



Lab Notes

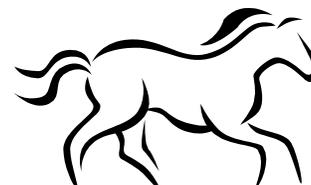
October 2013

Meet Our Staff

Mallory Davis joined our lab in 2007. She graduated from Arkansas State University with a bachelors degree in animal science. After graduation she worked in an emergency vet clinic before coming to work at the ALPC lab. She is the virology technician and is involved in several types of tests including PCR, SN serology, and FA testing. Outside of the lab, she spends much of her time working on her small farm where she takes care of 2 horses, 3 donkeys, 4 goats, 6 cats, 3 dogs, several tropical fish, 3 hermit crabs, and many varieties of chickens. When free time is available, she enjoys riding horses, hiking, rock climbing, boating, gardening and hunting.

NEWSLETTER OF THE
ARKANSAS LIVESTOCK
AND POULTRY
COMMISSION
VETERINARY
DIAGNOSTIC LAB

Dr. James O. Britt,
Laboratory Director.



Helpful Hints from the Lab—

Please do not put submission forms in with containers of fluid, urine, or formalin. The containers occasionally leak and can damage or contaminate the forms. Please place them in a separate sealed baggie or on the outside of the styrofoam shipping container between it and the outer shipping box. Thank you!

EEE and WNV in Arkansas

We have had 2 cases of eastern equine encephalomyelitis (EEE) in horses recently and 3 for the year. We have had only one positive West Nile Virus infection in a horse. These results are based on the IgM serology method that is accurate for acute infection for these diseases. If a regular (old method) serology for IgG antibodies is requested at another lab, a horse will likely be positive at some level from prior vaccination or exposure, so IgG serology needs to have acute and convalescent samples to be diagnostic. We do not have western equine encephalitis (WEE) in Arkansas but the screening serology for IgG antibodies is often positive from prior vaccination.

Website Updates!

We are in the process of updating our website to be more user-friendly and helpful for our clients. Recent additions include:

- A page with links to Client Education documents and pamphlets that you can download and print.
- A downloadable and updated Lab Submission Form
- The Monthly Newsletters
- Case Spotlights

The website will continue to be updated on a regular basis, stay tuned for more to come!

Nitrate and cyanide testing in cattle

Bovine eye fluid can be used for nitrate toxicity testing but not for cyanide. It is preferred to collect 1-2 ml. of fresh eye fluid in the field with an 18-20 ga. needle and syringe with gentle aspiration. Try to collect just aqueous if you can, just under the cornea. If you can't, go through the lens and try to aspirate vitreous, without blood contamination. If the needle gets plugged, blow it out with air pressure and try again. We prefer that you do not send the whole eye to the lab. It is difficult to get clear fluid once it is autolyzed for a day or 2 and we may end up with an insufficient or bloody sample. Cyanide poisoning requires that we test suspect hay, forage, or Johnson grass. Rumen content can also be used but should be tightly bagged and frozen to prevent the cyanide from out gassing.

We can also test for hypocalcemia, hypomagnesium and hypokalemia with the aqueous humor in cattle.

You can receive your newsletter through e-mail! Send a request to jmccune@alpc.ar.gov



Arkansas Livestock and Poultry Veterinary Diagnostic Laboratory

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5 reasons you want a veterinarian on your team in a zombie apocalypse

Michael San Filippo, Media Relations Assistant

In several episodes of AMC's zombie series *The Walking Dead*, a new character introduced to the show, Dr. Hershel Greene, helps treat and save the life of a critically injured child. Dr. Greene, however, is not a physician,



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Now, under normal circumstances, of course, we would never recommend that a veterinarian treat a human, but in the midst of a zombie apocalypse, well ... physicians might be hard to come by, governing boards and malpractice laws are out the window, and if one of your party is bleeding to death, a veterinarian just might give that person the best chance of survival.

Which got us thinking ... how else might a veterinarian prove useful in a zombie apocalypse? Here are our top 5 reasons you'd want a veterinarian as part of your zombie apocalypse team:

1. They have a better chance at surviving: In the event of a zombie apocalypse, survivors are at a premium, and losing members of your group will make you much more vulnerable. The biggest risk is getting bitten by a zombie. Well, who's better at avoiding bites than a veterinarian?
2. They can provide medical care: Again, pre-apocalypse, see your physician. Post-apocalypse, if a physician isn't available, you couldn't do much better than having a veterinarian treat your (non-zombie-bite) wounds and illnesses. Veterinarians spend at least four years post-grad training to care for ALL species, so while the general anatomy might be slightly different, they're probably not going to be overwhelmed by the prospect of working on human patients.
3. They can take care of the animals: With electrical grids down and gasoline no longer in production, you're going to be relying on animals much more: Dogs for protection, horses for transportation, livestock for food and labor. A veterinarian will make sure these highly valuable animals are well treated, healthy and performing at a high level.
4. They can make sure your food is safe: Without grocery stores, restaurants or refrigerators—not to mention state and federal oversight—obtaining, storing and preparing food will provide a whole new set of challenges for most people. Veterinarians have experience in ensuring food safety and testing; many work nationally to ensure food safety at processing plants and distribution centers, or across the globe working to make sure food for our troops is safe to eat. Unsure if the remaining meat from a deer carcass ravaged by zombies is safe to eat? Consult the veterinarian!
5. They can find a cure: Veterinarians are experts at studying the causes and distribution of diseases, or epidemiology. They've been invaluable in determining the source and distribution of several diseases that pose risk to humans, such as rabies, SARS, and West Nile virus. Veterinarians might be able to determine what causes people to turn into zombies and develop a cure. Why aren't animals infected? Perhaps there's an epidemiological clue there!

Veterinarians bring an enormous amount of talents to the table: They're trained to treat all animals, from mice to elephants, from aardvarks to zebras and everything in between. They have expertise in animal welfare, food safety, environmental protection and public health. They work all over the world, in all types of fields, helping to ensure the health of animals and people. And, in the event of a zombie apocalypse, they might just be the most valuable survivors of all.

Talk to your veterinarian today about his or her zombie apocalypse plans!