



VET NOTES

MAY 2006

Previous VET NOTES

- April 2006 - Exercise-induced pulmonary hemorrhage
- March 2006 - The use of high speed treadmill to diagnose upper respiratory tract disorders
- February 2006 - Common medications used to assist breeding, cycle regulation and pregnancy maintenance of the mare
- January 2006 - Managing high risk pregnancies
- December 2005 - Affording the unhealthy horse
- November 2005 - Strangles
- October 2005 - The "dummy" foal
- September 2005 - New medications
- August 2005 - Extracorporeal shockwave therapy (ESWT)
- July 2005 - Vaccination recommendations
- June 2005 - The advantages of high fat/low carbohydrate diets for horses
- May 2005 - The Hoof: Form and function
- March 2005 - Liquid gold
- February 2005 - Breeding the problem mare
- January 2005 - Condylar fractures
- December 2004 - Early diagnosis and treatment of high-risk pregnancy in the mare

Mare reproductive loss syndrome (MRLS)

Following up on the MRLS informative meeting coordinated by the University of Florida on April 6, 2006, we would like to give you an update on the MRLS situation in Florida.

In March, 2006 there were 3 confirmed cases of MRLS in Florida: one case in Marion county and two cases in Alachua county. In all cases the presence of the Eastern tent caterpillars (ETC) was confirmed. The university has announced that there has NOT been an overall increase in the number of abortions reported this year (as was reported in Kentucky in 2001/2002) and that the goal of the meeting and release of information is to increase awareness and to prevent future losses.

In summary

The ETC is one member of a group of caterpillars known as the "hairy" caterpillars. The hairs or setae are thought to be responsible for causing the pathophysiology. The mares eat the caterpillars while grazing; the hairs penetrate the gut wall and carry the gut flora into the bloodstream. These bacteria are carried in the blood to the placenta, to the eyes and to the heart. Placentitis caused by these species of bacteria are otherwise very uncommon. Experimentally, the hairs were shown to migrate across the gut wall and cause granulomas, but the rest of the mechanism has not been worked out.

The Problem: Wandering larvae of the ETC (and other hairy caterpillars) ingested by pregnant mares may cause premature birth and abortion (MRLS). The ETC typically spend most of the larval life cycle in the *Prunus spp.* tree (cherry, plum), then come down to pupate in a safe place, usually on fence posts, etc. This is when horses accidentally ingest the caterpillars.

Short term solutions: Remove pregnant mares from paddocks containing or within 100 yards of any cherry or plum trees. Keep these mares in the barn and feed hay. Also apply a perimeter band of a registered pesticide around fields to control wandering caterpillars. Remember: spraying larvae with pesticide will kill the worms but mares can still ingest dead larvae and be affected.

(Continued on page 2)

Long term solutions: Removed preferred trees from paddocks and adjacent areas. Monitor trees for presence of caterpillars, i.e. webs/tents. The tents typically occur in Florida around the first of March.

We are now at the end of the EASTERN tent caterpillar season and have moved in to the season for the FOREST tent caterpillar. Be on the look out for the ETC and other hairy caterpillars and follow the solutions listed above.

Caterpillars to look out for and their (host trees)

Eastern tent caterpillar (cherry, plum, apple, crabapple)

Forest tent caterpillar (oak, Tupelo gum)

Walnut caterpillar (walnut, pecan, hickory)

Tussock moth (oak, and possible other plants)

Fall webworm (pecan, hickory, persimmon, sweet gum and other)

Images of the caterpillars can be found on the following websites:

www.woodypests.cas.psu.edu/insects/easttentcat/

www.3.govb.ab.ca/srd/forests/_larvae.jpg

www.eny3541.ifas.ufl.edu/

www.fs.fed.us/r8/foresthealth/idotis/insects/

www.fs.fed.us/r8/foresthealth/idotis/insects/

- November 2004 - Know your horse
- October 2004 - White Line Disease
- September 2004 - Announcements
- August 2004 - Reminders for pregnant mare management
- July 2004 - The heat is on
- June 2004 - Equine first aid
- May 2004 - Bacterial pneumonia in foals
- April 2004 - Digital radiographs
- March 2004 - Colic in the post-foaling broodmare
- January 2004 - Lameness and poor performance
- December 2003 - Internal parasites - the hidden battle

We're on the web:
www.petersonsmith.com



4747 SW 60th Avenue
Ocala, FL 34474

Phone: (352) 237-6151
Fax: (352) 237-0629
Email: PSEH@petersonsmith.com

*A Tradition of Leadership and
Excellence in Equine Medicine*