Tuesday, May 31

POSTER PRESENTATIONS and OPENING RECEPTION

Sponsored by: Zinpro Corporation

5:00 pm – 7:00 pm

All posters will be in Oakleigh ABC room and need to be in place by 4:30 pm, Tuesday, May 31. They will be posted from Tuesday, May 31, at 4:30 until Friday, June 3, at noon. Authors are to be present on Tuesday, May 31 from 5:00 pm – 7:00 pm.

Exercise Physiology Posters

Chair: Carey Williams, Rutgers University
Oakleigh ABC

1 Dietary supplementation of conjugated linoleic acid in horses. S. Headley¹, J. Coverdale², T. Jenkins¹, L. Boone³, J. Sharp¹, and K. Vernon*¹, ¹Clemson University, Clemson, SC, ²Texas A&M University, College Station, ³University of Georgia, Athens.

2 Trot kinematics of the Arabian Country English Pleasure performance horse. M. Nicodemus*¹, K. Slater², and S. Lindsey¹, ¹Mississippi State University, Mississippi State, ²Kasper and Rigby Veterinary Associates, Magnolia, TX.

Genetics Posters

Chair: Samantha Brooks, Cornell University
Oakleigh ABC

13 A chromosome translocation [64,XX,t(2;13)] in a Thoroughbred mare with repeated early embryonic loss. T. L. Lear*¹, T. Raudsepp², J. Lundquist¹, and S. Brown³, ¹University of Kentucky, Lexington, ²Texas A&M University, College Station, ³Hagyard Equine Institute, Lexington, KY.

Nutrition Posters

Chair: Burton Staniar,
The Pennsylvania State University
Oakleigh ABC

22 Standardization of equine-specific enzyme-linked immunosorbent assay for measuring serum insulin concentrations. J. P. Kayser*¹, R. M. Hoffman¹, J. C. Haffner¹, and H. Johansson², ¹Middle Tennessee State University, Murfreesboro, Tennessee, ²Mercodia AB, Uppsala, Sweden.


24 Supplemental leucine’s influence on plasma glucose, insulin, and amino acid responses in Quarter Horse yearlings. L. C. Etz*¹, N. M. Lambert¹,
Factors affecting the glucose response to insulin injection in mares: Epinephrine and supplementation with cinnamon extract or fish oil. L. R. Earl*, D. L. Thompson Jr., and P. B. Mitcham, LSU Agricultural Center, Louisiana Agricultural Experiment Station, Baton Rouge.

The effects of lipoic acid supplementation on blood glucose, insulin, and leptin concentrations in pony mares. E. Berg*, D. McNamara, and D. Keisler, North Dakota State University, Fargo, University of Wisconsin, Platteville, University of Missouri, Columbia.

Relationships between inflammatory cytokines, body condition, and plasma insulin in light breed horses. J. K. Suagee*, B. A. Corl, M. V. Crisman, R. S. Pleasant, R. J. Geor, and C. D. Thatcher, Virginia Tech, Blacksburg, Virginia-Maryland Regional College of Veterinary Medicine, Blacksburg, VA, Michigan State University, East Lansing, Arizona State University, Phoenix.


Dietary fish oil supplementation affects plasma fatty acids and glycemic response but not insulin sensitivity in horses. R. M. Hoffman*, J. P. Kayser, R. M. Lampley, and J. C. Haffner, Middle Tennessee State University, Murfreesboro.

The body condition score of leisure horses competing at an unaffiliated championship in the United Kingdom. I. J. Harker*, P. A. Harris, and C. F. Barfoot, Mars HorseCare UK Ltd., Milton Keynes, Bucks, United Kingdom, Equine Studies Group, WALTHAM Centre for Pet Nutrition, Melton Mowbary, Leics, United Kingdom.


Production and Management Posters
Chair: Lori Warren, University of Florida
Oakleigh ABC


Continuous vs. rotational grazing of cool season pastures during the summer months. G. Webb*, S. Webb, C. Duey, and K. Minton, *Missouri State University, Springfield.


Growth rates in 3- and 4-month-old foals during the summer in central Kentucky. L. Strasinger* and L. Lawrence, *University of Kentucky, Lexington.


Reproductive Physiology Posters
Chair: Sheryl King,
Southern Illinois University
Oakleigh ABC

Effects of flaxseed supplementation on mare progesterone and blood parameters. T. J. Swanson* and C. J. Hammer, *North Dakota State University, Fargo.


Effect of dietary energy manipulation on mares and their foals: Colostrum and IgG. C. J. Hammer*1, K. N. Winsco2, J. L. Lucia2, and J. A. Coverdale2, 1North Dakota State University, Fargo, 2Texas A&M University, College Station.

Factors affecting live foal rates of Thoroughbred stallions in Kentucky. B. E. Davis* and L. M. Lawrence, *University of Kentucky, Lexington.

Characterization of uterine pH during the estrous cycle of the mare. L. V. Penrod*1, S. E. Deaver1, E. K. Prendergast1, G. C. Duff2, M. L. Rhoads1, and M.


Stimulation of prolactin after estradiol pretreatment: Comparison of polymer formulations for domperidone and sulpiride and oral administration of sulpiride in horses. R. C. Hebert*1, D. L. Thompson Jr.1, P. B. Mitcham1, R. M. Gilley2, and P. J. Burns3, 1LSU Agricultural Center, Louisiana Agricultural Experiment Station, Baton Rouge, 2BioRelease Technologies, Birmingham, AL, 3BioRelease Technologies, Lexington, KY.

Teaching and Extension Posters
Chair: Jenifer Nadeau, University of Connecticut

Oakleigh ABC

The Master Equine Manager Level I Program. P. M. Auwerda* and D. Miller, Iowa State University, Ames.

The Master Equine Manager Level II Program. P. M. Auwerda* and D. Miller, Iowa State University, Ames.

Student confidence levels in horsemanship skills associated with a university equine assisted therapy course. M. Nicodemus*, Mississippi State University, Mississippi State.

An assessment of the educational needs of Delaware equine owners. C. Wickens*1, K. Waite2, S. Garey3, and S. Fraze1, 1University of Delaware, Newark, 2Michigan State University, East Lansing.

Economic impact and demographics of recreational horse trail users in Minnesota. I. Schneider1, A. Date2, E. Venegas3, and K. Martinson*1, 1University of Minnesota, St. Paul, 2Department of Natural Resources, St. Paul, MN, 3Department of Employment and Economic Development, St. Paul, MN.

Profile of the equine industry’s environmental, best management practices and variations in Pennsylvania. A. Swinker*1, S. Worobey1, H. McKernan1, R. Meinen1, D. Kniffen1, D. Foulik1, M. Hall1, J. Weld1, F. Schneider2, A. Burk3, and M. Brubaker4, 1Pennsylvania State University, University Park, 2Pennsylvania Department of Environmental Protection, Harrisburg, 3University of Maryland Extension, College Park, 4Pennsylvania State Conservation Commission, Harrisburg.

Healthy lands, healthy horses: Connecting South Dakota horse owners with skills for small acreage success. R. C. Bott*1, M. Hubert2, P. Nester3, T. Renelt3, R. Salvesen3, and R. Gates2, 1South Dakota State University, Brook-
Using an equine pasture evaluation disk (EPED) to document canopy cover and evaluate pasture improvement. D. Foulk*, A. Swinker, M. Hall, and H. McKernan, Pennsylvania State University, University Park.


Static composting of equine mortality. C. A. Shea Porr*1, R. A. Clark1, C. E. Smith2, R. M. Brooks1, and R. K. Splan1, 1Virginia Tech, Blacksburg, 2West Virginia University, Morgantown.

OTHER EVENTS

Reproductive Physiology Invited Speaker–Squire’s Lecture

Chair: Sheryl King,
Southern Illinois University
Moderator: Jason Bruemmer
Oakleigh ABC

7:00–7:15 Welcome

PREPARATION GUIDELINES FOR ORAL PRESENTATIONS

Again this year each session room will be equipped with a laptop computer configured with Microsoft PowerPoint 2007; an LCD projector; and a podium microphone. The use of personal laptop computers for presentations in the session rooms is not permitted.

Presenters:
The usual scheduled time for presentation of each oral paper is 12 minutes with 3 minutes for questions, discussion and speaker transition.

ON-SITE UPLOAD

Files can be delivered to the Pre-load Room, at the Embassy Suites Hotel and Conference Center in Murfreesboro the day prior to the scheduled presentation time. Deadlines for on-site uploads are:
All Wednesday presentations will need to be submitted by Tuesday by 5:00 pm
All Thursday presentations will need to be submitted by Wednesday by 5:00 pm
All Friday presentations will need to be submitted by Thursday at 5:00 pm

Please note:
All PowerPoint presentations must be loaded in advance of each session.
No presentations will be accepted or modified in the session rooms.
No presentations will be loaded while the session is in progress, between presentations, or during breaks.

Wednesday, June 1

Fun Run
6:00 AM meet in hotel lobby

Nutrition Invited Speaker
Chair and Moderator: Burton Staniar,
The Pennsylvania State University
Sponsored by: McCauley Brothers Inc.
Oakleigh AB

8:00 AM Recent developments in the formulation of energy and nutrient requirements in horses and the resulting feeding recommendations. M. Coenen, University Leipzig.
SYMPOSIA AND ORAL SESSIONS

Genetics Graduate Student Competition
Chair: Samantha Brooks, Cornell University
Moderator: Rebecca Splan, Virginia Tech

9:15 AM 14 Whole mtDNA D-loop sequence variation of the Arabian horse strains. A. Khanshour* and E. G. Cothran, Texas A&M University, College Station.


9:45 AM 16 Morphometric traits in gaited breeds of horse: Potential future targets for mapping. E. A. Staiger*, N. B. Sutter, R. R. Bellone, and S. A. Brooks. 1Cornell University, Department of Animal Sciences, Ithaca, NY, 2Cornell University, Department of Clinical Sciences, Ithaca, NY, 3University of Tampa, Department of Biology, Tampa, FL.

10:00 AM 17 Tensile strength of tendons from Quarter Horses with hereditary equine regional dermal asthenia (HERDA). J. E. Bowser*, S. Elder, A. M. Rashmir-Raven, and C. E. Swiderski. 1Mississippi State University College of Veterinary Medicine, Department of Clinical Sciences, Mississippi State, 2Mississippi State University, College of Agricultural and Biological Engineering, Mississippi State, 3Michigan State University, College of Veterinary Medicine, East Lansing.

Nutrition Graduate Student Competition
Chair: Burton Staniar, The Pennsylvania State University
Moderators: Patricia Harris, Amy Burk, Sarah Ralston


9:30 AM 37 Growth hormone, glucose, insulin, and NEFA patterns in meal-fed Quarter Horse weanlings. S. M. Gray* and W. B. Staniar, The Pennsylvania State University, University Park.

9:45 AM 38 In vitro starch availability of various grains and digestibility of popped milo, rice bran, and whole oats in mature geldings. T. L.
9 Effects of fiber type, particle size, and soak time on water hydration and estimated potential water-releasing capacities of roughages fed to horses. A. M. Parsons,*1 B. D. Nielsen1, H. C. Schott1, R. Geor1, M. Yokoyama2, and P. Harris2, 1Michigan State University, East Lansing, 2WALTHAM Centre for Pet Nutrition, Leics, United Kingdom.

10:15 AM Break

10:45 AM Comparison of bacterial populations from the cecum, right dorsal colon, and feces of horses using terminal restriction fragment length polymorphism (TRFLP). K. Dougal*1, T. Blackmore1, J. Pachebat1, P. Harris2, and C. Newbold1, 1Aberystwyth University, Aberystwyth, Ceredigion, United Kingdom, 2WALTHAM Centre for Pet Nutrition, Melton Mowbray, Leicestershire, United Kingdom.

11:00 AM Characterization of L-lysine transport across equine small intestine and large colon brush border membrane. A. D. Woodward*1, M. Z. Fan2, J. P. Steibel1, R. J. Goer1, N. P. Taylor1, and N. L. Trotter1, 1Michigan State University, East Lansing, 2University of Guelph, Guelph, Ontario, Canada.


11:45 AM Effect of dietary energy manipulation on mares and their foals: Determination of voluntary dry matter intake of mares during late pregnancy using a dual marker system. K. N. Winsco*1, T. A. Wickersham1, C. J. Hammer2, and J. A. Coverdale1, 1Texas A&M University, College Station, 2North Dakota State University, Fargo.

12:00 PM Lunch


2:00 PM Amino acid concentrations in late lactation mares’ milk. S. L. Tanner*, A. L. Wagner, R. B. Ennis, and K. L. Urschel, University of Kentucky.

2:15 PM Effect of age on digestibility of various feedstuffs in horses. S. Elzinga*1, B. Nielsen1, H. Schott1, J. Rapson1, C. Robison1, J. McCutcheon1, P. Harris2, and R. Geor1, 1Michigan State University, East Lansing,
Discrimination of water acidity by mature horses. K. Merkies and J. Carson*, University of Guelph, Guelph, ON, Canada.

Breaks sponsored by:
Performance Horse Nutrition
Southern States
HyGain Feeds
LMF Feeds
Poulin Grain
Otter Coop Ltd.

Production and Management Graduate Student Competition
Chair: Lori Warren, University of Florida
Moderator: Krishona Martinson

9:15 AM The beneficial effects of equine events on the local economy. A. A. Armstrong*, J. P. Kayser, and J. G. Gardner, Middle Tennessee State University, Murfreesboro.

9:30 AM Use of best management practices and pasture and soil quality on Maryland horse farms. N. M. Fiorellino*¹, S. K. Kariuki¹, J. M. McGrath¹, M. J. Calkins², B. Momen¹, and A. O. Burk¹. ¹University of Maryland, College Park, ²Maryland Department of Agriculture, Annapolis.

9:45 AM Effects of windrow composting on the viability of Parascaris equorum eggs within the interior of the windrow. J. C. Gould*, M. G. Rossano, E. T. Lyons, and L. M. Lawrence, University of Kentucky, Lexington.

10:00 AM The effect of endophyte-infected tall fescue on weanlings. B. E. Davis* and L. M. Lawrence, University of Kentucky, Lexington.

10:45 AM Equine grazing preferences and persistence of cool-season grasses. E. Allen*, K. Martinson, and C. Sheaffer, University of Minnesota, St Paul.


11:15 AM Influence of confinement housing on the cecal environment of the horse. A. N. Wolford*¹, J. A. Coverdale¹, W. E. Pinchak², R. C. Anderson³, and T. A. Wickersham¹. ¹Texas AM University, College Station, ²Texas AgriLife Research, Vernon, ³USDA, ARS, Southern Plains Agri-
The effects of hoof trimming and farrier on hoof shape. S. R. Malone* and H. M. S. Davies, The University of Melbourne, Werribee, VIC, Australia.


Effect of restricted grazing on dry matter intake rate. E. C. Glunk* and P. D. Siciliano, North Carolina State University, Raleigh.

Effect of turn-out time on pasture NSC intake and hindgut fermentation characteristics. A. C. Pearson*, P. D. Siciliano, S. J. McLeod, and V. Fellner, North Carolina State University, Raleigh.


Comparing glycemic and insulimemic responses of ponies and horses to dietary glucose. K. D. Tinworth*1, S. L. Raidal1, P. A. Harris2, M. N. Sillence3, and G. K. Noble1, 1Charles Sturt University, Wagga Wagga, NSW 2650, Australia, 2WALTHAM Centre for Pet Nutrition, Waltham-on-the-Wolds, Leicestershire, United Kingdom, 3Queensland University of Technology, Brisbane, QLD 4001, Australia.
Student Competition Undergraduate Oral Presentations

Chair: Patricia Graham-Thiers, Virginia Intermont College
Moderators: Shea Porr, Debra Powell, Patricia Graham-Thiers

11:00 AM 108 Investigation of HERC2 and OCA2 SNP for iris color variation in Puerto Rican Paso Fino horses. E. J. A. Kowalski* and R. R. Bellone, University of Tampa, Tampa, FL.


11:30 AM 110 Effect of ivermectin and fenbendazole on fecal egg count reduction among foals in Virginia. A. C. Carrington*,1, J. L. Carrington1, J. C. Gould2, R. M. Brooks1, C. A. Porr1, and R. K. Splan1, 1Virginia Tech, Blacksburg, 2University of Kentucky, Lexington.


12:00 PM Lunch

1:30 PM 112 Effect of equine sports massage therapy on cutaneous temperature. M. M. Salter*,1, C. A. McCall1, D. D. Pascoe1, W. H. McElhenney2, and C. Pascoe1, 1Auburn University, Auburn, AL, 2Tuskegee University, Tuskegee, AL.

1:45 PM 113 Comparison of moist heat and magnetic therapy on ultrasound changes in the loin area of adult horses. D. Mulligan* and D. Powell, Ohio State University Agriculture Technical Institute, Wooster.

2:00 PM 114 Effects of a 90-day training program on gait quality in 2-year-old horses. K. L. Kirbow* and K. J. Duberstein, The University of Georgia, Athens.

2:15 PM 115 Effects of steel and aluminum shoes on forelimb kinematics in stock horses. E. Huguet* and K. Duberstein, The University of Georgia, Athens.


3:00 PM Break

3:30 PM 118 Pituitary pars intermedia dysfunction down-regulates mRNA abundance of genes encoding GLUT4 and insulin receptor in the small...

3:45 PM 119 Postprandial changes in plasma free amino acids in weanling horses. R. N. Digianantonio*1, A. L. Wagner1, S. L. Tanner1, R. B. Ennis1, P. A. Harris2, J. T. Sylvester3, and K. L. Urschel1, 1University of Kentucky, Lexington, 2WALTHAM Centre For Pet Nutrition, Melton Mowbray, United Kingdom, 3Buckeye Nutrition, Dalton, OH.

4:00 PM 120 Feed intake as influenced by body condition score, outside temperature, and duration of stay in a teaching hospital in healthy adult horses. J. Shaba*1, B. D. Nielsen1, S. Elzinga1, J. Rapson1, C. I. Robinson1, H. C. Schott1, J. McCutcheon1, R. Geor1, and P. Harris2, 1Michigan State University, East Lansing, 2WALTHAM Centre for Pet Nutrition, Leics, United Kingdom.


**Invited Speaker Luncheon**

**Genetics/Exercise Physiology - Invited Speaker**

Chair: Samantha Brooks, Cornell University

Sponsored by: Buckeye Nutrition

Mirabella E

12:00 PM The interplay between genetics, exercise, and nutrition in managing muscle disease. S. Valberg, University of Minnesota.

**SYMPOSIA AND ORAL SESSIONS**

**Exercise Physiology Graduate Student Competition**

Chair and Moderator: Carey Williams, Rutgers University

Mirabella A


4:00 PM 5 Heart rate and hematology response to submaximal training in Quarter and miniature horses. R. M. Legere*, M. J. Arns2, and J.
S. Pendergraft, 1Sul Ross State University, Alpine, TX, 2University of Arizona, Tucson.

4:15 PM 6 Effects of polysulfated glycosaminoglycan injections on joint range of motion and gait quality at the walk and trot. R. Stewart*, K. J. Duberstein, and A. Hanafi, University of Georgia, Athens.

4:30 PM 7 Influence of an intra-articular lipopolysaccharide challenge on markers of inflammation and cartilage metabolism in young horses. J. L. Lucia*, J. A. Coverdale, and C. E. Arnold, Texas A&M University, College Station.

4:45 PM 8 Relationship of osteochondrosis in yearling Standardbred horses to subsequent race earnings and number of starts at 2 and 3 years of age. I. Hilliker*, K. Kline, and P. Kapraun, University of Illinois, Champaign.

Reproductive Physiology Graduate Student Competition
Chair and Moderator: Sheryl King,
Southern Illinois University
Mirabella B

3:45 PM 102 Effects of oxytocin, LPS, and polyunsaturated fatty acids on PGF$_2$ secretion and gene expression during equine endometrial culture. L. V. Penrod*, R. E. Allen1, M. L. Rhoads1, J. L. Turner2, S. W. Limeland1, and M. J. Arns1, 1The University of Arizona, Tucson, 2New Mexico State University, Las Cruces.

4:00 PM 103 Evaluation of exosomes containing miRNA as an indicator of pregnancy status in the mare. A. Cameron*, J. C. da Silveira, G. Bouma, and J. E. Bruemmer, Colorado State University, Fort Collins.


BBQ
7:00 PM–10:00 PM

Buses will depart from the Embassy Suites at 6:00 PM.
Enjoy a Barbeque dinner catered by Jim and Nick’s BBQ while listening to Nashville recording artist Mr. Paul Bogart. Dancing and visiting are encouraged. Evening sponsored by The League of Agricultural and Equine Centers and the Rutherford County Chamber of Commerce.

General Symposium
Sponsored by: ADM Alliance Nutrition, Kent Nutrition Group, Equine Feed Oat Project-Peritus

Thursday, June 2

Nutrition Oral Presentations - I

Chair: Burton Staniar,
The Pennsylvania State University
Moderator: Shannon Pratt-Phillips

Mirabella A


8:30 AM  52  Digestibility and balance of organic and inorganic sources of calcium and magnesium in exercised 2- and 3-year-old geldings. B. Dundon*, L. Baker, J. Pipkin, and T. Lawrence, West Texas A&M University, Canyon.


9:00 AM  54  Using urinary urea-N as an assessment of protein requirements and protein quality in exercising horses. P. M. Graham-Thiers* and L. K. Bowen, Virginia Intermont College, Bristol.

9:15 AM  55  The apparent digestibility of hay and three concentrate feeds by exercised ponies. A. C. Longland*, C. Barfoot, and P. A. Harris, ¹Equine and Livestock Nutrition Services, Tregaron, Ceredigion, Wales, United Kingdom., ²Mars Horse Care UK Ltd., Old Wolverton, Buck-
Estimation of pasture intake by ponies from live weight change during six weeks at pasture. A. C. Longland*, J. Ince², and P. A. Harris³, ¹Equine and Livestock Nutrition Services, Tregaron, Ceredigion, Wales, United Kingdom, ²Nottingham Trent University, Nottingham, United Kingdom, ³WALTHAM Centre for Pet Nutrition, Waltham-on-the-Wolds, Leicestershire, United Kingdom.

Techniques, equipment, and considerations applied in equine digestibility experiments. M. Edwards*, L. Lawrence², and C. O’Connor-Robison³, ¹California Polytechnic State University, San Luis Obispo, ²University of Kentucky, Lexington, ³Michigan State University, East Lansing.

Production and Management Oral Presentations - I
Chair: Lori Warren, University of Florida
Moderator: Janice Holland
Mirabella C

Evaluation of hay fed to horses in Tennessee. B. McIntosh*, D. Joines¹, G. Parks¹, and P. Buff², ¹University of Tennessee, Knoxville, ²The Nutro Company, Franklin, TN.

Field observations from the University of Maryland’s equine rotational grazing demonstration site: A 2-year perspective. A. O. Burk*, N. M. Fiorellino¹, T. A. Shellem¹, M. E. Dwyer¹, L. R. Vough¹, and E. Dengler², ¹University of Maryland, College Park, ²USDA Natural Resources Conservation Service, Annapolis, MD.

Observations of insulin responses to five glucocorticoids commonly used in equine medicine. G. K. Noble*, A. J. Cawdell-Smith², W. L. Bryden², and M. N. Sillence¹, ¹Charles Sturt University, Wagga Wagga, NSW 2650, Australia, ²The University of Queensland, Gatton, QLD, 4343, Australia, ³Queensland University of Technology, Brisbane, QLD 4001, Australia.

Breed and age effects on metabolic profiles of young horses using NMR-based metabonomic analyses of serum. S. L. Ralston*, L. Pappalardo², and I. Pelczer³, ¹Rutgers, the State University of New Jersey, New Brunswick, ²American University of Sharjah, United Arab Emirates, ³Princeton University, Princeton, NJ.

Dietary protein affects nitrogen and ammonia excretion in horses. C. A. Williams*, C. Urban, and M. L. Westendorf, Rutgers, the State University of New Jersey, New Brunswick.

Effects of excess dietary phosphorus on fecal phosphorus excretion and water extractable phosphorus in horses. M. L. Westendorf* and C. A. Williams, Rutgers, the State University of New Jersey, New Brunswick.
Teaching and Extension Oral Presentations - I
Chair and Moderator: Jenifer Nadeau, University of Connecticut
Mirabella B

8:00 AM  133 Measuring impact and subscriber engagement of an extension electronic newsletter. C. Skelly*, A. Bodle¹, G. Heyboer¹, and M. Lambur², ¹Michigan State University, East Lansing, ²Virginia Tech, Blacksburg.

8:15 AM  134 Assessing current equine welfare knowledge in Michigan 4-H leaders and youth. T. A. Fabus and K. L. Waite*, Michigan State University, East Lansing, MI.

8:30 AM  135 Holy Hoofprints: Is that a horse in my science class?! Rutgers Equine Science Center launches Equine Science 4 Kids. K. Malinowski*, T. J. Cody, A. Palkhiwala, and W. Haduch, Rutgers, the State University of New Jersey, New Brunswick.

8:45 AM  136 2010 Kentucky Equine Youth Festival: How to create an event that draws 6,000 people. F. Camargo* and E. LaBonty, University of Kentucky, Lexington.

9:00 AM  137 Results of a 2010 survey assessing Tennessee 4-H horse and livestock volunteer training needs. A. G. Parks*, B. J. McIntosh, and F. N. Smith, University of Tennessee, Knoxville.

9:15 AM  138 Survey of adult volunteer horse leaders for the development of an online equine education program. K. Waite*, K. Wilson², G. Heyboer¹, and E. Greene¹, ¹Michigan State University, East Lansing, ²University of Maryland, Ellicott City, ³University of Vermont, Burlington.

9:30 AM  139 Measuring the effectiveness of a Facebook fan page for equine extension programs. K. Martinson*, C. Skelly², and L. Fisher², ¹University of Minnesota, St. Paul, ²Michigan State University, East Lansing.

9:45 AM  140 Assessing the impact and usefulness of eXtension horses. K. P. Anderson*, E. A. Greene², and K. Martinson³, ¹University of Nebraska, Lincoln, ²University of Vermont, Burlington, ³University of Minnesota, St. Paul.
OTHER EVENTS

Thursday Industry Tour: 10:30 AM-5:00PM
Sponsored by: Embassy Suites Hotel & Convention Center

The Industry Tour buses will leave the Embassy at 10:30 AM. The first stop on the tour is The Tennessee Walking Horse Celebration grounds in Shelbyville, Tennessee. The Tennessee Walking Horse National Celebration® takes place each year during the 11 days and nights prior to Labor Day. It is the premier event for the Tennessee Walking Horse, during which the breed’s World Grand Champion® and some 20 World Champions are named. While at The Celebration, owners, trainers and exhibitors from the local area while demonstrate the different gaits and classes of the Tennessee Walking Horse. Representatives from S.H.O.W. will discuss current regulations and inspection procedures required at approved shows. Southern style lunch will be served at the Celebration grounds.

The second stop on the tour will be Waterfall Farms. An industry showplace for more than a decade, Bill and Sandra Johnson’s Waterfall Farms is nestled in the picturesque rolling hills of Middle Tennessee. Centered in the heart of Tennessee Walking Horse country, Waterfall continues to bring to the walking horse world an impeccable line-up of stallions. Their stallions have records of world championship competition, in the town where the World Grand Champion walking horses are crowned.

Jack Daniel’s Distillery will be the final stop of the day. The Jack Daniel Distillery is the oldest registered distillery in the U.S. It’s where Mr. Jack first crafted the recipe for Old No. 7. It’s where the pure, iron-free cave spring water flows. And it’s where every drop of Jack Daniel’s Tennessee Sippin’ Whiskey is still made today.

Graduate Student Professional Development Program
Chair and Moderator: Jessica Suagee, Virginia Tech
Mirabella D


Nutrition Workshop
Chair and Moderator: Mark Edwards, California Polytechnic State University
Mirabella A

8:00 PM Total collections—Tips for success. M. Edwards, C. I. O’Connor-Robison, L. Lawrence.
Production and Management Workshop
Chair and Moderator: Carey Williams, Rutgers University
Mirabella C
8:00 PM Current research: Equine environmental impact. C. Williams, K. Martin-son, P. Siciliano.

Teaching and Extension Workshop
Chair and Moderator: Kathy Anderson, University of Nebraska Mirabella B
8:00 PM Research + Teaching + Extension = eXtension Horses: Making your research relevant and reaching new audiences. K. Anderson, B. Greene, A. Griffin.

Friday, June 3
Production and Management Invited Speaker
Chair and Moderator: Carey Williams, Rutgers University
Oakleigh AB
8:00 AM Environmental issues for the horse industry. W. Powers and T. Guthrie, Michigan State University.

SYMPOSIA AND ORAL SESSIONS
Nutrition Oral Presentations - II
Chair: Burton Staniar,
The Pennsylvania State University
Moderator: Josie Coverdale
Mirabella A
9:15 AM 58 Glucose and insulin dynamics in neonatal foals: Influence of maternal diet. T. N. Dobbs¹, C. E. Foote², A. J. Cawdell-Smith¹, S. T. Anderson¹, R. C. Boston¹, and W. L. Bryden*,¹, ¹The University of Queensland, Gatton, QLD, Australia, ²Equine Consulting Services Pty Ltd., Glenorie, NSW, Australia, ³University of Pennsylvania, Philadelphia.

9:30 AM 59 Insulin sensitivity in growing horses fed a higher starch versus a higher fat diet for 2 years. M. E. Gordon*, M. L. Jerina, R. H. Raub, and K. K. Williamson, Land O’Lakes Purina Feed, Gray Summit, MO.

9:45 AM 62 Effect of prebiotic supplementation in mares on the evolution of the digestive ecosystem in feces of suckling foals from birth to pre-weaning period (6 months). C. Faubladier, C. Philippeau, J. Danel, and V. Julliand*, AGROSUP Dijon USC INRA, Dijon, France.

10:00 AM 61 Changes in in vitro fermentative capacity in foals from birth to 2 months old. C. Philippeau, C. Faubladier, S. Sadet-Bourgeteau, R. Blot, and V. Julliand*, Agrosupdijon, Dijon, France.
10:15 AM Break

10:45 AM 60 The effect of soaking hay on dry matter loss and fructan removal. K. Martinson*, H. Jung1,2, M. Hathaway1, and C. Sheaffer1, 1University of Minnesota, St. Paul, 2USDA ARS, St. Paul, MN.

11:00 AM 63 Characterization of α-glucose transport across equine jejunal brush border membrane using the pig as an efficient model of jejunal glucose uptake. A. D. Woodward*, M. Z. Fan, J. P. Steibel, R. J. Goer, N. P. Taylor, and N. L. Trotter, 1Michigan State University, East Lansing, 2University of Guelph, Guelph, Ontario, Canada.

11:15 AM 64 The effect of time of feeding on plasma amino acids during exercise and recovery. P. M. Graham-Thiers* and L. K. Bowen, Virginia Inter-mont College, Bristol.

11:30 AM 65 The effect of wearing a grazing muzzle vs. not wearing a grazing muzzle on pasture dry matter intake by ponies. A. C. Longland*, C. Barfoot, and P. A. Harris, 1Equine and Livestock Nutrition Services, Tregaron, Ceredigion, Wales, United Kingdom, 2Mars Horse Care United Kingdom Ltd., Old Wolverton, Buckinghamshire, United Kingdom, 3WALTHAM Centre for Pet Nutrition, Waltham-on-the-Wolds, Leicestershire, United Kingdom.

11:45 AM 66 Changes in proportions of dry matter intakes by ponies with access to pasture and haylage for 3 and 20 hours per day, respectively, for 6 weeks. J. Ince, A. C. Longland*, J. C. Newbold, and P. A. Harris, 1IBERS, Aberystwyth, Wales, United Kingdom, 2Equine and Livestock Nutrition Services, Tregaron, Ceredigion, Wales, United Kingdom, 3WALTHAM Centre for Pet Nutrition, Waltham-on-the-Wolds, Leicestershire, United Kingdom.

Teaching and Extension Oral Presentations - II

Chair: Jenifer Nadeau, University of Connecticut
Moderators: Jenifer Nadeau, Jeff Pendergraft, and Mike Yoder

Mirabella B


9:45 AM 143 Contributions of an animal sciences major with equine science option to department and college enrollment trends at a land grant university. E. Wagner* and C. McCall, Auburn University, Auburn, AL.

10:00 AM 144 The Penn State Equine Research Team. W. B. Staniar* and A. L. Macrina, Pennsylvania State University, University Park.
10:15 AM  Break

10:45 AM  145 The status of equine-assisted therapy programs within higher education. H. A. Brady*, H. M. Hernandez, and K. A. Guay, Texas Tech University, Lubbock.

11:00 AM  146 Development of equine-assisted therapy and learning as an elective module within an Irish equine curriculum. B. A. Murphy*, University College Dublin, Belfield, Dublin, Ireland.


11:30 AM  148 Castration of wild horses: A unique classroom setting. D. Sherwood*, Oregon State University, Corvallis.

11:45 AM  149 Academic assessment of equine welfare during the gather process of the Bureau of Land Management’s Wild Horse and Burro Program. E. A. Greene*, C. R. Heleski, S. L. Ralston, and C. L. Stull, University of Vermont, Burlington; Michigan State University, East Lansing; Rutgers, The State University of New Jersey, New Brunswick; University of California, Davis.

12:00 PM  Lunch

1:30 PM  150 Mentoring underrepresented students through sustainable agricultural and biological research. J. Pendergraft*, R. Legere, and A. Rodriguez, Sul Ross State University, Alpine, TX; University of Puerto Rico, Mayaguez, PR.

1:45 PM  151 Change in knowledge and beliefs of youth as a result of participation in creating a youth-friendly environmental brochure. M. Philbrick and J. Nadeau*, University of Connecticut, Storrs.

2:00 PM  152 Using action research to develop an online horseless horse learning lesson. J. M. Bauman* and K. P. Anderson, University of Nebraska, Lincoln.


Reproductive Physiology Oral Presentations
Chair: Sheryl King,
Southern Illinois University
Moderator: William Day
Mirabella C

10:45 AM  107 Gestation length, duration of labor, and foal survival. R. A. Ferris* and P. M. McCue, Equine Reproduction Laboratory, Colorado State University, Fort Collins.
Genetics Oral Presentations
Chair: Samantha Brooks, Cornell University
Moderators: Rebecca Splan and Samantha Brooks
Mirabella C

11:00 AM 18 Genetic parameters for conformation and movement traits in North American sporthorse foals. A. S. Bhatnagar*1, R. M. Lewis1, D. R. Notter1, C. Schacht2, and R. K. Splan1, 1Virginia Polytechnic Institute and State University, Blacksburg, 2International Sporthorse Registry Inc., Sycamore, IL.


11:30 AM 20 The influence of exercise on entrainment of skeletal muscle transcription in the horse. O. F. McGlynn, J. A. Browne, C. M. Blake, and B. A. Murphy*, University College Dublin, Belfield, Dublin, Ireland.

11:45 AM 21 Smooth muscle proliferation is a histologic feature of airway remodeling in summer-pasture-associated recurrent airway obstruction. N. Mujahid*1, C. Bowers1, L. R. Costa2, C. Ferrari1, J. Cooley1, S. C. Burgess1, S. Mays1, and C. E. Swiderski1, 1Mississippi State University, Mississippi State, 2Tufts University, North Grafton, MA.

Invited Speaker Luncheon
Production and Management Invited Speaker
Chair and Moderator: Randy Robbins
Mirabella E

12:00 PM 22 Fancy: An equine nutrition and management model. T. Tylutki, Agricultural Modeling and Training Systems.

SYMPOSIA AND ORAL SESSIONS
Exercise Physiology Oral Presentations
Chair: Carey Williams, Rutgers University
Moderator: Tanja Hess
Mirabella A

1:30 PM 9 The effect of calcium and magnesium proteinates on bone density in exercised 2- and 3-year-old geldings. C. Douglas-Fuller*1, L. Baker1, J. Pipkin1, and G. Veneklasen2, 1West Texas A&M University, Canyon, 2Timbercreek Veterinary Hospital, Canyon, TX.

1:45 PM 10 The effect of exercise training on insulin sensitivity and fat and muscle tissue cytokine profiles of old and young Standardbred mares. N. R. Liburt*1, M. N. Fugaro2, E. K. Wunderlich1, J. L. Zambito1, D. W. Horohov3, A. Betancourt1, R. C. Boston4, K. H. McKeever1, and R. J. Geor5, 1Rutgers, the State University of New Jersey,
New Brunswick, 2Centenary College, Hackettstown, NJ, 3University of Kentucky, Lexington, 4University of Pennsylvania, Kennett Square, 5Michigan State University, East Lansing.

2:00 PM 11 Effect of conditioning horses 1, 2, or 3 times a week with 2 runs of 100 meters at near maximal speed on v4. A. Lindner*1, R. Signorini2, L. Brero2, E. Am3, R. Mancini2, and A. Enrique2, 1Arbeitsgruppe Pferd, Juelich, Germany, 2Universidad del Litoral, Esperanza, Argentina, 3Ejercito Argentino, Esperanza, Argentina.


OTHER EVENTS

3:30 ESS General business meeting, Oakleigh AB

6:30 ESS Awards Banquet
Graduate Student Competition Awards sponsored by NAERIC
Society Awards sponsored by Kentucky Equine Research