

**March 1, 2017 6:30 - 9:00 pm**

## **Tick Borne Disease - It's not just about Lyme disease anymore!**

**SPEAKER NEIL MITTELMAN, DVM**

Horses are frequently bitten by ticks and infected with the bacteria that causes Lyme Disease. Many different clinical signs have been attributed to Lyme Disease, but how often do those symptoms actually result from tick-borne diseases? This presentation will summarize current knowledge regarding Lyme Disease in horses including Neuroborreliosis, the neurological form of Lyme Disease.

Diagnostic testing and treatment will be discussed as well as a brief discussion of other tick-borne illnesses and other diseases including Equine Protozoal Myeloencephalitis (EPM) that may need to be ruled out before an accurate diagnosis of Lyme Disease is made.



## **Tick Biology & Control**

**SPEAKER LOUISE BUGBEE, Penn State Extension Educator**

Black-legged ticks (*Ixodes scapularis*) carry a number of diseases that affect humans and animals.

Pennsylvania has been first in the nation in Lyme disease cases for several years.

Tick populations continue to expand and increase exposure to pathogens.

Learn some simple measures that can help to protect you and your pastured animals from contact with ticks .

**April 12, 2017 6:30 - 9:00 pm**

## **Equine Metabolic Disease & the Effect of Grazing on Your Horse**

**SPEAKER CAREY WILLIAMS, PhD.**

Has your horse been diagnosed with Equine Metabolic Syndrome (EMS) or maybe just sensitive to changes in diet or sugars in the diet?

Ever wondered how consuming pasture will affect your horse's metabolism and whether it is safe for your horse?

If so then this talk is for you. We will cover topics dealing with EMS and how changes in growth of pastures could affect your horse.



## **Featured Speakers**



**Neil Mittelman, DVM.**, completed both his undergraduate and veterinary education at Cornell University. He has since completed a rotating hospital internship at Rood and Riddle Equine Hospital in Lexington, Kentucky and a large animal medicine, surgery, and emergency and critical care internship at the University of Pennsylvania New Bolton Center where he is currently in his final year of a large animal internal medicine residency. Dr. Mittelman will be pursuing a veterinary neurology residency starting in July. He has a special interest in equine neurology, parasitology, and toxicology and has published on these topics.



**Carey A. Williams, Ph.D.** joined Rutgers University in July 2003 as its Equine Extension Specialist, and Associate Director of Outreach for the Equine Science Center taking an active role in teaching, conducting research and working with the equine and academic communities to ensure the viability of the horse industry in New Jersey. She earned her doctorate degree in animal & poultry sciences (with an emphasis on equine nutrition & exercise physiology) from Virginia Polytechnic Institute and State University. She holds a master's degree in equine nutrition, from Virginia Tech, and a bachelor's degree from Colorado State University. At Rutgers, she maintains a herd of Standardbred mares for nutrition, pasture and exercise physiology research. She is performing research on Best Management Practices with horse farms and finding ways for farmers to keep their horse farms and pastures environmentally friendly while maintaining optimal horse health and economic viability. As a hobby she trains and competes with her Thoroughbred mare at various local and regional dressage shows.

**REGISTRATION  
INFORMATION**  
Penn State Extension  
Horse Health Series

March 1, 2017—Tick Borne Disease—It's  
not just about Lyme disease anymore!

April 12, 2017—Equine Metabolic and the  
effect of grazing on your horse

Registration fee:  
\$25 per person per program  
Or  
\$40 per person if attending both  
programs

**Registration closes 1 week prior to program**

**TO REGISTER ONLINE GO TO:**

<http://extension.psu.edu/equine>

Once online, you can choose to pay by either  
check or credit card.  
There are directions on the registration site  
for check payments.

If you do not have internet access please call  
Tina Weidele at 610-391-9840

For questions about course content  
please contact:

Donna Foulk [dlf5@psu.edu](mailto:dlf5@psu.edu)  
or  
Heather Stofanak [haf10@psu.edu](mailto:haf10@psu.edu)



This program is being offered by the  
Penn State Extension Equine Team

Questions?

Contact the

Northampton County Extension Office

610-746-1970

or E-mail

Donna Foulk: [dlf5@psu.edu](mailto:dlf5@psu.edu)

or

Heather Stofanak: [haf10@psu.edu](mailto:haf10@psu.edu)

*More information is available at:*  
<http://extension.psu.edu/animals/equine>

Penn State College of Agricultural Sciences research and  
extension programs are funded in part by Pennsylvania  
counties, the Commonwealth of Pennsylvania, and the U.S.  
Department of Agriculture.

Where trade names appear, no discrimination is intended,  
and no endorsement by Penn State Extension is implied.

The Pennsylvania State University encourages qualified  
persons with disabilities to participate in its programs and  
activities. If you anticipate needing any type of  
accommodation or have questions about the physical access  
provided, please contact Heather Stofanak 610-746-1970 in  
advance of your participation or visit.

This publication is available in alternative media on request.

Penn State is an equal opportunity, affirmative action  
employer, and is committed to providing employment  
opportunities to minorities, women, veterans, individuals with  
disabilities, and other protected groups. Nondiscrimination:  
<http://guru.psu.edu/policies/AD85.html>



**PennState Extension**

**Horse Health Care  
Programs**

*Tick Borne Disease - It's not just  
about Lyme disease anymore!*  
**March 1, 2017**

*Equine Metabolic Disease & the  
Effect of Grazing on Your Horse*  
**April 12, 2017**



**Held at Caitlyn & Cody's  
Restaurant**

**1907 John Fries Highway  
Quakertown, PA 18951**

**Right off of the Pennsylvania Turnpike**