

## Penn State Dairy Nutrition Workshop Agenda

### November 10, 2009

12:00 - 5:00 **Feed Management Planner Workshop**, details on page 11  
Additional fee required; *Intended for nutritionists who are NOT currently certified feed management planners.*

### November 11, 2009

7:00 - 8:15 Registration

#### DSM Nutritional Products Preconference Symposium



8:00 - 8:25 Coffee and Danish

8:25 - 8:30 Introduction

8:30 - 9:15 Production and Reproduction Responses of Dairy Cows to Supplemental Beta-carotene...  
*Dr. Mary Beth de Ondarza, Paradox Nutrition LLC*

9:15 - 10:00 Feeding in Today's Economy...  
*Dr. Bill Weiss, The Ohio State University*

10:00 - 10:30 Break

10:30 - 11:15 Opportunities for Improving Starch Digestibility in Dairy Cows...  
*Dr. Randy Shaver, University of Wisconsin-Madison*

11:15 - 12:00 Maintaining Client Relationships in Good and Bad Times...  
*Dr. Jeff Weyers, Compass Nutrition*

12:00 - 12:15 Questions and Wrap Up

12:15 - 2:00 Lunch

12:00 - 8:00 Exhibit hall open

2:00 - 3:15 Afternoon workshop session 1

3:15 - 3:30 Break

3:30 - 4:45 Afternoon workshop session 2

5:00 - 7:00 Reception in exhibit area - **Sponsored by Alltech**

7:30 - 10:00 • Ice cream social and "bear pit" session  
What Do Progressive Dairies Want from Their Consultants?...  
*Moderator: Dr. Bob Van Saun, Penn State; Panel: Dr. Greg Bethard, DRMS; Mr. Walt Moore, Walmoore Holsteins; and Mr. Doyle Waybright, Mason Dixon Farms*  
**Sponsored by Diamond V Technologies - RSVP Required**

## Penn State Dairy Nutrition Workshop Agenda

### November 12, 2009

6:30 - 7:45 • Breakfast - **Sponsored by Elanco Animal Health**  
**RSVP Required** - Evolving Dairy Industry Efficiencies...  
*Dr. Tom Elam, FarmEcon LLC*

7:00 - 3:00 Exhibit hall open

7:45 - 8:00 ARPAS Update... *Dr. Kenneth Cummings, ARPAS*

8:00 - 8:45 Interaction of Hormones and Nutrition on Reproductive Efficiency...  
*Dr. Milo Wiltbank, University of Wisconsin-Madison*

8:45 - 9:30 Cows and Tie-stall Barns: Are They Made for Each Other?...  
*Dr. Neil Anderson, Ontario Ministry of Agriculture, Food and Rural Affairs*

9:30 - 10:15 Characteristics of Highly Profitable Dairy Farms: Striking a Balance for Long Haul Profits...  
*Mr. Mike Hosterman, AgChoice Farm Credit*

10:15 - 10:45 Break

10:45 - 11:45 Morning workshop session 1

11:45 - 12:00 Break

12:00 - 1:00 Morning workshop session 2

1:00 - 2:00 Lunch, sponsored in part by Adisseo

2:00 - 3:00 Afternoon workshop session

**Morning breaks sponsored by Venture Milling, Varied Industries Corporation, and Lallemand Animal Nutrition**

#### Post-conference Seminar

**Sponsored by Adisseo**

**RSVP Required •**

3:00 - 3:45 New Developments in Amino Acid Formulation for Dairy Cows...  
*Dr. Chuck Schwab, Professor Emeritus, University of New Hampshire*

3:45 - 4:00 Break

4:00 - 4:40 Practical Formulation Using CPM When Balancing for Amino Acids...  
*Dr. Brian Sloan or Dr. Daniel Luchini, Adisseo*

4:40 - 5:00 The Economic Environment for Dairy Producers and the Factors Influencing Revenue...  
*Mr. John Geuss, Adisseo*

Publication of this brochure was supported by  
**DSM Nutritional Products**

## Afternoon Workshop Descriptions—November 11, 2009

*Each participant can attend 2 workshops during the afternoon. Use these descriptions to rank your preferences on the registration form. Please mark at least 5; 1 = first choice. Due to space restrictions, workshops will be assigned in the order registrations are received. Numbers in parentheses indicate the participant limit for each workshop. Workshops are removed when full.*

**Cost Effectiveness of Feed Additives**—With today's tight dairy margins, we need a good return on investment on all diet ingredients. How do we gather and evaluate research on additives? Do ration parameters, environment and management affect responses? Once an additive is in a diet, how do we know it worked? And finally, how do we know an additive is still needed after six months? (75) *Instructor: Mary Beth de Ondarza, Paradox Nutrition*

**Formulating Real World Diets that Reduce Manure Ammonia without Affecting Milk Yields**—This workshop will cover results from a recent large experiment in which forage type, source of carbohydrate and protein were varied systematically. Optimum diets based on production, output of manure and manure nutrients, and production of ammonia from manure were developed and will be discussed. (75) *Instructor: Bill Weiss, Ohio State*

**Forage Analyses 101**—Forages are the main ingredients in most dairy rations and often the most variable in terms of nutrient content. Therefore, analyzing forages often and understanding those analyses will lead to improved ration formulation. Discussion will focus on a basic understanding of laboratory procedures and how those values relate to forage quality and utilization of forages by the cow. (30) *Instructor: Sarah Dinh, Penn State*

**Water Quality Issues for Dairy Cattle**—Water quality problems can lead to both reduced milk production and herd health issues. This session will focus on common water quality issues that can impact dairy herds based on data from Penn State water quality surveys. Example water testing strategies and interpretations will be described based on herd symptoms and surrounding land uses (such as natural gas drilling). (50) *Instructor: Bryan Swistock, Penn State*

**Not Even Really Good Cows Can Live Forever**—Dealing with dying and dead cows poses an animal welfare and management challenge to dairy producers. Discuss practical ways to address these issues, including animal handling and euthanasia protocols and guidelines. The basics of on-farm mortality composting will be reviewed along with real farm examples, and mass mortality plans for the dairy industry being developed across the country will be discussed. (50) *Instructors: Ernest Hovingh and Craig Williams, Penn State*

### ARPAS Members and Veterinarians

This conference is approved for continuing education credit.

## Afternoon Workshop Descriptions—November 11, 2009

**Bioactive Nutrients**—Some nutrients are bioactive and have the ability to change animal metabolism. Milk fat depression is one condition caused by a bioactive fatty acid. Discussion will focus on dietary conditions that result in absorption of nutrients that change yield or composition of milk. (30)

*Instructor: Kevin Harvatine, Penn State*

**Update on Limit Feeding Heifers**—Costs of raising dairy heifers are the second or third largest cost to production of milk and feed costs represent over 60% of rearing costs. On many farms, forages are limited in supply and are needed for lactating dairy cows as a first priority. Limit feeding diets that contain less forage may be an opportunity to reduce manure output, feed costs and heifer forage use. Discussion will focus on nutrition and management strategies for limit feeding dairy heifers. (40) *Instructor: Geoff Zanton, Penn State*

**Essential Oils as Modifiers of Ruminal Fermentation**—Research in natural products (essential oils, herbs, spices, botanicals) as modifiers of ruminal fermentation has dramatically increased in recent years. Can these products be as effective as feed antibiotics, and what is their future? (40)

*Instructor: Alex Hristov, Penn State*

**Assessing Heifer and Milking Cow Reproduction**—What are the best tools to evaluate reproductive performance? How can some of these measures go wrong? There are many appropriate questions related to reproductive performance: How many heifer or cow pregnancies are needed on my dairy? Are my breeders getting cows pregnant? Is my timed-AI program working? Are my breeders following protocols? Discussion will focus on answering these questions. (40) *Instructor: Greg Bethard, Dairy Records Management Systems*

### [www.das.psu.edu/dairynutrition](http://www.das.psu.edu/dairynutrition)

Online registration | Updated list of available workshops | Registration forms  
Online hotel reservations | Proceedings from previous years

## Morning Workshop Descriptions—November 12, 2009

**Each participant can attend 1 two-hour workshop OR 2 one-hour workshops during the morning.** Use these descriptions to rank your preferences on the registration form. Please mark at least 5; 1 = first choice. Workshops are removed from this list when full to capacity.

### 1-HOUR SESSIONS

**Reducing Failure of Passive Transfer in Calves by Pasteurizing Colostrum**—This workshop will outline major points that can help farmers reduce the number of calves with low blood IgG. Special emphasis will be given to recent research on pasteurizing colostrum to minimize disease transmission and increase IgG absorption. (25) *Instructor: Jud Heinrichs, Penn State*

**Corn Hybrid Performance for Silage Production: PDMP/Penn State Project Overview for 2009**—Corn hybrid selection can affect yield and forage quality and impact cost of production on dairy farms. This discussion will share the results of the 2009 hybrid performance trials and other studies evaluating various testing methods on hybrid ranking and performance. (40) *Instructors: Greg Roth, Penn State; Chris Canale, Cargill Animal Nutrition; Gary Kline, PDMP*

**Heifer Housing Alternatives**—Whether building a new structure for dairy heifers or remodeling an existing one, building features and layout must provide a productive environment for the occupants. This session will discuss space requirements, suggested management groups, and common housing layouts to consider for dairy heifers from weaning to pre-fresh. (50) ONE SESSION ONLY  
*Instructor: Dan McFarland, Penn State*

**Future Genetic Improvement Opportunities through Genomics and Feed Intake Evaluation**—Genomic genetic evaluations are now available and genetic control of feed intake has become a research focus. This workshop will discuss how to implement genomic selection techniques to improve cow performance and strategies to optimize feed efficiency through genetic selection. (20)  
*Instructor: Chad Dechow, Penn State*

**Creating a Productive Environment for Dairy Calves**—There seem to be infinite calf housing alternatives, but the best ones benefit both calves and caregivers. This session will discuss essential housing features, look at popular housing alternatives, and cover sizing and management that benefit calf health and performance. (50) ONE SESSION ONLY *Instructor: Dan McFarland, Penn State*

## Morning Workshop Descriptions—November 12, 2009

Workshops will be assigned in the order registrations are received. Numbers in parentheses indicate the participant limit for each workshop. **Please note, if you choose a 2-hour session you will only attend 1 workshop.**

### 2-HOUR SESSIONS

**Synching in a Sea of Options**—Discover the physiology underlying the various programs available for synchronization of reproduction in lactating cows. We will discuss the pros and cons of different methods and the expected outcomes. Practical aspects of managing a synchronization program also will be discussed. (50) *Instructor: Milo Wiltbank, University of Wisconsin-Madison*

**Case Study: This Dairy Profit Team Needs Tools for Success**—This workshop will use case study format to allow you to discuss a real (names changed for confidentiality) dairy operation and the issues faced by the Dairy Profit Team working with the farm. Come prepared to see an overview of tools being used, analyze the data and make some suggestions for next steps to success. (40)  
*Instructors: Lisa Holden and Erica Cowan, Penn State*

**Lameness and Its Relationship with BCS**—Lameness is the most significant challenge for the dairy industry to overcome, given its obvious disruption of animal welfare and severe economic losses. This workshop will unearth the association of body condition score and lameness and explore novel approaches to lameness prevention. (75) *Instructor: Rodrigo Bicalho, Cornell*

**Assist Your Non-Electric Clients with Milk Quality Concerns**—Learn to evaluate milk quality measures on non-electric dairies. Preliminary incubation counts (PIC) have recently been included in bonus schedules for fluid milk plants and can lead to milk income deductions or premiums. Tools will be provided to diagnose risk factors on client farms and demonstrate how to work with other advisors to resolve causes. (25) *Instructor: Sandy Costello, Penn State*

**Profit Strategies: Information-Based Decision Tools for Farm Advisors**—Sound decisions are based on analysis of accurate information. Readily available tools for conducting such analyses will enable farm advisors to show producers how decisions impact profitability. Participants will view and use a number of tools in this interactive workshop. All participants will receive a flash drive containing these tools. (40) BRING YOUR LAPTOP *Instructor: Brad Hilty, Penn State*

### This publication is available in alternative media on request.

Penn State encourages 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 Coleen Jones at 540-997-5809 in advance of your participation.

Penn State is committed to affirmative action, equal opportunity, and the diversity of its workforce.

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

## Afternoon Workshop Descriptions—November 12, 2009

**Each participant can attend 1 workshop during the afternoon.** Use these descriptions to rank your preferences on the registration form. Please mark at least 4; 1 = first choice. Due to space restrictions, workshops will be assigned in the order registrations are received. Numbers in parentheses indicate the participant limit for each workshop. Workshops are removed from this list when full to capacity.

**Strategies for Trace Mineral Supplementation**—There is increasing evidence that trace mineral supplements may boost health and performance of dairy cattle. However, not all supplements are created equally. Discussion topics will include the relationship between mineral form and animal availability, times when trace mineral supplementation may be beneficial, and the need for consideration of mineral form when determining supplementation levels. (40)

*Instructor: Tanya Gressley, University of Delaware*

**Feeder Steps to Success for Improving TMR Consistency**—This seminar will cover the feeder steps to success for improving within and between batch consistency of TMR. Discussion will cover all feeder's steps throughout the day from facing silage, to reading refusal levels, to mixing and delivering the TMR and to coordination of feeding with milking. Presentation will be very interactive with lots of video to demonstrate some of the key factors causing inconsistency in TMR. (75)

*Instructor: Tom Oelberg, Diamond V Technologies*

**Using DHI Test Day Milk Yields to Examine "Employee" Performance**—Most dairies have monthly milk production records for their cows (i.e. "employees"), but do they use them routinely to evaluate performance? This workshop will focus on utilizing those monthly records to monitor herd, group and individual cow performance to determine if all "employees" are performing adequately. (30)

*Instructors: Ken Griswold and Rob Goodling, Penn State*

## Feed Management Workshop—November 10, 2009

We are pleased to again offer training for consultants interested in Feed Management Planner Certification. Feed management is one of the 6 core elements of a Comprehensive Nutrient Management Plan (CNMP) as defined by NRCS. ***This workshop is targeted for those who are NOT yet certified.*** An opportunity to take the certification exam will be provided at the end of the workshop.

12:00 - 1:00	Lunch
1:00 - 1:20	Introduction to Workshop and Resource Materials... <i>Ms. Virginia Ishler, Penn State</i>
1:20 - 1:40	Defining the Purpose: Feed Management as Part of CNMP... <i>Ms. Jana Malot, NRCS</i>
1:40 - 1:50	The Certification Process... <i>Dr. Joe Harrison, Washington State University</i>
1:50 - 2:15	Identify Conditions Where Practice Applies... <i>Dr. Sarah Dinh, Penn State</i>
2:15 - 2:45	Assessing the Opportunities: Opportunity Checklist... <i>Dr. Charles Stallings, Virginia Tech</i>
2:45 - 3:00	Break
3:00 - 3:30	Economic Evaluation: Alter Feed Management or Export Manure... <i>Ms. Becca White, Washington State University</i>
3:30 - 4:15	Feed Management Plan Development... <i>Ms. Virginia Ishler</i>
4:15 - 5:00	Implement and Monitor... <i>Ms. Jana Malot and Mr. Tim Pilkowski, NRCS</i>
5:00	Adjourn or Certification Exam

### Registration Fee: \$30

*In addition to fee for Nutrition Workshop  
Includes lunch and reference materials*

For more information contact

Virginia Ishler at  
vishler@gmail.com or (814) 863-3912

## Conference Location—Holiday Inn, Grantville, PA

### Three ways to make reservations:

Call (717) 469-0661

Email [inninfo@stayholiday.com](mailto:inninfo@stayholiday.com)

Visit [www.stayholiday.com](http://www.stayholiday.com)

Located just off of I-81  
Hershey Exit 80 (old exit 28)

Mention the Nutrition Conference  
to receive the conference rate of  
\$102/night (single or double room).

For online room reservation, enter  
Group Booking Code PSN.

Holiday Inn  
Harrisburg-Hershey Hotel  
604 Station Road  
Grantville, PA 17028