

TO: ADSA DISCOVER Conference Registrants
FROM: Molly Kelley, ADSA DISCOVER Conference
RE: Planning for the Conference
DATE: April 10, 2007

To: Conference Registrants

Thank you for registering for the upcoming DISCOVER Conference on Food Animal Agriculture, "Integrating Nutritional Management into Environmental Stewardship." As you prepare for your trip, I thought it might be useful to relay a few relevant comments. Additionally, I have attached the program, including times, and the latest registration roster for your review.

* **Housing:** A review of the housing roster has revealed that just about everyone has made their lodging reservations – that's great! Feel free to contact me if you have trouble with your room arrangements. Also, please let me know if you are planning to share a room with someone (there is no additional charge for more than one person in a room at Abe Martin). My goal is to ensure every registrant has a room.

* **As you pack:** CASUAL ATTIRE is strongly recommended for the entire conference. We will be in a retreat type setting and we want you to relax and interact in a comfortable environment. You will find the folks at Abe Martin Lodge (AML) and adjacent town of Nashville to be friendly and casual. Weather is hard to predict for this time of year. Temperatures could range from the 50's to the 70's. We recommend dressing in layers and bringing along some comfortable shoes. The Lodge lies in the middle of Brown County State Park, a beautiful wooded area with miles of hiking trails, scenic lakes and nearby golf courses.

* **Registration:** Conference materials and notebooks will be available for pick-up from 3:30 to 5:30 p.m. on Sunday, April 15 at a registration table set in the Melodian Room (to the left of hotel registration) at Abe Martin Lodge. We encourage you to pick up your conference materials on Sunday so we can begin on time Monday morning. Alternatively, we'll be set up again Monday morning starting at 7:00 a.m.

* **Schedule:** All conference sessions will be held in the Melodian Room on the first floor of the Lodge. The general format for the sessions allows for a brief question and clarification period immediately after each presenter with a longer open discussion period at the end of each session. We want free and open discussion and only ask that we all be courteous and follow the directions of each session Moderator who will manage the time available. Monday's sessions will be in the morning and evening; Tuesday's sessions will be morning, with group breakouts in the afternoon. Tuesday evening will be free for group dinners at the many great eateries in nearby Nashville. Wednesday morning's session should wrap up no later than 12 Noon.

* **When you arrive on Sunday:** Upon arrival at the Lodge, proceed to the Conference registration desk in Melodian. Check-in time at the Lodge front desk for your room is at 4:00 pm, so getting your Conference materials first may be helpful. Conference registration will be Sunday from 3:30 – 5:30. Sunday evening's events will be held off site at The Overlook Restaurant at the beautiful Salt Creek Golf Club just 1.5 miles east (on Highway 46) of the North or "covered bridge" entrance to the Brown County State. It is important that we have an accurate number for this meal, so **please let me know if you are unable to attend the meal, or if you plan to bring a spouse.** A few of us will have cars to shuttle those needing transportation. Those with cars willing to provide rides and those needing rides should meet in the AML lobby at 5:15.

The reception with cash bar will begin at 5:30 p.m. Seating for dinner will begin at 6:00 p.m. If you have special dietary needs, please let me know ahead of time. After the meal and a few welcoming comments Dr. Otto Doering, Purdue University will take the podium, setting the stage for the conference with his keynote address, "2017: The Environmental Regulatory Environment." This evening will be a great opportunity to get to know other participants, get an introduction to the Conference, and enjoy great conversation in a delightful and picturesque setting.

* **Meals at the Conference:** Your conference fee includes Sunday's meal at The Overlook Restaurant, and breakfast and lunch Monday and Tuesday, and breakfast on Wednesday at the dining hall in Abe Martin Lodge. We will be seated as a group, so please wear your name badge to the meals so that you can be readily identified as a DISCOVER Conference participant. Meals are a wonderful time to have further discussion about session topics and to get to know the other conference participants. Evening meals on Monday and Tuesday are on your own. The restaurant at the lodge is open. Alternatively, we encourage you to go off grounds and sample some of the fine eateries within minutes of the park. Nearby Nashville has a number of great restaurants from which to choose.

* **Spouse Meal tickets:** If you are bringing a spouse, you are welcomed to include them in group meals. We kindly request you contact me by Tuesday, April 10 if you plan to include your spouse in any or all group meals so we can include them in our counts. Meal prices are not finalized, but should be in the approximately \$23 for the Sunday evening meal, \$9.50 for breakfasts (Mon-Wed) and \$11.50 for lunches (Mon-Wed). Once at the conference, stop by registration to pay for the meals you'd like to add.

* **Conference Roster:** I have attached the latest registration list for the conference. As you can see, we have nice sized conference with 63 registrants representing a wide array of expertise and interests. **Please take a moment to review your roster listing**, and contact me at kelleymt@aol.com if anything needs to be revised or added. A printed copy will be included in your program binder.

* **Conference Materials:** All registrants will receive a program binder at registration. To encourage open discussion, no proceedings of this meeting will be published. The materials provided in the book and at the DISCOVER Conference are for the personal use of DISCOVER Conference Registrants, and must not be cited, duplicated, or referenced. The only exception is if an already-published article is distributed or the author specifically states in writing on any other handout information, that it may be distributed and cited. Included in this notebook will be Interpretive Summaries by each speaker. These short bits give an overview of each topic in laymen's terms. We hope they prove a useful addition to the speaker notes and other information traditionally provided in the program notebooks.

* **Backcasting Scenarios:** Unique to other Discover Conferences to date, this program will incorporate the use of backcasting scenarios. As a conference attendee, you will be actively involved in addressing topics within the scenarios by working with others to develop nutritional strategies to achieve the desired future outcomes. The breakout session will be held on Tuesday afternoon. I have included the scenarios with this mailing. You are encouraged to review these now and begin thinking about them based on your background and perspective.

* **Transportation to/from Indy Airport:** Nearly every rental car agency is represented at the airport. For a complete listing, go to <http://www.indianapolisairport.com/> and click on GROUND TRANSPORTATION. Additionally, shuttle service between the Indianapolis Airport and Abe Martin Lodge in Nashville, IN is being offered by Signature Limousine.
-- Round trip rates (total for up to 3 people) are \$177 round trip (does not include driver gratuity.)
-- For larger groups (total for up to 9), limousine service is available for \$253 round trip.

ADVANCED RESERVATIONS ARE REQUIRED. Phone: 800-589-6004 or 812-332-6004. Identify yourself as an **ADSA Discover Conference participant to get this special negotiated rate**. If you are planning on a shared ride, have your travel plans already confirmed with your travel partners and indicate as such when making your reservation. Upon arrival at the airport, pick up your luggage and proceed toward baggage claim 2. There you will find signs directing you out the door and across the streets to the Ground Transportation Center. Once there, go to the check-in counter for Signature Limousine/Bloomington Shuttle.

* **Driving Directions:** Abe Martin Lodge is in Brown County State Park, Nashville, Indiana. It is about one hour (50 miles) south of the Indianapolis International Airport. The easiest drive from the Indianapolis Airport is to take I-465 SOUTH and EAST to I-65 SOUTH (marked, "To Louisville"). Go south on I-65 for 39 miles to the exit at State Highway 46 (Columbus/Nashville). Turn right (west) on Highway 46 for about 13 miles. As you pass Salt Creek Golf Retreat (where some of you will be staying and the site of our Sunday Evening dinner), you'll see the Brown County State Park entrance on your left. This is about 2.5 miles before you get to Nashville. There is a nominal one-time entry fee into the park. Once registered at the lodge, your key will serve as your park entry pass. If you are staying off site, be sure to ask for an off-site pass when you register. The pass will allow you, after your first admission to the park, to enter and leave without paying each time.

* **Internet Access:** Wireless internet access is available throughout the lodge, the meeting rooms and lodge rooms at Abe Martin. You may wish to note, wireless is not available in the cabins and there are no phones in the cabins.

* **Recreational Opportunities on Monday afternoon:** Monday sessions are during the morning and evening, leaving the afternoon free for recreation. Several forms of recreation are available, giving you the opportunity to interact with colleagues. The park has tennis, horseback riding, and miles of hiking trails from easy to rugged.

In addition, arrangements have been made with the Salt Creek Golf Course for special rates for those of you who may wish to play golf aside from the Monday outing. Salt Creek is adjacent to the Park and is an 18-hole course taking advantage of the vistas bordering the Park. Half of the course is carved through mature forests with hills and deep ravines, while the balance of the holes wind through the meadowlands crossing Salt Creek seven times. Some rental clubs are available. Tee times are available between 12:30 and 3:30 on Monday. Call the pro shop to arrange a tee time at 812-988-7888.

On Monday evening, you are invited to stay after the session to enjoy conversation and refreshments (alcohol will be offered via informal “donation” bar) with other conference participants. Aside from that, alcohol beverages are not sold at the Lodge, or in any other part of the Brown County State Park. However, several stores and restaurants in nearby Nashville do sell and serve alcohol.

Again, thank you for participating in this DISCOVER Conference. I hope you will find the conference beneficial. If you have any questions as you prepare for your trip, feel free to contact me!

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Integrating Nutritional Management into Environmental Stewardship
April 15-18, 2007
Abe Martin Lodge in Nashville, Indiana

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63 REGISTRANTS

Conference Program
12th DISCOVER Conference
Integrating Nutritional Management into Environmental Stewardship
April 15-18, 2007
Abe Martin Lodge in Nashville, Indiana

SUNDAY, APRIL 15, 2007

3:30 – 5:30 PM Registration – Melodian Hall, Abe Martin Lodge

5:30 – 9:00 PM Welcoming Reception and Dinner – Salt Creek Golf Retreat

Session I: Opportunities and Challenges: Setting the Stage *Moderator: Stephanie Frankenbach, JBS United, Inc.*

Welcome. *Bill Baumgardt, DISCOVER Opportunities and Wendy Powers, Program Co-Chair*

Keynote Speaker. 2017: The Environmental Regulatory Environment *Otto Doering, Purdue*

University

MONDAY, APRIL 16, 2007

7:00 AM BREAKFAST – Allison Dining Room, 2nd Floor, Abe Martin Lodge

8:00 AM Welcome and Introductions, Melodian Hall

Set up 2009 Scenario *Session Moderator: Wendy Powers, Michigan State University*

Morning Session II: Technologies and Strategies Available to Meet 2009 Reduction Goals

Moderator: Wendy Powers, Michigan State University

Actions and Reactions for 2007 – 2009:

- **Non-ruminants** *Theo Van Kempen, Provimi, Belgium*
- **U.S. Beef Cattle Industry** *Robbi Pritchard, South Dakota State University*
- **Dairy Cattle** *Glenn Broderick, USDA – ARS US Dairy Forage Research Center*

Questions and Open Discussion

Conference Summarizers and Provocateurs *Alan Sutton, Purdue University and Tom Graham, Davis, CA*

10:10 AM BREAK

10:30 AM **Morning Session III: Changing the Paradigms to Meet 2009 Targets** *Moderator: N. Andy Cole, USDA-ARS-CPRL*

Feedstuff Selection *Galen Erickson, University of Nebraska, Lincoln*

Formulation to Include Environmental Impact. *Normand St. Pierre, The Ohio State University*

Endpoint Criteria: Optimal vs. Maximal Performance *Roselina Angel, University of Maryland*

General Open Discussion

Conference Summarizers and Provocateurs *Alan Sutton, Purdue University and Tom Graham, Davis, CA*

12:10 PM **LUNCH – Allison Dining Room.** *Afternoon free for informal group discussions and/or recreation. Dinner on your own.*

6:30 PM **ICE CREAM SOCIAL – Melodian Hall**

Evening Session IV: Open Discussion: The Impact and Feasibility of Concepts Presented Thus Far *Moderator: Scott Radcliffe, Purdue University*

Conference Summarizers and Provocateurs *Alan Sutton, Purdue University and Tom Graham, Davis, CA*

TUESDAY, APRIL 17, 2007

7:00 AM BREAKFAST – Allison Dining Room

8:00 AM **Announcements/Overview of day – Melodian Hall.** *Moderator: Michel Wattiaux, University of Wisconsin, Madison*

Morning Session V: Improving Animal Efficiencies. *Moderator: Michel Wattiaux, University of Wisconsin, Madison*

1. Defining Efficiency - Animal vs. Farm-Scale. *Michael VandeHaar, Michigan State University*

2. Analysis of Post-Absorptive N Metabolism *Mark Hanigan, Virginia Tech*
General Open Discussion
Conference Summarizers and Provocateurs *Alan Sutton, Purdue University and Tom Graham, Davis, CA*

9:55 AM **BREAK**

10:15 AM **Morning Session VI: Animal Nutritional Strategies and Technologies for 2012 and Beyond.**
Moderator: Roselina Angel, University of Maryland
3. Impact of Enzymes, Additives, Microbials, Beta-Agonists. *Mike Bedford, Syngenta Animal Nutrition*
4. Energetic Efficiency of Reducing Methane Production. *Kris Johnson, Washington State University*
5. Genetic Improvements – Potential from a Commercial Perspective *Frank Siewerdt, University of Maryland*
General Open Discussion
Conference Summarizers and Provocateurs *Alan Sutton, Purdue University and Tom Graham, Davis, CA*
Set the Stage for the Afternoon *David Beede, Michigan State University*
Breakout Groups

11:55 AM **BOX LUNCH** to breakout areas

1:00 PM **Groups should be at their assigned breakout groups and begin their discussions.**
Afternoon Session VII: Breakout Session - The Feasibility of Nutritional Strategies and Approaches for Implementation by 2012. *Facilitator: David Beede, Michigan State University*

2:30 PM **BREAK**

3:00 PM **General Session: Share Breakout Thoughts – Melodian Hall**
Conference Summarizers and Provocateurs *Alan Sutton, Purdue University and Tom Graham, Davis, CA*
Adjourn for the afternoon

Dinner & Tuesday Evening – free for discussion and dinner on your own as groups

WEDNESDAY, APRIL 18, 2007

7:00 AM **BREAKFAST – Allison Dining Room**

8:00 AM **Announcements/Overview of day – Melodian Hall** *Moderator: Mary Ann Rozum, USDA/CSREES*
Morning Session VIII – Meeting Potential 2017 Environmental Goals *Moderator: Mary Ann Rozum, USDA/CSREES*
Panel Discussion:
- *Roberta Parry, USEPA/NRCS*
- *Tom Graham, Veterinary Consulting Services*
- *Stephanie Frankenbach, JBS United, Inc.*

10:10 AM **BREAK**

10:30 AM **Synthesize Discussion and Provide View of World in 2017 – Alan Sutton, Purdue University**
General Open Discussion
Summary of DC12 – David Beede, Michigan State University

12:00 PM **ADJOURN.** Lunch on your own.

Proposed Backcasting Scenarios
12th DISCOVER Conference
Integrating Nutritional Management into Environmental Stewardship

3/27/07

Scenario 1:
Year: 2012

Overview:

- a. In late 2007, a two-phase legislation was passed that required all livestock production facilities to reduce N and P excretion by 20% as of 2009, relative to levels recorded in 2007 with additional reductions required by 2012. Also by 2009, a 20% reduction in ammonia emissions was mandated along with a 10% reduction in hydrogen sulfide emissions, and a 10% reduction in dust emissions (Total Suspended Particles).
- b. It is now 2012. This first round of reductions (2009 deadline) was accomplished relatively easily. The second phase called for reductions in N and P excretion by 50%, ammonia and NO_x emissions by 50%, hydrogen sulfide emissions by 30%, and PM_{2.5} and PM₁₀ by 40%. Additionally, beef feedlots and dairy operations were required to reduce methane emissions by 40%. Initially, it appeared as if much of the U.S. livestock production was going to move to foreign countries where environmental regulations were less rigorous. However, with high oil prices making the prospect of importing expensive, and with the possibility of a Global Environmental Protection Act being discussed, livestock production has been maintained and even increased 5-10% across all species. To be in compliance with the new environmental regulations, additional costs were incurred by producers, raising the cost of production by approximately 5%.

How were the 2009 reductions achieved?

What changes in approach were needed to reach the 2012 benchmarks?

What sort of measurements and documentation allows for accurate follow-up on each of the targeted emissions?

Scenario #2

Year: 2017

Mandated reductions in nutrient losses from livestock were phased in over a 5-year period (2007 – 2012). In the following five years (2012-2017), an incentive program was introduced to encourage even greater emissions reductions. This program requires that producers document change starting in year 2012. Baseline emissions were set in 2012 and the goal was for a 5% decrease from baseline yearly, for all species and all regulated emissions (N, P, VOCs, ammonia, hydrogen sulfide, nitrogen oxides, sulfur oxides, methane, PM_{2.5} and PM₁₀), for a total of a 25% decrease vs. baseline on the 5th year (2017).

The incentive program was a success, with more than 50% of producers establishing an effective measurement and documentation program by year 3 (2015) and meeting the 5% annual decrease vs. the 2012 baseline. Compliance increased yearly and by 2017 the incentive program has accomplished an unprecedented level of adoption (80%) that is able to be documented and verified.

The decreases were achieved without greater producer attrition than had been normal prior to the setting of these goals. No loss of productive capacity within any specific region or within the US has been seen.

How were reductions achieved?

What sort of measurements and documentation allows for accurate follow-up on each of the targeted emissions?

What incentives could have resulted in such high adoption?