers will have a bigger selection of quality hay, (and owners will) be more likely to find hay close to home and in the packaging they want," he said. "The longer it's put off, the more trouble producers will have meeting these criteria. The cost is also going to be better now."

To get the most out of current hay supplies, producers should have their hay tested. The Kentucky Department of Agriculture offers a forage testing program.

"Hay testing helps producers feed the correct amount of hay with the right amount of supplements to meet their animals' nutritional needs," Keene said. "It can help producers feed hay more economically and efficiently."

For more information on the Kentucky Department of Agriculture's (KDA) testing program or hay for sale across the state, visit the KDA Forage Testing Program's website at www.kyagr.com/marketing/forage/index.htm. UK

Katie Pratt, communication specialist at the University of Kentucky provided this informaiton.

UPCOMING EVENTS

Dec. 24-Jan. 2

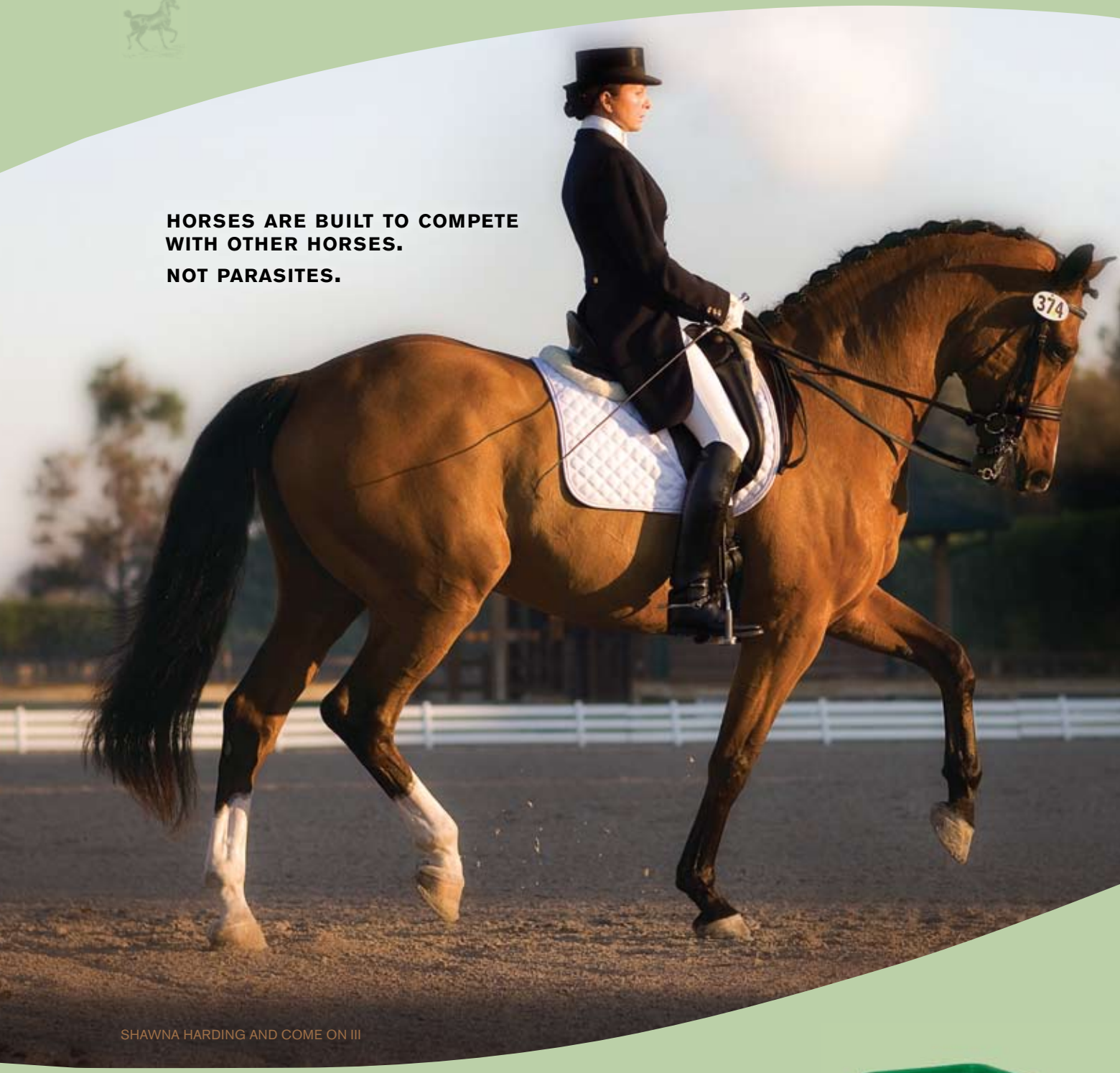
The University of Kentucky will be closed for the holidays during this time. The Veterinary Diagnostic Laboratory (VDL) is still reachable at 859/257-8283.

Jan. 13-14

Kentucky Agricultural Industry Trade Show, co-sponsored by the Kentucky Horse Council in partnership with the Kentucky Cattlemen's Association and the Burley Tobacco Growers Co-op, Lexington Convention Center.

Jan. 21-22

Second Annual Kentucky Breeders' Short Course, hosted in partnership with the University of Minnesota. Veterinarians' Day: Jan. 21; Horse Owners' Day: Jan. 22. To register, visit www.ca.uky.edu/gluck.



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