

Twenty-Third Annual Conference

of the
American Association
of
Bovine Practitioners
and
International Mastitis Symposium
National Mastitis Council

Indianapolis, Indiana
September 13-16, 1990
Specialty Seminars September 10-15, 1990

Theme: "Team Up In Indy"

Team Up In Indy

The 1990 American Association of Bovine Practitioners meeting in Indianapolis is unique as AABP teams up with the National Mastitis Council to feature an International Mastitis Symposium. Dairy Sessions will run throughout the conference featuring international speakers discussing such topics as resistance mechanisms, mastitis control in heifers and dry cows, environmental mastitis advances in milking hygiene and milking systems, therapy, diagnostics, mastitis monitoring, economics, and case histories.

Concurrent with the Mastitis Symposium a group of outstanding Beef and General Sessions will be presented. The Cow/Calf sessions feature programs on reproductive efficiency in beef cattle. The 3 sessions will cover nutrition, economics, abortions, replacement rearing and selection, and record keeping as they relate to Cow/Calf reproduction programs. Feedlot Sessions will deal with the interactions of nutrition and health, feedlot decision, analysis, quality assurance and residue avoidance, and the increasing awareness of animal welfare issues in the feedlot.

The General Sessions will feature topics applicable to the beef and dairy cattle practice. General Sessions I and II will feature programs on clinical nutrition, and infectious diseases. General Sessions III takes a crystal ball look at animal production and veterinary medicine into the 21st century.

The 1990 program will feature 17 specialty seminars including a blend of popular seminars from prior AABP meetings and a group of new seminars. All seminars will have limited enrollments to facilitate in-depth coverage of subject material and encourage open discussions between faculty and participants.

Practice tips and research summaries will be offered as in previous years along with the computer software demonstration lab which was a popular addition to the 1989 program.

Social activities for the 1990 meeting will include a reception followed by the Opening Session and a Friday evening at the beautiful Indiana Roof Ballroom. Opening Sessions to the AABP meeting seem to get bigger and better every year and this year will be no exception. The program will kick off in the exhibit hall with a reception and stand up meal featuring "Hoosier Ribeyes" and conclude at the Westin Hotel with the Opening Session which features an outstanding speaker. A few other surprises will make this a session you do not want to miss. Exhib-

its will open early Thursday afternoon, September 13 so plan to arrive early.

Due to Indianapolis' central location and accessibility by automobile for many members, the 1990 meeting will offer an excellent opportunity to bring the spouse along. Few meeting sites have offered more for the spouses than Indianapolis. Planned activities include 3 tours of the Indianapolis and central Indiana area and 2 spouse seminars. Within a short distance of the Westin Hotel is excellent shopping, shows, and dining in the downtown area. The internationally famous Indianapolis Zoo is only one mile from the headquarters hotel. The local Arrangements Committee and the IVMA Auxiliary have worked hard to make this the best spouse program ever.

Hopefully you are already planning to attend the 1990 AABP meeting. Also plan to bring the spouse along as we "Team Up In Indy."

David Mc Clary, Program Chairman

Program Committee

Program Chairman	David Mc Clary
Seminar Coordinator	Gordon Atkins
Scientific Session Coordinator	John Fetrow
Dairy Session Coordinator	Darrel Johnson
Beef Cow/Calf Session Coordinator	Kurt Wohlgenuth
Beef Feedlot Session Coordinator	Tim Jordan
Practice Tip Session Coordinator	Greg Ledbetter
Research Summary Session Coordinator	Larry Heider
Local Arrangements Coordinator	Jake Hines
Indiana Vet. Med.-AABP Liaison	Paul Dieterlen
Exhibits Chairman	Samuel Hutchins
Continuing Education Liaison	Larry Hutchinson
Conference Manager	Harold Amstutz
National Mastitis Council Representatives	Larry Smith, Ann Saeman, J. Woodrow Pankey

AN INVITATION TO INDIANAPOLIS

Jake Hines - District 5 Director

District 5 is pleased to host this year's AABP convention, and for the first time ever combine our meeting with the National Mastitis Council. Our "Team-Up-In-Indy" theme is exactly this, an opportunity

to rekindle old friendships and make new ones within our two organizations.

Thanks to the unselfish response from the Indiana Veterinary Medical Association and the local Central Indiana Veterinary Medical Association and their auxiliaries, our reception in Indianapolis will be a delightful experience. Knowledgeable, friendly people will be available to provide information throughout the convention.

If you arrive by air our welcome will start with a booth at the airport to provide assistance. Look for it! Indianapolis is easy to get to by car and is located on major Interstate systems.

Our headquarters hotel, the Westin, is located within walking distance of many Indianapolis great attractions.

The local arrangement committee has arranged a selection of interesting seminars and tours for our spouses.

The scientific program speaks for itself and practitioners who miss this convention will have only themselves to blame.

PRISIDENT'S WELCOME

Tom Fuhrmann

I'm glad that you are reading this program and are thinking of attending the 23rd annual conference. AABP is making a giant step forward this year—cooperating with the National Mastitis Council to host an International Mastitis Symposium! Consider where you will meet and hear international speakers, world renowned for their contribution in the field of animal health and mastitis. Consider that you will visit with and see more veterinarians than ever at a larger, expanded AABP meeting. Consider that you will meet animal and dairy scientists, non-veterinarians, invited for the first time ever to discuss issues of animal health that we all must share. Consider that our exhibit hall will offer more to view as we invite our NMC guests. Consider that the beef program with cow/calf and feed lot sessions are stronger than ever to give the specialists or generalist a solid, practical program.

Indianapolis is a charming town; the Westin hotel and adjoining convention center facilities are some of the nicest we've had to host our annual meeting. I welcome each of you to come, to enjoy, and to continue the tradition of top quality continuing education comradery, social activities and now the international flavor of the best meeting for bovine practitioners in the country—The 1990 AABP Annual Meeting!

REGISTRATION

Wednesday, September 12—7:00 a.m. - 5:00 p.m.
1st Floor Foyer - Indiana Convention Center

Thursday, September 13—7:00 a.m. - 5:00 p.m.
2nd Floor Foyer - Westin Hotel

Friday, September 13—7:00 a.m. - 5:00 p.m.
2nd Floor Foyer - Westin Hotel

Saturday, September 15—8:00 a.m. - 5:00 p.m.
2nd Floor Foyer - Westin Hotel

Sunday, September 15—8:00 a.m. - 1:00 p.m.
2nd Floor Foyer - Westin Hotel

(Registration personnel sponsored by Central Indiana Veterinary Medical Association)

SPEAKER READY ROOM

September 10-12

Room 262 - Indiana Convention Center

September 13-16

Mayor's Suite - Westin Hotel

PRESS ROOM

September 13-16

Senate 1 - Westin Hotel

AABP BOARD OF GOVERNORS MEETINGS

Congress Room - Westin Hotel

Wednesday, September 12—8:00 p.m. - 10:00 p.m.

Capitol 1 Room - Westin Hotel

Thursday, September 13—7:00 a.m. - 5:00 p.m.

Friday, September 14—12:00 noon - 2:00 p.m.

Saturday, September 15—12:00 noon - 2:00 p.m.

AABP COMMITTEE MEETINGS

Thursday, September 13—1:00 p.m. - 3:00 p.m.

Capitol 2 Room, Westin Hotel

Nutrition Committee—Senate 2 Room, Westin Hotel

NATIONAL MASTITIS COUNCIL MEETINGS

NMC Executive Committee - Thursday, September 13

2:00 p.m. - 5:00 — Capitol 3 Room — Westin Hotel

NE 112 Group — Thursday, September 13

8:00 a.m. - 5:00 p.m. — Grand Room 2 — Westin Hotel

IDF A2 Group — Thursday, September 13

2:00 p.m. - 5:00 p.m. — Grand Room 1 — Westin Hotel

OPENING EVENING HOSPITALITY

Featuring "Hoosier Hospitality"

and

The Opening Session with Orion Samuelson

Thursday, September 13

Exhibits Open—2:00 p.m. - 7:00 p.m.

Reception and Meal—5:00 p.m. - 7:00 p.m.

Exhibit Area — Indiana Convention Center Hall A

Program Committee Welcome—7:15 p.m. - 7:45 p.m.

Keynote Speaker - Orion Samuelson—7:45 p.m. - 9:00 p.m.

Grand Ballrooms — Westin Hotel

If you haven't been able to spend ample time in the exhibit area at the last few AABP meetings due to conflicts with the program come early to Indianapolis. The Exhibit Hall will open at 2:00 p.m. on Thursday prior to the Opening Session allowing you to browse through the exhibits and meet old and new friends. "Hoosier Hospitality" will follow at 5:00 p.m. featuring snacks, drinks, a cash bar, ice cream and the famous "Hoosier Ribeye" sandwiches grilled by members of the Indiana Cattlemen's Association.

Following the reception the Opening Session will get the 1990 AABP meeting off to a great start. Following a welcome to Indianapolis, introduction of the program, and awards ceremony, and possibly a few other surprises the program will be turned over to our keynote speaker, Orion Samuelson. Mr. Samuelson is known throughout the country for his familiar voice which is heard daily on 300 radio stations with the 'National Farm Report'. He is also seen on 160 TV stations weekly with his syndicated 'US Farm Report'. He is a talented speaker who will first make you laugh, then make you cry, but in the end will make you think. Don't miss the Opening Session and Orion Samuelson.

REGISTRANTS' LUNCHEON

Friday, September 14 and Saturday, September 15

12:00 noon - 1:30 p.m.

Exhibit Area, Convention Center, Hall A

These two luncheons are for all registrants, including exhibitors. Spouses have other activities scheduled and are not included. Tickets are provided in registration packets at no additional charge.

ANNUAL BUSINESS MEETING AND AWARDS LUNCHEON

Sunday, September 16

12:00 noon - 2:00 p.m.

Grand Ballrooms 4 and 5, Westin Hotel

All AABP members should attend and sit in areas designated for their district. Membership business will be conducted. Highlights are presentation of awards and officer elections. Tickets are included in registration packets.

SPOUSE HOSPITALITY ROOM

Thursday, September 13 – Sunday, September 16

Cameral Room, Westin Hotel

PUBLIC RELATIONS BREAKFAST

Friday, September 14

7:00 a.m. - 9:00 p.m.

Capitol 1 Room, Westin Hotel

For the third year the Board of Governors will host a breakfast for media personnel to familiarize them with the AABP and our annual meeting. Attendance is by invitation. Breakfast funded by Indiana Veterinary Medical Association.

CHRISTIAN VETERINARY

MISSION BREAKFAST

Saturday, September 15

6:45 a.m. - 8:00 a.m.

Capitol 1 Room, Westin Hotel

Free will offering will be taken at the breakfast. Please indicate on the general meeting registration form if you plan to attend. Tickets will not be issued.

COMPUTER SOFTWARE DEMONSTRATION

Objective: This session is designed to provide individual and software companies with an opportunity to demonstrate their programs to interested practitioners.

Program: This session has been expanded to consist of two portions:

1. Software Lecture Presentations

These will be a series of twenty minute presentations demonstrating computer software programs on a wide variety of topics. It will be an excellent opportunity to get an overview of new software available for beef and dairy records, practice management, nutrition, and other areas of bovine practice. A schedule of presentations will be available at the registration desk.

Fee: Free to all registrants

Location: Congress 2 Room - Westin Hotel

Date & Time: September 13 (Thursday) 8:00 a.m. - Noon, September 14 (Friday) 8:00 a.m. - 5:00 p.m.

Coordinator: Jim Ehrlich (518) 638-8566

2. Computer Demonstration Lab

This session will be held in the computer lab where thirty computers will be available for interested practitioners to get some "hands-on" experience working with some of the programs demonstrated in the "Software Lecture Presentation" portion. For programs with copyrights that permit free distribution, we will have one computer designated to copying diskettes. Bring your own, 3.5" or 5.25" floppies. Beginners and experts are equally welcome.

Fee: Free to all registrants.

Location: Room 122 - Indiana Convention Center

Date & Time: September 14 (Friday) 8:00 - Noon, 7:00 p.m. - 10:00 p.m., September 15 (Saturday) 7:00 p.m. - 10:00 p.m., September 16 (Sunday) 8:00 a.m. - 5:00 p.m.

Coordinator: Jim Ehrlich (518) 638-8566

GENERAL SESSIONS

Three general sessions will be held during the first 1½ days of the program format. Each session offers registrants practical cow-side information for general practitioners. Whether you work with dairy or beef cattle, whether you are in a mixed practice or do exclusively cattle work, these sessions contain useful information for you.

GENERAL SESSION I

"Feeding the Rumen: That Vat That Pays Your Bills"

Friday, September 14

8:00 a.m. - 12:00 noon

Grand Ballrooms 4 and 5, Westin Hotel

Moderator: **Paul Johnson**

- 8:00 Microbiology and Physiology of the Rumen and its Response to Different Feeding Strategies. – **Jane Leedle**
- 8:55 Fiber, Energy and Nutrition Partitioning – **Mike Hutgens**
- 9:50 Break
- 10:20 Protein, Bypass Protein, and the Fate of Nitrogen – **Charles Sniffen**
- 11:10 Rumen Function Enhancement: Buffers, Ionophores, Probiotics, and More – **Larry Corah**

GENERAL SESSION II

"Infectious Diseases:

Old Problems, New Approaches"

Friday, September 14

1:30 p.m. - 5:10 p.m.

Grand Ballrooms 4 and 5 - Westin Hotel

Moderator: **John Fetrow**

- 1:30 Bovine Vaccines: Which Work Best: What's New or Coming? – **Kevin Schultz**
- 2:20 Diagnosing Viral Infections: Beyond the Paired Sera – **Jim Collins**
- 3:10 Break
- 3:40 Bovine Abortion: A Different Approach to Diagnosis – **Scott Hurd**
- 4:25 Controlling Infectious Disease at the Herd Level. With Special Attention to Johnes and Leukosis – **Mike Brunner**

GENERAL SESSION III

"Were You Planning to Be in Practice in the Year 2000?"

Saturday, September 15

8:00 a.m. - 12:00 noon

Grand Ballrooms 4 and 5, Westin Hotel

Moderator: **John Fetrow**

- 8:00 Food Safety and the Food Animal Veterinarian: What You Need to Know – **Bill Van Dresser**
- 8:55 Veterinary Medicine in the Larger Environment: What Will the Farm Bill, Politics, and Regulations do to You? – **Lonnie King**
- 9:50 Break
- 10:20 The Dairy Industry in the 1990s – **Andy Novakovic**
- 11:10 The Beef Industry in the 1990s – **Topper Thorpe**

SPLIT SESSIONS

Split sessions are designed for all registrants, but allow you to select topics related to your specific interests in either dairy, cow/calf or feedlot practice specialties. Subject matter will be much more specific

to beef or dairy general session. The dairy sessions this year will center on basic and applied mastitis research in keeping with the Joint AABP/NMC International Symposium. Lecture style format allows speakers to cover a considerable quantity of information in each of the sessions.

INTERNATIONAL MASTITIS SYMPOSIUM DAIRY SESSION I

“Resistance Mechanism”

Friday, September 14

8:00 a.m. - 12:00 noon

Grand Ballrooms 2 and 3 - Westin Hotel

Moderator: **K. Larry Smith**

- 8:00 - 8:10 International Mastitis Conference Introduction
- 8:10 Introductory Paper – **A. J. Frost**
- 8:30 Characterization of Keratin From the Bovine Teat Canal – **Sue Bright**
- 8:40 Turnover of Teat Canal Keratin During Lactation – **A. V. Capuco**
- 8:50 Pre-Infection Functions of Blood Polymorphonuclear Leucocytes and the Outcome of Experimental *Escherichia coli* Mastitis in the Cow – **J.A.C.M. Lohius**
- 9:00 Discussion
- 9:10 Dietary Vitamin E and Selenium Effects on Polymorphonuclear Neutrophil Function – **J. S. Hogan**
- 9:20 The Effect of Antibiotics on in vitro Phagocytosis and Intracellular Killing of *Staphylococcus aureus* by Bovine Polymorphonuclear Leucocytes – **Uri Vecht**
- 9:30 Modulation of Bovine Mammary Immune Function During the Periparturient Period Following Exposure to Recombinant Bovine Interferon Gamma – **Lorraine Sordillo**
- 9:40 Enhancement of Bovine Mammary Mononuclear Cell Proliferation By Recombinant Interleukins – **P. M. Torre**
- 9:50 Discussion
- 10:00 Break
- 10:30 rBo Interferon (gamma) Reduces Local and Systemic Tumor Necrosis Factor Production in Acute *E. coli* Mastitis – **S. R. Martinod**
- 10:40 The in vitro Antimicrobial Activity of Natural Antibiotics Against Clinical Isolates from Bovine Mastitis – **James S. Cullor**
- 10:50 The Acute Phase Response During Experimental *Escherichia coli* Mastitis – **R. J. Erskine**
- 11:00 Supplemental Zinc as a Potential Therapeutic Aid in the Reduction of Fetal Loss Associated with Coliform Mastitis or Endotoxemia – **Thomas W. Graham**
- 11:10 Discussion
- 11:20 Iron Regulated Outer Membrane Proteins of Coliform Bacteria Isolated from Bovine Intramammary Infections – **D. A. Todhunter**
- 11:30 Resistance to *Staphylococcus aureus* Infections in Staphylococcal Vaccinated Heifers – **Philip M. Sears**
- 11:40 A Field Trial to Test the Efficacy of a Staphylococcal Mastitis Vaccine in Commerical Dairies in Australia – **Dennis L. Watson**
- 11:50 Discussion
- 12:00 Lunch

INTERNATIONAL MASTITIS SYMPOSIUM DAIRY SESSION II

This session sponsored by
SmithKline Beecham Animal Health

“Mastitis and its Control in
Heifers and Dry Cows”

Friday, September 14

1:15 p.m. - 5:00 p.m.

Grand Ballrooms 2 and 3 - Westin Hotel

Moderator: **Keith Sterner**

- 1:15 Introductory Paper – **Stephen C. Nickerson**
- 1:35 Influence of Different Methods of Milk Cessation on Intramammary Infections During the Peripartum Period – **Stephen P. Oliver**
- 1:45 The Role of Coagulase-Negative *Staphylococcus* Species on Bovine Mastitis – **Tuula Honanen-Buzalski**
- 1:55 Coagulase-Negative *Staphylococcus* Species and *Staphylococcus aureus* Prevalence during the Periparturient Period in Primiparous and Multiparous Cows – **Robert J. Harmon**
- 2:05 Discussion
- 2:10 Prevalence of Mastitis in First Lactation Cows – **J. Woodrow Pankey**
- 2:20 *Staphylococcus aureus* Intramammary Infections (IMI): Prevalence, Reservoirs and Modes of Transmission in Dairy Heifers – **J. R. Roberson**
- 2:30 Factors Affecting the Result of a Dry Cow Treatment – **J. Sol**
- 2:40 Incidence of New *S. aureus* Infections During the Dry Period in Antibiotic-Treated and Non-Treated Infected and Noninfected Cows – **Gideon Ziv**
- 2:50 Discussion
- 3:00 Break
- 3:30 Effects of antibiotic Therapy at Drying Off on Mastitis in the Dry Period and Early Lactation – **Jeff Browning**
- 3:40 The Effect of Dry Cow Therapy: An Evaluation of Long Acting and Short Acting Intramammaria – **Olav Osteras**
- 3:50 Systemic Dry Cow Therapy in Control of Subclinical *Staphylococcus aureus* Infections – **Stephen Soback**
- 4:00 The Effect of a Long Versus a Short Cannula After Drying Off Cows With 600mg Cloxycillin in a Novel Formulation – **J. Sol**
- 4:10 Discussion
- 4:20 Economics of a Dry Period Intramammary Antibiotic Therapy in Dairy Cows – **William M. Sischo**
- 4:30 A Benefit Cost Analysis of Dry Cow Mastitis Therapy in Ontario Dairy Cattle – **W. B. McNab**
- 4:40 Ontario's Experience with *Nocardia* Mastitis – **Debra Stark**
- 4:50 Discussion

INTERNATIONAL MASTITIS SYMPOSIUM DAIRY SESSION III

(2 Topic Session)

Saturday, September 15

8:00 a.m. - 12:00 noon

Grand Ballrooms 1, 2, 3 - Westin Hotel

“Environmental Mastitis” (Topic 1)

8:00 a.m. - 10:30 a.m.

Moderator: **J. Woodrow Pankey**

- 8:00 Introductory Paper – **A. J. Bramley**
- 8:20 Economic Losses Associated With Clinical Mastitis on Nine Well-Managed Ohio Dairy Farms – **Kent Hoblet**
- 8:30 Mastitis and Its Influence Upon Reproductive Performance in Dairy Cattle – **James S. Cullor**
- 8:40 Clinical Mastitis From Environmental Pathogens: Analysis of a Large Commercial Dairy – **Richard H. Bennet**
- 8:50 Risk Indicators For Cases of Clinical Mastitis in Herds with a Low Bulk Milk Somatic Cell Count – **Y. H. Schukken**
- 9:00 Discussion
- 9:10 The Influence of Cubicle (free-stall) Design and Management of *E. coli* Populations of Bedding – **John Sumner**
- 9:20 Antigenic Homology of Bacterial Isolates from Cattle with Clinical Coliform Mastitis – **J. W. Tyler**

- 9:30 Efficacy of *E. coli* J5 Vaccine for Preventing Coliform Mastitis – **Joseph S. Hogan**
- 9:40 Efficacy and Financial Benefits of Preventing Clinical Coliform Mastitis in Dairy Cows by a Mutant (J5) *Escherichia coli* Vaccine – **Ruben N. Gonzalez**
- 9:50 Discussion
- 10:00 Break

DAIRY SESSION III (Topic 2)

10:30 a.m. - 12:00 noon

“Advances in Milking Hygiene and Milking Systems That Relate to Mastitis Control”

- 10:30 Introductory Paper – **Jorn Hamann**
- 10:50 Relationship of Pressure Gradients at the Teat During Milking and Machine-Induced Infections – **David M. Galton**
- 11:00 Milking Machine Liner Slip and Mastitis with Emphasis on Vacuum Level – **Stephen B. Spencer**
- 11:10 Discussion
- 11:20 New Developments in Milking Machine Design Related to Mastitis and Milk Quality – **Murray W. Woolford**
- 11:30 The Relationship Between Chapped Teats, Teat Skin Colonization and Intramammary Infections by *Staphylococcus aureus* – **Larry K. Fox**
- 11:40 Long-term Influence of Two Germicidal Teat Dips on *Staphylococcus* species Prevalence and New Infection Rate of *Staphylococcus aureus* in a Dairy Herd – **Robert J. Harmon**
- 11:50 Discussion
- 12:00 Lunch

INTERNATIONAL MASTITIS SYMPOSIUM

DAIRY SESSION IV

(2 Topic Session)

Saturday, September 15

1:15 - 5:00 p.m.

Grand Ballrooms 4 and 5 - Westin Hotel

“Therapy of Mastitis” (Topic 1)

1:15 p.m. - 3:30 p.m.

Moderator: **Joe Hogan**

- 1:15 Introductory Paper – **Stephan Soback**
- 1:35 Effect of Combinations of Antibiotics on Strains of *Staphylococcus aureus* Highly Resistant – **F. S. Rodrigues**
- 1:45 The Pharmacokinetics and Efficacy of Intramammary Gentamicin for the Treatment of Coliform Mastitis – **R. J. Erskine**
- 1:55 Anti-inflammatory Therapy for Acute Coliform Mastitis – **Kevin L. Anderson**
- 2:05 Discussion
- 2:10 Pharmacokinetics of Aditoprim in Healthy Cows and Cows with Endotoxin-Induced Mastitis – **J. A. C. M. Lohius**
- 2:20 Rapid Tests for the Detection of Antibiotic Residues – **Sue Bright**
- 2:30 Antibiotic Concentration in Mammary Tissue and Milk Following Intramammary and/or Intramuscular Therapy – **William E. Owens**
- 2:40 An Inhibition Assay for Farm Use in Detecting Gentamycin, Beta Lactams, and Other Antibiotics – **Stanley Charm**
- 2:50 Discussion
- 3:00 Break

DAIRY SESSION IV (Topic 2)

3:30 p.m. - 5:00 p.m.

“Advantages in Mastitis Diagnosis”

- 2:30 Introductory Paper – **S. P. Oliver**
- 3:50 The Control of *Staphylococcus aureus* Mastitis Using the DHI Milk Antibody Test – **G. M. Jones**

- 4:00 Evaluation of Methods for the Diagnosis of *Streptococcus agalactiae* Intramammary Infections in Dairy Cattle – **R. Page Dinsmore**
- 4:10 Discussion
- 4:20 *Streptococcus agalactiae* Antigens Reactive with Milk IgG of Infected Dairy Cows – **D. Scott Adams**
- 4:30 Diagnostic Methods to Evaluate Therapy Response in Clinical Mastitis – **S. Pyorala**
- 4:40 Evaluation Changes in Somatic Cell Counts as Indicators of New Mammary Infections – **Ian R. Dohoo**
- 4:50 Discussion

INTERNATIONAL MASTITIS SYMPOSIUM

DAIRY SESSION V

“Monitoring Mastitis, Milk Quality and Economic Losses in Dairy Herds”

Sunday, September 16

8:00 a.m. - 11:00 a.m.

Grand Ballrooms 1, 2, 3 - Westin Hotel

Moderator: **Ken Nordlund**

- 8:00 Introductory Paper – **Jeffery K. Reneau**
- 8:20 Monitoring the Incidence of Clinical Mastitis – **James M. Booth**
- 8:30 Clinical Mastitis Records as a Management Tool – **Deanne Morse**
- 8:40 Discussion
- 8:50 Environmental and Managerial Determinants of Mastitis in Ohio Dairy Herds – **Paul C. Bartlett**
- 9:00 The Norwegian Mastitis Control Program – **Olav Osteras**
- 9:10 Economic Evaluation of Coagulase-positive *Staphylococcus* Reduction Strategies in 3 Herds – **Kent H. Hoblet**
- 9:20 Discussion
- 9:30 Break
- 10:00 Production Effects of Bovine Mastitis – **M. W. Woolford**
- 10:10 The Relationships Between Bulk Tank Culture, Herd Prevalence of Mastitis Pathogens, and Herd Management Factors – **M. Ann Godkin**
- 10:20 Veterinary Practitioner Monitoring of Milk Quality – **David A. Reid**
- 10:30 Economic Impact of Mastitis in Ohio Dairy Herds – **Gay Y. Miller**
- 10:40 Economics of Mastitis Control Practices on Ontario Dairy Farms – **R. S. Gill**
- 10:50 Discussion
- 11:00 Lunch

INTERNATIONAL MASTITIS SYMPOSIUM

DAIRY SESSION VI

“Case Histories is the Name - But Problem Solving is the Game”

Sunday, September 16

1:00 p.m. - 4:00 p.m.

Grand Ballrooms 1, 2, 3 - Westin Hotel

Moderator: **Alan Britten**

- 1:00 Problem Solving - An Academic Approach – **J. Woodrow Pankey**
- 1:20 Discussion
- 1:25 Problem Solving - A Milk Marketing Cooperative Approach – **Norm J. Corlett**
- 1:45 Discussion
- 1:50 Problem solving - A Veterinary Approach – **Robert B. Bushnell**
- 2:10 Discussion
- 2:15 A Case History – **David A. Reid**
- 2:30 Critique and Discussion

- 2:40 Reoccurring Contagious Mastitis - Florida Dairy Herd –
David P. Kelbert
 2:55 Critique and Discussion
 3:05 Once a Staph Cow Always a Staph Cow? – **Robert B. Corbett**
 3:25 Critique and Discussion
 3:35 General Discussion
 4:00 Conference is Concluded

INTERNATIONAL MASTITIS SYMPOSIUM DAIRY SESSION VII

Poster Presentation

Rooms 104-108 - Indiana Convention Center

Posters will be displayed

Thursday, September 13 – 2:00 p.m. - 7:00 p.m.

Friday, September 14 – 9:00 a.m. - 4:00 p.m.

Saturday, September 15 – 9:00 a.m. - 4:00 p.m.

Personnel will be present to discuss posters from 5:00 p.m. - 7:00 p.m. Thursday, September 13.

Posters will contain additional information relative to Dairy Sessions I, II, III, IV, and VI.

Poster Titles

Diurnal Variation in Count and Composition of Somatic Cells in Milk and Characteristics Related to Infection – **Yasuhiro Aoki**

Bovine Mycotic Mastitis – **E. O. da Costa**.

Effects of Human Recombinant Granulocyte Colony Stimulating Factor (HR-GCSF) on the Hemogram of Lactating Dairy Cattle – **J. S. Cullor**.

Clinical and Subclinical Mastitis in a Dairy Herd Caused by Human Group G Streptococci (*Streptococcus dysgalactiae*) – **R. N. Gonzalez**.

Bovine Mycoplasmal Mastitis in New York State Dairy Herds, 1977-1988 – **R. N. Gonzalez**

Residual Hygienic Evaluation of Measures of Mastitis Therapy and Prophylaxis – **Walther H. Heeschen**.

Bacterial Counts Associated with Recycled Newspaper Bedding – **J. S. Hogen**

Typing of *Streptococcus* species Isolated From Bovine Milk – **B. M. Jararao**

Characteristics of *Staphylococcus* species Isolated From Bovine Mammary Secretion – **B. M. Jayarao**.

A Provincial Bulk Tank Microbiology Service – **John A. Lynch**.

A Method For Comparing Bulk Tank Antibody Levels with Dairy Herd Prevalence of *Staphylococcus aureus* Infections – **Matsushita, Tatsuo**.

Electron Microscopic Descriptions of Glycocalyx on the Surface of Coagulas-Negative *Staphylococcus* species Isolated From Bovine Milk – **K. R. Matthews**.

Intramammary Infections in Primigravid Heifers and Multiparous Cows During the Peripartum Period Following Antibiotic Therapy Before Parturition – **S. P. Oliver**.

Teat Lesions in Dairy Cattle with Reference to Milking and Housing Management – **Olav Osteras**.

Long Term Impact of Extension Education on Somatic Cell Count (SCC) and Milk Production of Demonstration Herds – **R. R. Peters**.

Updating Milking Equipment to Keep Pace With Production – **David A. Reid**.

The Effect of a Specified Teat Wash Procedure Using a Teat Dip as Wash Solution on Milking Routine and Bacterial Contamination of Teat Surfaces – **J. K. Reneau**.

Prospects for a Mastitis Control Program in Dairy Herds with a Low Bulk Milk Somatic Cell Count – **Y. H. Schukken**.

Hemogenicity of Penicillin G Sensitivity Pattern Among *S. aureus* Isolated from Different Quarters of the Same Udder – **M. Storper**.

Persistency of Barrier Teat Dips and Other Barrier Products on Dry Cows – **L. L. Timms**.

In vitro Growth of Environmental Mastitis Pathogens in Various Bedding Materials – **L. L. Timms**.

Reduction of Clinical Symptoms Associated with *E. coli* Toxic Mastitis Following Vaccination with a Commercial *E. coli* Vaccine – **Dennis Van Roekel**.

Distribution of *Streptococci* Isolated From Bovine Teat Skin, Teat Canals, and Milk – **J. L. Watts**.

NAGase, WMT, and Etiologic Agent as Predictors of Milk Production Change and Treatment Response in Clinical Mastitis – **D. J. Wilson**.

Environmental Mastitis and Immunological Status of the Udder – **Alfonso Zecconi**.

COW/CALF SESSIONS

The three cow/calf sessions are not independent from each other. Sessions I, II, and III deal exclusively with REPRODUCTIVE EFFICIENCY in the beef cow'n calf enterprise. The topics covered and the speakers selected will provide the beef practitioners with an opportunity to enhance medical, nutritional, economic and analytical skills. The sessions are designed to be fully integrated.

COW/CALF SESSION I

This session sponsored by
 SmithKline Beecham Animal Health

Saturday, September 15

1:30 p.m. - 5:00 p.m.

Grand Ballroom 1 - Westin Hotel

Moderator: **Donald B. Hudson**

- 1:30 Reproductive Efficiency in Beef Cattle: Nutritional and Medical Considerations – **Kenneth G. Odde**
 3:30 Break (visit exhibits)
 3:30 Economic Implications of Reproductive Efficiency in Beef Herds – **Harlan Hughes**
 4:15 Diagnosis and Control of Abortion in Beef Cattle – **Clyde A. Kirkbride**

COW/CALF SESSION II

Sunday, September 16

8:00 a.m. - 11:00 a.m.

Capitol 2 Room - Westin Hotel

Moderator: **John U. Thomson**

- 8:00 Replacement Heifers: Selection, Management and Medical Considerations – **Kenneth G. Odde**
 9:00 Replacement Heifers: Nutrition, Growth and Development – **Larry Corah**
 10:00 Replacement Heifers: Economic and Financial Considerations – **Harlan Hughes**
 11:00 AABP 1990 Business and Awards Luncheon

COW/CALF SESSION III

Sunday, September 16

1:00 p.m. - 4:00 p.m.

Capitol 2 Room - Westin Hotel

Moderator: **Kurt Wohlgemuth**

- 1:00 Production Records: Justification, Gathering and Interpretation – **Mark F. Spire**
 2:00 Financial Records: Why? What? When? Who? How? – **Harlan Hughes**
 3:00 Integration of Financial and Production Data: Available Record Systems Panel, Discussion and Comments – **L. Corah, H. Hughes, K. Odde, M. Spire**
 4:00 Adjourn

FEEDLOT SESSIONS

FEEDLOT SESSION I

"The Interaction of Nutrition and Animal Health"

Saturday, September 15

1:30 p.m. - 5:00 p.m.

Grand Ballroom 2 - Westin Hotel

Moderator: **Timothy Jordan**

- 1:30 Prevention of Disease with Nutrition- Starting and Arrival Programs for Feedlot Cattle – **Steve Armbruster**
- 2:30 Break
- 3:00 Nutritional Management of The Sick Animal – **Larry Watson**
- 4:00 The Veterinarian-Nutritionist Interaction – **Steve Armbruster**
- 4:30 Feed Additives and Animal Health – **Larry Watson**

FEEDLOT SESSION II

"Making Better Decisions"

Sunday, September 16

8:00 a.m. - 11:00 a.m.

Capitol 1 Room - Westin Hotel

Moderator: **Pat Huston**

- 8:00 Case Study: Economic Analysis in Stocker/Feeder Practice – **Timothy Jordan**
- 9:00 Case Study: Practical Use of Decision Theory – **Barrett Slanning**
- 10:00 Case Study: Use of Investigative Epidemiological Tools – **Steve Wikse**

FEEDLOT SESSION III

"The Regulatory World We Work In"

Sunday, September 16

1:30 p.m. - 5:00 p.m.

Capitol 1 Room - Westin Hotel

Moderator: **Timothy Jordan**

- 1:30 Quality Assurance and Residue Avoidance: Monfort's Approach – **Bob Kerschen**
- 2:15 Quality Assurance and Residue Avoidance in Midwest Feedlots – **Pat Huston**
- 3:00 The Changing Role of Animal Rights in Food Animal Production – **Bernard Rollin**

PRACTICE TIPS

"Suggestions for Success"

Saturday, September 15

7:30 p.m. - 10:00 p.m.

Grand Ballroom 4 and 5, Westin Hotel

Moderator: **Gregory A. Ledbetter**

Looking for tips on how to make practice easier, more rewarding, or just plain more fun? Suggestions for success provides an assembly of outstanding practitioners gathered to share with you some of their suggestions for success.

- A chance to Cut May Not be the Only Way to Cure. A nonsurgical method to remove hardware – **Dale Walther**.
- Chute 'em and Compute 'em. A portable computer software package for simple cow-calf data collection at chute side – **Laura Ledbetter Day**.
- Old Vet Paks Never Die, They Just Get Converted – **Jenks Britt**.
- Nair With a Flare or Bar-B-Q Dairy Style. The hassle free way to clip udders – **Andy Johnson**.
- Save the Knees and Other Nuggets From New York. Tips on knee pads, prescriptions, newsletters and others – **Julie Zdrojewski**.
- Cruzin' for Dollars. How to get paid while behind the wheel – **Don Klingborg**.

- Tidbits From Tennessee - Part 3. Back by popular demand – **Hugh McCampbell**.
- Throw Away Your IV Set. Milk Fever may never be an emergency again – **Dale Walther**.
- Screens not Scribbles. Computer generated drug labels are easy to read and easy to produce – **John Day**.
- Kick the Old Vet Out and Keep Him Smiling. An innovative compensation schedule allows flexibility in a multiperson practice – **Roger Meads**.

RESEARCH SUMMARIES

Saturday, September 15

7:30 p.m. - 10:00 p.m.

Grand Ballroom 1, 2, 3 - Westin Hotel

Moderator: **Lawrence Heider**

1. Risk of an Altered Interestrus Interval After Clinical Mastitis in Dairy Cattle.
Moore, D. A. et al., School of Veterinary Medicine, University of California, Davis
2. Incidence and Treatment of Abnormal Post Partum Function in Dairy Cows.
Archibald, L. F., et al., College of Veterinary Medicine, University of Florida.
3. Effects of Growth Conditions on the Outer Membrane protein Profile, Leukotoxin Production and Capsule Production of *Pasteurella Haemolytica* Type A1.
Gatwood, D. M., et al., College of Veterinary Medicine, Kansas State University.
4. Reported Use of Non-steroidal Anti-inflammatory Drugs in Food Animal Practice.
Kopcha, M., et al., College of Veterinary Medicine, Michigan State University
5. NAGase as a Predictor of Milk Production Change and Treatment Response in Clinical Mastitis.
Wilson, D. J., et al., College of Veterinary Medicine, Michigan State University.
6. Risk Factors for Clinical Lameness in Dairy Cattle.
Wells, S. J., College of Veterinary Medicine, University of Minnesota.
7. Hypertonic Saline Resuscitation of Endoxic Calves.
Constable, P. D., et al., College of Veterinary Medicine, Ohio State University.
8. Mastitis in the Beef Cow and Its Effect on Calf Weight Gain.
Drake, T., Department of Veterinary Sciences, Pennsylvania State University.
9. Production and Economic Effects of Johne's Disease in Dairy Cows.
Hutchinson, L. J., et al., Department of Veterinary Sciences, Pennsylvania State University and College of Veterinary Medicine, University of Pennsylvania
10. Relationship Between Starting and Ending Scrotal Circumference for Bulls in 140 Day Test-of-Gain Programs.
Whittier, W. D., et al., College of Veterinary Medicine, Virginia Tech.

SEMINARS

The seminar program is designed to provide specialized in-depth, cutting-edge information to the practitioner specialist. To complement a strong general program, seminars are built into our conference format to cater to those of you having specific CE requirements. Seminar registration fees entitle you to the most current technical information available, instruction from noted authorities in their fields, limited enrollment to allow one-on-one discussion, hand-out materials for future reference, and practical take-home information and ideas.

SEMINAR I
Quality Milk Production

Objective: This seminar is designed to give the dairy practitioner an in-depth understanding of basic areas of mastitis control including mastitis microbiology, milking equipment function, mastitis management concepts in both large and small herds and milk evaluation methods.

Fee: \$525.00
Limit: 20
Level: Intermediate to Advanced
Location: Cameral Room, Westin Hotel
Date: September 10, 11, 12 (Monday through Wednesday)
Time: 8:00 a.m. - 10:00 p.m.
Coordinator: Jim Jarrett (404) 235-2122
Faculty: Paul Blackmer D.V.M., John Dahl D.V.M.,
 Bob Bushnell D.V.M., Jim Jarrett, D.V.M.

Computers

Used: No

Description: This seminar is the longest continuously running seminar on the A.A.B.P. program and continues to be among the first to fill. It provides a unique opportunity for the dairy veterinarian offering clients a through milk quality/mastitis control program. The faculty offers an excellent blend of practitioners and educators with backgrounds in both small and large herd management. Basic principles and sophisticated techniques will be presented in a practical format that involves discussions among all participants.

SEMINAR 2
**Milking System Sanitation -
Principles and Trouble Shooting**

Objective: This seminar is designed for the dairy practitioner or milking equipment specialist looking for a review of the principles of cleaning the milking system and desiring to improve his/her skills in trouble shooting.

Fee: \$150.00
Limit: 30
Level: Basic to Intermediate
Location: Council Room, Westin Hotel
Date: September 13 (Thursday)
Time: 8:00 a.m. - Noon
Coordinator: Andrew Johnson (414) 833-6833
Faculty: Norm Corlette B.S., M.S. (Dairy Science), Ken Kirby,
 Andrew Johnson, D.V.M.

Computers

Used: No

Description: The focus of this half day seminar is to highlight the proper cleaning of a milking system and emphasize its importance in relation to milk quality. The seminar will teach the principles of cleaning the milking equipment as well as providing helpful advice in trouble shooting for such problems as high bacteria counts and mineral or milk component deposits. Each participant will be provided with a test kit which will be demonstrated in the seminar.

SEMINAR 2A
**Milking System Sanitation -
Principles and Trouble Shooting**

Objective: This seminar is designed for the dairy practitioner or milking equipment specialist looking for a review of the principles of cleaning the milking system and desiring to improve his/her skills in trouble shooting.

Fee: \$150.00
Limit: 30
Level: Basic to Intermediate
Location: Council Room, Westin Hotel
Date: September 13 (Thursday)
Time: 1:00 p.m. - 5:00 p.m.
Coordinator: Andrew Johnson (414) 833-6833

Faculty: Norm Corlette B.S., M.S. (Dairy Science), Ken Kirby,
 Andrew Johnson, D.V.M.

Computers

Used: No

Description: The focus of this half day seminar is to highlight the proper cleaning of a milking system and emphasize its importance in relation to milk quality. The seminar will teach the principles of cleaning the milking equipment as well as providing helpful advice in trouble shooting for such problems as high bacteria counts and mineral or milk component deposits. Each participant will be provided with a test kit which will be demonstrated in the seminar.

SEMINAR 3

Advanced Bovine Medical-Surgical Update

Objective: This medical-surgical conference will provide the astute bovine practitioner with the opportunity to explore in depth recent advances in surgery and internal medicine.

Fee: \$200.00
Limit: 30
Level: Advanced
Location: Room 124, Indiana Convention Center
Date: September 14 (Friday)
Time: 8:00 a.m. - 5:00 p.m.
Coordinator: Donald F. Smith (607) 253-3570
Faculty: Sheila M. McGuirk D.V.M., Ph.D., Diplomate
 A.C.V.I.M., Donald F. Smith D.V.M., Diplomate
 A.C.V.S.

Computers

Used: No

Description: This seminar will explore the management of several interesting and relevant cases which require challenging medical and surgical management. An interactive format that encourages audience participation will be employed and the use of audio-visual aids including videotape will enhance each case presentation. Although emphasis will be on diseases and conditions common to dairy cattle and calves, several topics will be equally relevant for beef cattle. Specific topics to be included are: Abomasal ulcer disease, vagal indigestion, new treatment protocols for management of metabolic alkalosis, recognition and treatment of cardiac arrhythmias, umbilical diseases in calves, management of kidney diseases, and much, much, more.

SEMINAR 3A

Advanced Bovine Medical-Surgical Update

Objective: This medical/surgical conference will provide the astute bovine practitioner with the opportunity to explore in depth recent advances in surgery and internal medicine.

Fee: \$200.00
Limit: 30
Level: Advanced
Location: Council Room, Westin Hotel
Date: September 15 (Saturday)
Time: 8:00 a.m. - 5:00 p.m.
Coordinator: Donald F. Smith (607) 253-3570
Faculty: Sheila M. McGuirk D.V.M., Ph.D., Diplomate
 A.C.V.I.M., Donald F. Smith D.V.M., Diplomate
 A.C.V.S.

Computers

Used: No

Description: This seminar will explore the management of several interesting and relevant cases which require challenging medical and surgical management. An interactive format that encourages audience participation will be employed and the use of audio-visual aids including videotape will enhance each case presentation. Although emphasis will be on diseases and conditions common to dairy cattle and calves,

several topics will be equally relevant for beef cattle. Specific topics to be included are: Abomasal ulcer disease, vagal indigestion, new treatment protocols for management of metabolic alkalosis, recognition and treatment of cardiac arrhythmias, umbilical diseases in calves, management of kidney disease, and much, much, more.

SEMINAR 4

Evaluation of Testicular Function and Semen Quality in the Bull

Objective: This seminar is designed to provide an in-depth understanding of testicular function, to update the practicing veterinarian on methods of examining the scrotum and its contents, and better understanding of the meaning of various aspects of semen quality tests.

Fee: \$175.00
Limit: 30
Level: Basic to Intermediate
Location: Room 201, Indiana Convention Center
Date: September 12 (Wednesday)
Time: 8:00 a.m. - 10:00 p.m.
Coordinator: Albert Barth (306) 966-7151
Faculty: Glen Coulter Ph.D., Richard Saake Ph.D., Reuben Mapletoft D.V.M., Ph.D., Albert Barth D.V.M., M.V.Sc.

Computers

Used: No

Description: This seminar provides detailed instruction on all aspects of testicular function and semen quality evaluation. The process of normal spermatogenesis, causes and manifestations of abnormal spermatogenesis, and the importance of scrotal circumference measurements will be reviewed. Other methods of examining testicles including ultrasound, infra-red thermography, and tonometry will be discussed. The topic of semen evaluation methods, the evolution and status of the current scoring system, sources of error and relationship to fertility will be thoroughly covered. In addition, frozen semen evaluation methodology and frozen semen handling and thawing methods will be reviewed. This course will provide practitioners new insight, understanding, and confidence in breeding evaluation of bulls. The section on frozen semen will provide an understanding of the requirements for proper evaluation of frozen semen and will serve as a pre-requisite for the seminar and wet lab on frozen semen evaluation.

SEMINAR 5

Frozen Semen Evaluation

Objective: This seminar is designed to provide the practitioner with the basic information and hands on experience needed to begin to evaluate frozen semen at a competent level in practice.

Fee: \$200.00
Limit: 20
Level: Intermediate to Advanced (Pre-requisite-Seminar 4 or extensive field experience)
Location: House Room, Westin Hotel
Date: September 13 (Thursday)
Time: 8:00 a.m. - 5:00 p.m.
Coordinator: Albert Barth (306) 966-7151
Faculty: Richard Saake Ph.D., Edwin Robertson D.V.M., Albert Barth, D.V.M., M.V.Sc., Stan Smith (ACTS Instruments)

Computers

Used: No

Description: The initial portion of this seminar will include discussions of microscope quality and alignment. A practitioner who has recently applied frozen semen evaluation in practice will present his experiences, problems, tips, and recommendations. There will be demonstrations of semen specimen preparation for examination, methods of motility and acrosome evaluation and determination of concentration. Each participant will be provided with a series of labelled good quality

slide preparations for the study of sperm morphology. These slides may be taken home after the seminar. Frozen semen will be provided for analysis and each person will be expected to fully evaluate one sample. A microscope company will set up 20 microscopes of several makes and grades of quality for use in the wet lab. Participants are invited to bring their own microscopes for comparison to those provided. All other equipment needed for frozen semen evaluation will be provided.

SEMINAR 6

Embry Transfer: The Practitioner's Role

Objective: This seminar is intended to provide the veterinarian who is not actively involved in embryo transfers with the information needed to develop an embryo transfer service or to become involved in helping with existing embryo transfer programs on client farms. Proper handling and transfer techniques for frozen embryos will also be presented.

Fee: \$125.00
Limit: 30
Level: Basic
Location: House Room, Westin Hotel
Date: September 14 (Friday)
Time: 8:00 a.m. - 5:00 p.m.
Coordinator: Robert Rowe (608) 798-2993
Faculty: Reuben Mapletoft D.V.M., Ph.D., Robert Rowe D.V.M., Ph.D.

Computers

Used: No

Description: This seminar provides detailed instruction in all areas of embryo transfer. Information on equipment, supplies, and media will be presented. Topics to be covered include: superovulation; collection techniques (non-surgical); embryo handling, grading, and morphology; media preparation; non-surgical transfer; estrus synchronization programs; donor and recipient herd management; freezing techniques and equipment. Due to an increased opportunity for practitioners to become involved in implanting frozen embryos, a special segment on this subject has been added.

SEMINAR 7

Embryo Transfer: Advanced

Objective: This seminar is intended for the practitioner who is involved in embryo transfer. In this course the most current concepts and techniques involving embryo transfer will be presented.

Fee: \$150.00
Limit: 30
Level: Intermediate (Pre-requisite - embryo transfer experience)
Location: Chamber Room, Westin Hotel
Date: September 14 (Friday)
Time: 8:00 a.m. - 5:00 p.m.
Coordinator: Joe Wright (512) 538-2269
Faculty: Stan Liebo Ph.D., Joe Wright D.V.M., Edwin Robertson D.V.M., and 3 other selected practitioners.

Computers

Used: No

Description: The emphasis of this one day seminar will be on freezing bovine embryos. Dr. Stan Liebo, a well known cryobiologist with extensive experience with embryos will cover the physics and physiology involved in freezing and thawing bovine embryos. Some equipment will be demonstrated as well as practice tips for field application. Practitioners experienced with freezing, thawing and exportation of embryos will be utilized to provide participants with information and ideas to enable them to freeze and thaw embryos successfully or to improve their techniques.

SEMINAR 8

Applied Dairy Nutrition and Field Study

Objective: This seminar is designed to give the dairy cattle practitioner basic information and practical training in the area of dairy cattle nutrition.

Fee: \$400.00

Limit: 30

Level: Basic to Intermediate

Location: Chamber Room, Westin Hotel (Tues. 8:00 a.m. - 5:00 p.m.) Room 122 - Indiana Convention Center (Tues. 7:00 p.m. - 10:00 p.m.) Room 226 - Indiana Convention Center (Wed.-Thurs., 8:00 a.m. - 5:00 p.m.)

Date: September 11, 12, 13 (Tuesday through Thursday)

Time: 8:00 a.m. - 10:00 p.m. on September 11

8:00 a.m. - 5:00 p.m. on September 12

8:00 a.m. - 5:00 p.m. on September 13

Coordinator: Mike Hutjens (217) 333-2928

Faculty: Larry Chase Ph.D., Mike Hutjens Ph.D.

Computers

Used: Yes (Tuesday 7:00 p.m. - 10:00 p.m.)

Description: This seminar provides a comprehensive three day course for veterinarians featuring a problem solving approach to dairy nutrition. The course will include up-to-date lecture style presentations, a farm visit to demonstrate on-farm evaluation and data collection, an optional computer evening to provide "hands on" exposure to a microcomputer and the Illinois computer program, and a problem solving follow-up session utilizing the information accumulated from the farm visit. In addition, a hand calculated ration lab will be featured on the last afternoon. The farm visit will be scheduled for the second day with the computer lab being held on the first evening. There will be ample time for questions and one-to-one discussions. Also a box lunch will be provided on the day of the farm visit.

SEMINAR 9

Advanced Dairy Nutrition

Objective: This seminar is designed to provide advanced coverage of current topics in nutrition and feeding management for the dairy veterinarian who is already providing nutritional services.

Fee: \$350.00

Limit: 30

Level: Intermediate to Advanced (Pre-requisite - previous A.A.B.P. Nutrition Seminars or extensive field experience)

Location: Room 140 - Indiana Convention Center - (Tuesday 8:00 a.m. - 5:00 p.m.) Room 224 - Indiana Convention Center - (Wednesday 8:00 a.m. - 5:00 p.m.)

Date: September 11, 12 (Tuesday, Wednesday)

Time: 8:00 a.m. - 5:00 p.m.

Coordinator: James Ferguson (607) 255-2875

Faculty: Linda Baker V.M.D., William Chalupa Ph.D., David Galligan V.M.D., M.B.A., James Ferguson V.M.D., M.S., Charles Sniffen Ph.D.

Computers

Used: No

Description: This seminar is for the practitioner who is already involved with dairy cow nutrition management and is looking for up-to-date information from leading researchers in this field. Topics such as dry cow feeding, lactating cow feeding strategies, body condition management, and feeding for reproduction will be covered. Special consideration will be given to fats, bypass protein, amino acids, and the use of B.S.T. The seminar will address nutritional monitoring for production and profitability.

SEMINAR 10

Ration Formulation on the Microcomputer

Objective: This seminar is designed for the practitioner who is inter-

ested in learning the basic concepts of ration formulation with the aid of a microcomputer program. Participants will understand the basic components of ration evaluation and formulation. Prior computer experience with Lotus 123 would be advantageous but not necessary.

Fee: \$400.00

Limit: 30

Level: Intermediate (Pre-requisite - previous A.A.B.P. Nutrition Seminars or field experience)

Location: Capitol 2 Room, Westin Hotel (Friday, 8:00 a.m. - Noon). Room 122, Indiana Convention Center (Friday, 1:00 p.m. - 5:00 p.m. and Saturday 8:00 a.m. - 5:00 p.m.)

Date: September 14, 15 (Friday, Saturday)

Time: 8:00 a.m. - 5:00 p.m.

Coordinator: David Galligan (215) 444-5800

Faculty: Jim Beech V.M.D., William Chalupa Ph.D., James Ferguson V.M.D., M.S., David Galligan V.M.D., M.B.A.

Computers

Used: Yes (Friday, 1:00 p.m. - 5:00 p.m., Saturday, 8:00 a.m. - 5:00 p.m.)

Description: This two day seminar will be held in a microcomputer laboratory. The University of Pennsylvania computer program, Dairy LP, will be used. Short lectures covering new nutritional concepts will be followed directly by applications on the computer program. Basic mechanics of ration evaluation and formulation will be demonstrated through example applications. Formulation methodologies will be covered with regard to various feed delivery systems (total mixed rations, stanchion barn systems, combinations, etc.). Common nutritional problems will be discussed in light of ration formulation and evaluation strategies.

SEMINAR 11

Monitoring the Dairy Herd Using Microcomputers

Objective: This seminar is designed for the practitioner interested in dairy production medicine. The participant will gain a better understanding of how to collect and interpret data from a dairy and how to evaluate the performance criteria in all major areas. Prior computer experience is not required, however, some computer literacy will be a plus for the participant.

Fee: \$500.00

Limit: 30

Level: Advanced in terms of dairy analysis. Basic in terms of computers.

Location: Room 122, Indiana Convention Center (Tuesday and Thursday, 8:00 a.m. - 5:00 p.m.) Room 225, Indiana Convention Center (Wednesday, 8:00 a.m. - 5:00 p.m.)

Date: September 11, 12, 13 (Tuesday through Thursday)

Time: 8:00 a.m. - 5:00 p.m.

Coordinator: John Fetrow (919) 829-4299

Faculty: Steve Eicker D.V.M., Gene Boomer D.V.M., David Galligan V.M.D., M.B.A., John Fetrow V.M.D., M.B.A.

Computers

Used: Yes (Tuesday and Thursday 8:00 a.m. - 5:00 p.m.)

Description: This three day seminar includes two days in the microcomputer laboratory and one day on a local dairy. During the first day you will learn the basics of using a computer and the Lotus software, as well as how to use the Dairy Monitor software. Additionally, exposure to David Galligan's "DAIRYLP" nutrition package as well as other computer software will occur during this course. The first day centers on teaching how to develop a systematic approach to evaluating a dairy's status. On the second day you will go to a local dairy for practical experience at collecting on-farm data, efficient farm evaluation, and to learn about the dairy's performance. Day three will return you to the comput-

er room for further work evaluating the data from the dairy and to add to your skills in herd level evaluation. IBM compatible computers and a variety of software will be available for use by participants. This seminar is in its fifth year. The faculty will present real examples of a practical system in wide use in practices in all regions.

SEMINAR 12

Monitors of Dairy Herd Performance: D.H.I.A. and Hand Generated Information

Objective: This seminar is designed for the dairy practitioner servicing small herds and desiring to understand dairy records and increase the ability to use them to accomplish herd health goals.

Fee: \$300.00
Limit: 30
Level: Basic
Location: Caucus Room, Westin Hotel
Date: September 13, 14 (Thursday, Friday)
Time: 8:00 a.m. - 5:00 p.m.
Coordinator: Ken Nordlund (608) 263-6811
Faculty: Ken Leslie D.V.M., Jeff Reneau D.V.M., Ken Nordlund D.V.M., Brian Gerloff D.V.M., Ph.D.

Computers

Used: No

Description: The focus of this two day seminar is the delivery of production medicine programs including reproduction, mastitis control, nutrition, and replacement rearing. The course centers around interpretation of D.H.I.A. and supplemental records and the use of these records to identify problems, measure progress, and motivate change. The seminar will be changed from previous seminars of the same name to more of a problem solving exercise. Participants will learn to identify herd production problems from D.H.I.A. records, prioritize them, and then set up goals and programs to turn them into opportunities for both dairyman and the veterinarian. Participants will be provided with reference materials and work sheets to complement problem solving skills.

SEMINAR 13

Measuring and Managing Dairy Herd Reproductive Performance

Objective: This seminar is designed to provide an update in reproductive physiology, outline the analysis and assessment of reproductive status, and measure the economic impact of reproductive management decisions.

Fee: \$250.00
Limit: 30
Level: Intermediate (Entry level microcomputer experience desirable)
Location: Caucus Room, Westin Hotel (Wednesday, 8:00 a.m. - Noon). Room 122, Indiana Convention Center (Wednesday, 1:00 p.m. - 10:00 p.m.)
Date: September 12 (Wednesday)
Time: 8:00 a.m. - 10:00 p.m.
Coordinator: Leon Weaver (209) 688-1731
Faculty: Jack Britt Ph.D., Will Marsh Ph.D. Lynn Upham D.V.M., Leon Weaver V.M.D.

Computers

Used: Yes (Wednesday 1:00 p.m. - 10:00 p.m.)

Description: The focus of this full day seminar is on measuring and managing reproductive performance. Although rectal palpation is a well-established part of a practitioner's reproductive program, the information generated is often not utilized to maximum advantage. Emphasis will be placed on analysis of reproductive data, evaluating specific treatment strategies, and measuring the impact of reproductive management decisions involving heat detection, nutrition, breeding options, diseases, etc. In addition, consideration will be given to assessing the economics of reproductive performance and providing an update in

reproductive physiology. Lotus spreadsheets will be used on microcomputers to assess herd performance, to demonstrate decision-making methodologies, and to calculate economic effects.

SEMINAR 14

Quantitative Methods in Production Medicine

Objective: This seminar is designed for the practitioner involved in production medicine programs and requiring some basic practical statistics to facilitate proper herd performance monitoring as well as decision analysis.

Fee: \$175.00
Limit: 30
Level: Basic
Location: Cabinet Room, Westin Hotel
Date: September 13 (Thursday)
Time: 8:00 a.m. - 5:00 p.m.
Coordinator: James Ferguson (607) 255-2875
Faculty: Charles Curtis, David Galligan, V.M.D., M.B.A., James Ferguson, V.M.D., M.S.

Computers

Used: No

Description: This seminar will provide quantitative support for analysis of herd records. Veterinarians involved in dairy practice are often required to evaluate herd performance, yet have little quantitative skills to reliably do this. This course is designed to define data required to analyze herd performance in areas of heifer growth, disease, production, and reproduction. Basic descriptive statistics will be covered. How data may be analyzed via statistical methods for monitoring herd performance will be presented. Assessing performance within herds and across herds, and elements of decision analysis in interpreting product recommendations will be discussed. The course will be heavy on examples and problem solving.

SEMINAR 15

Veal Calf Health and Management

Objective: This seminar is designed for the practitioner intending to become involved with veal calf practice or intending to upgrade his/her expertise in an already existing veal calf practice. It is intended to provide the practitioner with the confidence and competency to more effectively serve an industry heavily involved with animal welfare and quality assurance issues.

Fee: \$100.00
Limit: 30
Level: Basic
Location: Caucus Room, Westin Hotel
Date: September 15 (Saturday)
Time: 8:00 a.m. - 5:00 p.m.
Coordinator: Clyde Smith (414) 743-0198
Faculty: Steve Bolin D.V.M., Herbert Thacker D.V.M., Wayne Grover D.V.M., Dan Shields D.V.M., Jan Gawthrop D.V.M., John Wagner D.V.M., Richard Sommers D.V.M., Todd Smith D.V.M., Clyde Smith D.V.M.

Computers

Used: No

Description: This comprehensive seminar will provide an introduction to the veal production industry as well as addressing all areas of veal production medicine. Emphasis will be placed on nutrition, immunology, and diagnostic procedures both for the practitioner and at the laboratory. In addition, stress and stress management along with environmental systems in the veal barn will be thoroughly covered. Participation in this seminar will update the practitioner with the scientific knowledge necessary to effectively deal with many of the consumer and animal rights issues.

SEMINAR 16**Cost Effective Feedlot Consultation**

Objective: This seminar is designed for the practitioner who is extensively involved with feedlot clients. It will address the following four specific topics: Treatment procedures, vaccination strategies, enhancing necropsy techniques, and computerized record keeping systems.

Fee: \$175.00
Limit: 30
Level: Intermediate
Location: Room 122, Indiana Convention Center (Wednesday, 8:00 a.m. - Noon). Caucus Room, Westin Hotel (Wednesday, 1:00 p.m. - 5:00 p.m.)
Date: September 12 (Wednesday)
Time: 8:00 a.m. - 5:00 p.m.
Coordinator: Kee Jim (405)938-5151
Faculty: P. T. Guichon D.V.M., R. A. Smith D.V.M., D. G. Miles D.V.M., G. K. Jim D.V.M.

Computers

Used: Yes (Wednesday, 8:00 a.m. - Noon)
Description: This seminar will be a comprehensive discussion of four topics which are of paramount importance to the feedlot practitioner. Treatment procedures to be covered include antimicrobial therapy, ancillary therapy, hospital management and investigation of treatment failure. The controversial area of feedlot vaccination programs will be critically reviewed and the rationale for immunological control of diseases such as BVD, BRSV, and Haemophilosis will be examined. Also, with the aid of AV materials the seminar participants will quickly become "amateur pathologists" as necropsy techniques and the relevance of subsequent diagnostic laboratory procedures will be debated. Finally, a "hands on" demonstration of a "chute-side" computerized record keeping system will be offered. IBM computers will be available for seminar participants. Basic familiarity with microcomputers would be desirable but not essential.

SEMINAR 17**Beef Reproductive Management: Tools and Techniques**

Objective: This seminar is designed for the production-orientated veterinarian wanting current information on genetic selection, estrus control, pelvic measurements and applications of ultrasound in commercial cow/calf operations.

Fee: \$150.00
Limit: 30
Level: Basic to Intermediate
Location: Cabinet Room, Westin Hotel
Date: September 14 (Friday)
Time: 8:00 a.m. - 5:00 p.m.
Coordinator: Duane Miksch (502)365-7541
Faculty: Larry Benyshek Ph.D., Gene Deutscher Ph.D., Duane Miksch D.V.M., M.S., David Patterson Ph.D., Roger Pierson, Ph.D.

Computers

Used: No
Description: This seminar will interpret E.P.D.'s (expected progeny differences) and demonstrate their uses in predicting birth weight, pelvic size, calving ease, milk production, weaning weight, yearling weight, and other traits. Estrus control will be addressed from the perspective of practical use in natural service as well as A.I. The use of pelvic measurement in heifers and bulls will be explained and demonstrated as it impacts calving ease immediately and in subsequent generations. Applications of ultra sonography in reproduction and trait measurement will be discussed and demonstrated. The seminar will be half classroom participation and half demonstration at a cattle handling facility.

SEMINAR 18**Spouse Seminar 1****Help! I'm Parenting My Parents**

Objective: This seminar is designed to identify and discuss the concerns

we all share as our parents approach or join the ranks of the elderly.

Fee: \$15.00
Limit: 75
Level: All
Location: Grand 1 Room, Westin Hotel
Date: September 14 (Friday)
Time: 7:30 a.m. - 9:00 p.m.
Coordinator: Linda Miller (317) 852-3323
Faculty: Jamia Jasper-Jacobson, Ph.D.

Description: This seminar is based on Dr. Jamia Jasper-Jacobson's book "Help! I'm Parenting My Parents". The author has both national and local professional work experience in the educational, aging and social service areas spanning some twenty-plus years. She will share her wealth of knowledge and experience in the area of dealing with aging parents. Discussion will include counselling needs of the older person, myths of aging and medical aspects as well as housing, legal, insurance, and financial concerns. Plan to attend this unique seminar while enjoying a delicious continental breakfast provided for all registrants.

SEMINAR 19**Spouse Seminar 2****Reagan White House Breakfast**

Objective: This seminar will provide you with an enjoyable and unique opportunity to experience what dining at the White House was during the Reagan years. The Westin's Executive Chef Hill will share some interesting stories about cooking at the White House and will serve some of the uniquely prepared foods the Reagans enjoyed for breakfast.

Fee: \$20.00
Limit: 150
Level: All
Location: Capitol 2 Room, Westin Hotel
Date: September 15 (Saturday)
Time: 8:00 a.m. - 9:30 a.m.
Coordinator: Linda Miller (317) 852-3323
Faculty: Executive Chef Hill

Description: This is a buffet breakfast seminar in which Chef Hill will serve a wide variety of uniquely prepared food typical of those he prepared while Executive Chef for President and Mrs. Reagan during their years in the White House. Be prepared for a gourmet's delight and some entertaining stories about cooking at the White House courtesy of Chef Hill, the Executive Chef at the Westin Hotel.

SOCIAL ACTIVITIES

Have fun and enjoy yourself in Indianapolis! Re-establish acquaintances, make new ones, enjoy the camaraderie of colleagues and absorb the culture and character of our host city...these are traditional of AABP meetings. Whether a registrant or spouse, there are activities planned for you each day of the meeting.

OPENING EVENING HOSPITALITY

Featuring
"Hoosier Hospitality"
and

The Opening Session
with Orion Samuelson

Thursday, September 13

Exhibits Open - 2:00 p.m. - 7:00 p.m.

Reception and Meal - 5:00 p.m. - 7:00 p.m.

Exhibit Area - Indiana Convention Center Hall A

Program Committee Welcome - 7:15 p.m. - 7:45 p.m.

Keynote Speaker-Orion Samuelson - 7:45 p.m. - 9:00 p.m.

Grand Ballroom - Westin Hotel

If you haven't been able to spend ample time in the exhibit area at the last few AABP meetings due to conflicts with the program come early to Indianapolis. The Exhibit Hall will open at 2:00 p.m. on Thursday prior to the Opening Session allowing you to browse through the exhibits and meet old and new friends. "Hoosier Hospitality" will follow at 5:00 p.m. featuring snacks, drinks, a cash bar, ice cream and the famous "Hoosier Ribeye" sandwiches grilled by members of the Indiana Cattlemen's Association.

Following the reception the Opening Session will get the 1990 AABP meeting off to a great start. Following a welcome to Indianapolis, introduction of the program, and awards ceremony, and possibly a few other surprises the program will be turned over to our keynote speaker, Orion Samuelson. Mr. Samuelson is known throughout the country for his familiar voice which is heard daily on 300 radio stations with the 'National Farm Report'. He is also seen on 160 TV stations weekly with his syndicated 'US Farm Report'. He is a talented speaker who will first make you laugh, then make you cry, but in the end will make you think. Don't miss the Opening Session and Orion Samuelson.

"HOOSIER HOEDOWN HOSPITALITY"

ANNUAL BANQUET

Friday, September 14

6:00 p.m. - 11:00 p.m.

Indiana Roof Ballroom

140 E. Washington Stret

Reception - 6:00 p.m. - 7:00 p.m.

Dinner - 7:00 p.m. - 8:00 p.m.

"Singing Hoosiers" - 8:00 p.m. - 9:00 p.m.

Square Dancing - 9:00 p.m. - 11:00 p.m.

This is a great opportunity to join friends for a full evening of fun and relaxation in the beautiful Indiana Roof Ballroom, just a block from the Westin Hotel.

The evening will begin with a cash bar followed by a delicious prime roast beef dinner.

During the dinner hour we will be entertained by a Chamber music trio from the Indiana University Music Department.

The dinner will be followed by a full hour of music supplied by the famed "Singing Hoosiers" from Indiana University, directed by Professor Robert E. Stoll. As Indiana University's ambassadors to more than half the world, The Singing Hoosiers have earned rave reviews for the professionalism of their delightful, brightly staged presentations in 26 states and 18 foreign countries. Their special blend of music, choreography, and exuberant narration will inspire all of us.

Everyone is invited and encouraged to participate in the rousing Hoosier square dance, "called" by "Call Girl" Marty Fertig, that will conclude the truly memorable evening. Don't miss it. \$30.00 per person.

SPOUSE HOSPITALITY RECEPTION

"Style - You Can Be a Cinderella at Any Age"

Joyce Lee Davis

Saturday, September 15

(while your spouse is at Practice Tips
and Research Summaries)

7:00 p.m. - 9:00 p.m.

Capitol 2 Room - Westin Hotel

What do Barbara Walters, Jackie Kennedy Onassis, Candice Bergen, and Princess Diana have in common? It is STYLE! Each has developed a unique LOOK that is known as their personal signature.

This beauty/fashion seminar is designed to assist you in developing your personal style.

The first segment will focus on beauty and your self-image as related to make-up. Whether you are a classic beauty, sophisticated or sporty, the proper use of make-up depends on application. Model secrets to a perfect face will be shared.

Part two will feature fashion and your self-image. It will include figure dressing, wardrobe planning, the effective use of accessories and packing efficiently for business and pleasure trips. Fall fashions will be

featured.

Time will be available for a question and answer period during each segment.

SPOUSE HOSPITALITY ROOM

A spouse hospitality room will be available Thursday, September 13 from 11:00 a.m. to 4:00 p.m., Friday, September 14 and Saturday, September 15 from 8:00 a.m. to 4:00 p.m., and Sunday, September 16 from 12:00 noon to 4:00 p.m.

The Cameral Room, Westin Hotel will serve as the hospitality room. Indy "Shop Till You Drop" maps, listings of museums, Indianapolis Zoo information, maps of Union Station, plus many more attractions will be available. Church listings will also be provided. The Auxiliary of the Indiana Veterinary Medical Association will host the room and can be identified by their distinctive scarves. Refreshments will be provided each day.

TOURS

Tour 1

Hoosier Highlights

Thursday, September 13

1:00 p.m. - 4:00 p.m.

Enjoy a panoramic view of Indianapolis which gives special attention to the city's downtown historic and modern landmarks and sports facilities, including stops at the Indianapolis Motor Speedway and the Indianapolis Museum of Art.

\$12.00 per person.

TOUR 2

Brown County - Nashville, Indiana

Friday, September 14

10:00 a.m. - 4:00 p.m.

Brown County has long been known for its natural beauty and fall colors, its rolling hills and quiet southern Indiana charm, the renowned arts and craft colony of Nashville, the dozens of antique shops and its important lasting art heritage.

Visitors in the area have an entirely different diversion available in the area's abundance of attractions, whether its shopping for one-of-a-kind items, distinctive paintings or antiques. Nashville has a dozen fine restaurants serving great food with warm Brown County hospitality.

Lunch will be on your own.

\$18.00 per person.

TOUR 3

Conner Prairie

Saturday, September 15

10:30 a.m. - 4:00 p.m.

William Conner first explored the wilderness lands of Indiana in 1800, living for years among the Delaware Indians as a fur trader and later, investing in land and serving as a state representative. Pharmaceutical leader Eli Lilly, recognizing the historical significance of the property, purchased the Conner home and surrounding lands in 1934. He restored Conner's brick home and gave the site to Earlham College in 1964 to serve as a museum. Now, Conner Prairie has some 150 acres of fields, woods and historic areas and features year-around programming and educational entertainment for all ages.

Enjoy history as you've never enjoyed it before. Come celebrate your past at Conner's Prairie!

Begin your visit in Conner Prairie's modern museum center. When you're ready, leave the 20th century behind and live a little history at the William Conner Estate, Pioneer Adventure Area and Prairietown, the 1836 Village.

As you round the path to Prairietown, you'll hear the sharp ring of a blacksmith's hammer, smell the spicy scent of wood smoke and participate in the hustle and bustle of a thriving Indiana community of the 1830's. As the village residents go about their daily chores, you are encouraged to chat about current politics, family and town gossip.

Lunch on your own.

\$13.00 per person.



1990 AABP Conference Exhibitors

EXHIBITS OPEN

The commercial and educational exhibit hall offers a modern showcase of veterinary products and services—the biggest trade show exclusively for cattle veterinarians at any meeting! Exhibits will be open 20 hours for 2 1/2 days. You will be inundated with biological, pharmaceutical and agricultural technical information throughout the day, including breaks and lunch time. Expand your educational processes and show your appreciation to the exhibitors who are an integral part of the AABP Annual Meeting.

Samuel Hutchins, 3rd, DVM
South Barre, VT
Exhibits Manager

BOVINE GIVE-A-WAY

Ten practitioners can win \$50.00 each by visiting the exhibit area. Bring business cards to deposit in milk cartons at each exhibit booth. Winners will be announced at the AABP business lunch on Sunday, September 16. All veterinarians registered at the meeting are eligible.

216

Accu-Med Corporation

270 Marble Avenue, Pleasantville, New York 10570

Accu-Med Corporation will display a full line of Accu-Cul-shure, a true anaerobic and aerobic culture swab, providing the ability for cytological as well as culture specimens with one entry. Available now in two convenient sizes for uterine, pharyngeal, nasal, tracheal, bladder or any other deep cavity culture site where specimen integrity protection is required.

108

Advanced Veterinary Systems

3410 Sky Park Blvd., Eau Claire, WI 54701

114

Agri-Sales Associates, Inc.

212 Louise Avenue, Nashville, TN 37203

Agri-Sales Associates, Inc., a National Manufacturer's Representative Group, will exhibit Y-Text Insecticide and I.D. ear tags; Rubbermaid Agricultural Products; Allied Precision Industries, UL approved livestock tank heaters; Q-Mist aerosol insecticides and air fresheners; Jorgensen Laboratories specialty instruments and equipment for the animal health care industry.

421

Albion Laboratories, Inc.

101 N. Main, Box 750, Clearfield, UT 84015

Complete line of nutritional formulas containing Albion's patented amino acid chelated minerals, such as Breeder Pac, C₂MZ, Replamin Liquid, Beef & Dairy Mineral, Nutri Sal, Rep Gel, etc.

205,207

Alfa-Laval Agri, Inc.

11100 N. Congress Avenue, Kansas City, MO 64153

De Laval – the world's largest dairy supplier is right next door.

118

American Breeders Service

P.O. Box 459, DeForest, WI 53532

Featuring Alcide® brand uddercare products — UDDERgold Germicidal Barrier Teat Dip, 4XLA™ Germicidal Pre/Post Teat Dip, and SilverQUICK™ Germicidal Udder Wash developed to reduce the spread of mastitis-causing organisms. Includes product samples, pictures, and printed materials explaining product properties and efficacy. Also featuring ABS sires and services.

329,428

American Cyanamid Company

One Cyanamid Plaza, Wayne, NJ 07470

American Cyanamid will be displaying its health and feed products — TRAMISOL® Brand Dewormer, Warbex® Pour-On, VIGILANTE® Insecticide, AUREO S 700® Medicated Premix, AUREOMYCIN® Medicated Premix, PRESPONSE® Pasteurella Haemolytica Toxoid and its Veterinary Merchandising Service Program — CVMS. Technical Service and sales personnel will be present.™ Langford, Inc.

307

AVMA Group Health & Life Insurance Trust
55 E. Jackson Blvd., 8th Floor, Chicago, IL 60604

Personnel from the Trust will be at the booth to answer any questions you may have concerning the AVMA Group Health & Life Insurance Plan for members, their dependents, and employees.

305

AVMA Professional Liability Insurance Trust
55 E. Jackson Blvd., Chicago, IL 60604

Here is the place to have your questions about malpractice and/or workers' compensation answered by representatives of the AVMA Professional Liability Insurance Trust and the broker, Mack and Parker. They will be on hand to help you with potential claims or technical questions.

217,219,221

Babson Bros. Co. "SURGE"

1880 Country Farm Drive, Naperville, IL 60540

SURGE dairy farm pipeline equipment and related products.

322,324

Bio-Ceutic

A Division of Boehringer Ingelheim Animal Health, Inc.
2621 North Belt Highway, St. Joseph, MO 64506

Bio-Ceutic offers a wide variety of biologicals, pharmaceuticals and insecticides for both large and small animals. Our complete Bio-Ceutic line of products is available through our national network of distributors.

105

Bou-Matic

P.O. Box 8050, Madison, WI 53708

325,422,424

Bowie Manufacturing, Inc.

313 South Hancock, Lake City, IA 51449

Come see the talk of the veterinary world!! Bowie's "GALAXY" chassis-mount mobile clinic. The design of the 90's. Ask our representative about the convention specials. Check out the Bowie X-ray generator and Bowie/Polaroid instant processor. As always, Bowie sets the standard for quality.

310

Burns Veterinary Supply

3400 West Lake Ave., Glenview, IL 60025

Burns Veterinary Supply, since 1946, has been supplying the Veterinary profession with quality pharmaceuticals, biologicals and equipment. Stop by our booth for our convention specials.

2,3

The Butler Company

5000 Bradenton Avenue, Dublin, OH 43017

AABP members and guests are cordially invited to stop by The Butler Company booths where the latest and most up-to-date hospital equipment, instruments and devices will be available for your inspection. Also on display will be the largest variety of pharmaceutical and biological products available through an ethical veterinary distributor.

209

Church & Dwight Co., Inc.

469 N. Harrison St., Princeton, NJ 08543-5297

Church & Dwight Co., Inc., makers of ARM & HAMMER® products including MEGALAC® Rumen Bypass Fat and Feed Grade Sodium Bicarbonate, will provide product literature, technical and sales information. Computer simulation of dairy rations using MEGALAC® and sodium bicarbonate will demonstrate proper application of these products.

419

Diversy Corp.

1532 Biddle Ave., Wyandotte, MI 48192

Diversy Corp.: Uddercare products for the prevention and control of mastitis for recommendation or resale by veterinarians.

409

Eidson Associates, Inc.

P.O. Box 16204, 3908 Kipling Ave., Minneapolis, MN 55416

We extend a cordial welcome . . . Introducing NEW POW'R DOSER. Pneumatically-powered Injectors; Drenchers; "Pour-On" Devices: Automatic/Adjustable 0.5ml-2.0ml, 0.1ml-10.0ml, 1.0ml-25.0ml; also 1 oz. Automatic "Pour-On" Applicators. All can be powered by compressed air or by propane gas cylinder. POW'R JECT, CO₂ Powered Automatic/Adjustable 0.05ml-1.0ml. INJECT WITHOUT NEEDLES. NEW INFORMATION. NEW ATTACHMENTS.

400

Elanco Products Company

Lilly Corporate Center, Indianapolis, IN 46285

Elanco will feature Rumensin for improved feed efficiency in feedlot cattle and increased rate of weight gain in stocker, dairy and beef replacement heifers; Tylan Premix for liver abscess control; Tylan 200 for treatment of shipping fever, pneumonia, foot rot and diphtheria; and Compudose—the one-shot, 200-day implant.

323

Encyclopaedia Britannica, U.S.A.

310 S. Michigan Ave., Chicago, IL 60604

The new Encyclopaedia Britannica, great books of the Western World and Compton's Encyclopedia; plus a complete line of educational accessories.

109

Environmental Diagnostics, Inc.

1238 Anthony Road, Burlington, NC 27215

EZ-SCREEN® test kits for the detection of antibiotic residue, aflatoxin and mycotoxins will be displayed. C.A.S.T. and L.A.S.T., bioassay tests for sulfa drugs and antibiotics, and S.O.S. test kits for the detection of sulfamethazine in animal urine, sera, and feed will be shown.

404

Equibov Ltd.

205 Harris Street, Rockwood, Ontario, Canada, N0B 2K0

Equibov Ltd., will display specialized and innovative equipment, not available elsewhere, for large animal reproductive work and for equine dentistry. New items include an Electronic Pelvimicrometer with a lightweight, durable sensor. It does not need to be protected while being used in the rectum. No fluid to leak and alter accuracy. Digital readout

gives repeatable, reliable results instantly. It even calculates area! Tested and proven to stand up after years of measuring. An innovative, endometrial bovine biopsy punch. FACS—Fluid Administration and Control System will be displayed and demonstrated.

415

Flying W Livestock Equipment

Rt. 1 Box 27, Watonga, OK 73772

*Flying W Livestock Equipment is exhibiting their "VET SPECIAL" hydraulic chute with hydraulic headbender. Offering: *the heaviest construction available, *safety features for operator and animal, *one man operation, *quiet, motor-driven pump coupling, *hydraulic side exit, *rebar floor, *head hold-down chains, *medicine hooks. Free consultation and video viewing at booth.*

100

Fort Dodge Laboratories

P.O. Box 518, Fort Dodge, IA 50501

Please plan to visit the Fort Dodge Laboratories' booth and get the latest information on our complete line of bovine pharmaceuticals and biologicals, including a new Trichomoniasis vaccine, and the new all-killed BVD, IBR, PI₃, BRSV, pasteurella combination called Triangle® 4+PH-K.

215

Glenwood, Inc.

83 N. Summit Street, Tenaflly, NJ 07670

Glenwood Inc. will exhibit the INTRAMUSCULAR Calcium/Phosphorus product Calphosan® Suspension. This time-tested product is used as an aid in the treatment of milk fever in cattle.

309,311

Grand Laboratories, Inc.

RR 3 Box 36, Freeman, SD 57029

Grand Laboratories, Inc. will highlight our growing line of Federally-licensed bovine vaccines, bacterins, and anti-serums. They include: Vira Shield 5, a killed IBR, BVD, PI-3, BRSV vaccine; Vib Shield Plus, a one-dose Vibrio bacterin that can be given anytime within 12 months of breeding; and Vira Shield 4+L5, a combination IBR, BVD, PI-3, and 5-way Lepto vaccine.

318

Hoard's Dairyman

28 Milwaukee Avenue W., Fort Atkinson, WI 53538

Hoard's Dairyman magazine has served the dairy industry for over 100 years. Our books reflect the magazine's scope, and those featured at the exhibit are especially useful to the bovine practitioner, as references or as client premiums: Laboratory and Field Handbook on Bovine Mastitis, Embryo Transfer in Dairy Cattle, Fertility and Sterility, and more.

300,302

Hoechst-Roussel Agri-Vet Co.

Rt. 202-206, P.O. Box 2500, Somerville, NJ 08876-1258

224

Hoffman-La Roche, Inc.

Animal Health and Nutrition

340 Kingsland St., Nutley, NJ 07110

Roche Animal Health and Nutrition will be featuring our full

line of Albon® sulfadimethoxine products and Rocavit® injectable vitamins along with Bovatec® for cattle.

408,410

IBA Inc.

27 Providence Rd, Millbury, MA 01527

Dairy Farm Supplies, including: IBA Teat Dips, Silicone and Rubber Inflatons, IBA Milker Claws, Pipeline Cleaners and Sanitizers, Animal Health Products for calf and cow and Livestock Identification and Handling Products.

402

Ideal Instruments, Inc.

401 North Western Ave., Chicago, IL 60612

116

Idexx Corporation

100 Fore St., Portland, ME 04101

411

IMMVAC, Inc.

6080 Bass Lane, Columbia, MO 66201

IMMVAC, Inc is pleased to introduce ENDOVAC-Bovi™, the first and only federally-approved vaccine for protection against Salmonella, Pasturella, E. coli and virtually all gram-negative bacterial infections in cattle. This remarkable "cross-protective" vaccine is indicated for use against endotoxin-mediated diseases such as Coliform mastitis, neonatal septicemias/diarrheas and Pasturellosis.

117

IMPROMED, Inc.

304 Ohio Street, Oshkosh, WI 54901

IMPROMED, Inc. (formerly Animed Computer Systems, Inc.) will be exhibiting the powerful practice management software which set the industry standard in the early 1980's. IMPROMED will also be demonstrating the PROVIDES diagnostic software which has now been translated into Japanese and French for foreign distribution. Completing the product line is vDRUG, the new veterinary drug and usage guide program which supplies on-line references for veterinary pharmaceuticals.

200

Jorgensen Laboratories, Inc.

1450 N. Van Buren Ave., Loveland, CO 80538

We will be exhibiting our complete line of OB instruments, including the Hercules zig zag calf puller, embryo transfer catheters and Danish line of rubberized OB apparel. Don't miss our slide tape presentation of the new Grymer/Sterner Toggle suture method for repair of left displaced abomasum.

214

Kamar Marketing Group, Inc.

N. 6th W. 23673 Bluemound Rd., Waukesha, WI 53188

Kamar proudly introduces the Accufirm Progesterone Test Kit that measures progesterone in four simple steps and less than four minutes time. Stop by to see and learn about the ImmuCell Rapid Mastitis Test and Rapid Johnes Test . . . A whole new world of rapid diagnostics for the bovine practitioner . . . today!

225

Kane Enterprises, Inc.

P.O. Box 360, Sioux Falls, SD 57101

Displaying AG-TEK Veterinary Specialty Products – including the new AG-TEK Fingerless “Poly-Sleeve”® and AG-TEK Maxi-Sleeve® OB gloves; disposable plastic semen collection cones; Wolf Tooth Extractor and other innovative and unique veterinary products.

6

Klenzade — A Service of Ecolab

370 Wabasha, St. Paul, MN 55102

Klenzade, the leading supplier of Dairy Farm cleaners and sanitizers, will be featuring Oxy-Gard, the first activated Hydrogen Peroxide teat dip and Fast-Pacs, pipeline cleaners in a handy and safe dissovable packet.

7

LaBoit Inc.

1256 Britains Lane, Columbus, OH 43224

Manufacturers of fine-quality mobile inserts and van conversions for veterinary use. Also see our line of X-ray support equipment such as our patented X-ray cassette holder and X-ray footplate.

119

Large Animal Veterinarian

122 S. Wesley Ave., Mount Morris, IL 61054

LARGE ANIMAL VETERINARIAN is published bimonthly, directing its message to large animal veterinarians, providing a concise, quick-to-read format covering: preventive medicine, nutrition, animal environment, genetics, production management, new technology and regulatory impact.

111

The Magrath Company

404 West B St., McCook, NE 69001

Stop by our booth and take a look at our new products.

321

Merritt Veterinary Supply

P.O. Box 188, Sumter, SC 29151-0188

Merritt is proud to once again be exhibiting at the “BIG” one for bovine practitioners. Come by our booth at your leisure and see our full line of biologicals, pharmaceuticals and equipment. Southern hospitality will be liberally dispensed this year as it was in Kansas City. “Your Practice Deserves Merritt.”

211

Midwest Veterinary Supply, Inc.

11965 Larc Industrial Blvd., Burnsville, MN 55337

110,112

Mobay Corporation

Animal Health Division (Haver/Diamond Scientific)

P.O. Box 390, Shawnee, KS 66201

Haver will display their complete line of Biologicals and Insecticides and Pharmaceuticals for Bovine Practitioners. In addition to featuring the innovative analogue, ESTRUMATE (cloprostenol) now available for your client’s beef, dairy herds, and feedlot heifers we will feature Spotton, Tiguvon Pour On and Hava Span.

414

Mosby-Year Book, Inc.

11830 Westline Industrial Drive, St. Louis, MO 63146

Mosby-Year Book, the leader in medical publishing, is pleased to announce the arrival of *Smith’s Large Animal Internal Medicine*, an indispensable tool for everyone involved with large animal care. Stop by to see all the latest in animal care. We’re proud to sponsor the AABP.

101,103

MSD AGVET, Division of Merck & Co., Inc.

485 Rt. 1, South Parkway Towers-WBF-445, Iselin, NJ 08830

MSD AGVET sales representatives and technical service veterinarians will be available to discuss ivermectin products; specifically IVOMEK 1% cattle injection; IVOMEK swine, available in 1% or .27% injectable concentrations, CURATREM for liver fluke control, CORID for preventing or treating coccidiosis, and TBZ. We will also be eager to discuss EQVALAN and HEARTGARD-30.

407

Nasco

901 Janesville Avenue, Fort Atkinson, WI 53538

Nasco supplies a large selection via catalog of tools and equipment from two locations, Fort Atkinson, Wisconsin, and Modesto, California. Stop at the booth to sign up for a free copy of the 1991 Farm and Ranch catalog. The catalog includes thousands of products used by veterinarians, farmers, and ranchers. Included are livestock identification items, products for poultry, sheep, dairy, beef, and hog productions. The catalog features artificial insemination supplies, veterinarian hand tools, and much more.

320

North American States Leasing

103 S. Center St., Lake City, IA 54119

420

Nutritional Software Systems

57828 C.R. 107-S, 6th St., Elkhart, IN 46517

Dairy Software for Desktop to Laptop Computers. **Nutri-Ration:** Maximum Profit Program. Up to 22 different printouts. Menu-driven. Flexibility includes balancing for **bypass protein, amino acids, fats, NS carbohydrates, cation/anion ratio, NDF or ADF, and cud chewing time.** Field tested by consultants since 1977. **LactPro:** Milk Profile of Lactation: tool for analyzing feeding programs; persistency of milk production. Used to access DHIA records for profiling monthly milk reports. **Graphing capabilities.**

406

Penicillin Assays, Inc.

36 Franklin Street, Malden, MA 02148

Introducing the full line of Charm Veterinary Diagnostics. Among these is the Charm Farm Test, a broad-spectrum test for Beta-lactams, sulfonamides, tetracyclines, macrolides and aminoglycosides; all detected in a single test. It is easy to use, portable and designed for on-site use and at the clinic.

115

Pfizer, Inc.

1107 South MO 291 Highway, Lee’s Summit, MO 64081

© Copyright American Association of Bovine Practitioners; open access distribution.

206

**Pioneer Hi-Bred International, Inc.
Microbial Genetics**

4601 Westown Pkwy., Suite 120, West Des Moines, IA 50265
MICROBIOL GENETICS, A DIVISION OF PIONEER HI-BRED INTERNATIONAL, INC. will display PROBIOCIN® brand Microbiol Products — direct-fed products that will help re-inoculate the digestive tracts of beef cattle that have experienced adverse conditions.

129,228

Pitman-Moore

421 East Hawley St., Mundelein, IL 60060

122,124

Porta-Vet

110 Wood St., Hudson, IA 50643

We will be exhibiting an all-new look for the Bovine Practitioner. Stop by for a quote on updating your mobile unit.

5

PRN Pharmacal, Inc.

5830 McAllister, Pensacola, FL 32504

120

Pro Vet of Loves Park/Seattle

P.O. Box 2286, Loves Park, IL 61131

We are a full line distributor with over 8,000 products available. We will feature new equipment, pharmaceuticals and biologicals.

210

Products Group Int'l, Inc.

2805 Wilderness Place, Boulder, CO 80301

Top-Of-The-Line ultrasound scanning equipment and accessories are offered by Products Group Int'l, Inc. Stop and see our Bovine Fetal Sexing and Reproductive video tape. Ultrasound equipment is manufactured by Tokyo Keiki Company, Ltd.

107

ProScience Corporation

107 Carpenter Drive, Suite 100, Sterling, VA 22080

ProScience Corporation is focused on applying state-of-the-art immunochemistry systems for the agricultural and food industries. Initial products of ProScience are targeted for the dairy industry and its initial product, ProStaph I,™ is a rapid diagnostic for testing antibodies to the bacterial pathogen, Staph. aureus, in cow milk.

4

Protein Technology, Inc.

1221 Nicollet Mall, #230, Minneapolis, MN 55403

202,204

PSI (Professionals' Software, Inc.)

One PSI Plaza, Effingham, IL 62401

PSI is a software company serving the veterinary profession and has been designated as an Industry Remarketer by IBM. We supply the veterinarian with a total system that will enable you to better manage and market your practice. The Veterinary Practice Manager software program operates in either a single-user or multi-user environment and is continually enhanced by PSI's research and development team.

121

Rhone-Poulenc Animal Nutrition N.A.

500 Northridge Road, Suite 620, Atlanta, GA 30350

Deccox brand of Decoquate prevents coccidiosis, the third most prevalent cattle health problem today. By stopping coccidiosis early, cattle go on feed faster, have better feed conversions and improved health. By starting cattle on a Deccox program you can prevent an outbreak in the first critical days in the feedlot.

123,125

Sanofi Animal Health, Inc. (formerly CEVA Labs.)

7101 College Blvd., Suite 610, Overland Park, KS 66210

Sanofi Animal Health, Inc. will feature ERYTHRO®-200 Injectable (Erythromycin) and a new line of inactivated bovine vaccines. Also, SYNCHRO-MATE-B™ for controlled breeding programs; CYSTORELIN® (GNRH), the preferred treatment for cystic ovaries in bovine; Sustain III™ (Sulfamethiazine), BOVO-COX™ (Coccidiosis) Bolus and HY-SORB™-G an oral electrolyte gel; and our popular line of Sanofi/Abbott I.V. Fluids and Sets.

301,303

Schering-Plough Animal Health

P.O. Box 529, Kenilworth, NJ 07033

223

Shank's Veterinary Equipment, Inc.

410 Cochran Avenue, Milledgeville, IL 61051

The B.P. 360° Rotary containment chute was designed by a practicing veterinarian and has been manufactured solely by Shank's Veterinary Equipment, Inc. for the past five years. The B.P. Chute has a broad range of uses such as processing cattle, minor foot work and major surgery.

413

Shoes for Moos, Inc.

9 Church St. E., Elmira, Ontario, Canada, N3B 2K7

- An aid to hoof treatment for cows
- Promotes healing
- Waterproof
- Re-usable

201,203

SmithKline Beecham Animal Health

1600 Paoli Pike, West Chester, PA 19380

106

Solvay Animal Health, Inc.

1201 Northland Drive, Mendota Heights, MN 55120

Watch for the Solvay Animal Health, Inc. exhibit, where we will feature our bovine pharmaceutical products, including Re-Covr, Vetisulid, and Follutein, along with our injectable antibiotics and surgical instrument line.

417

Stone Manufacturing & Supply Company

1212 Kansas Avenue, Kansas City, MO 64127

Stone Manufacturing will exhibit their full line of livestock identification, handling, and grooming equipment. Products will include tattoos, ear notchers, brands, dehorners, calf pullers, O.B. equipment, cattle leads, anti-kick, ear puches, rumen magnets, horn weights, bull rings, hoof trimmer; plus several new products, including their COWLIFT and CALF SAVER.

314,316

Syntex Animal Health, Inc.

4800 Westown Pkwy., Suite 200, West Des Moines, IA 50265

218,220

**TechAmerica Veterinary Products/
Fermenta Animal Health**

10150 N. Executive Hills Blvd., Kansas City, MO 64153

Please plan to stop for information on TechAmerica Veterinary Products from Fermenta Animal Health. Premier killed virus vaccines featuring Premier 4 BRSV, IBR, BVD, PI3 vaccine are available from your TechAmerica distributor. Ask for details on SulfaTech SMSR bolus, Revive and Tylosin. Ask your distributor for TechAmerica!

319

TriLogic System

10201 Dennis Drive, Des Moines, IA 50322

Profit Maximizer™ Dairy: Version 5 Enhanced . . . the ultimate solution for nutrition and feeding; it works the way you do. Dairy formulation software unequalled for flexibility & ease of use. Leading the industry since 1981, the program is fully 1989 NRC compatible, or it can be easily & completely customized for you.

208

UltraFlex Co.

1609 Golden Gate Plaza, Cleveland, OH 44124

UltraFlex manufactures UltraFlex non-binding elasticized veterinary bandage, elasticized quilted intermediate dressings, MediPad foot and wound medication pads, FootFelt Hoof Packing, and WetWrap Cold/Hot Therapy Packs.

306,308

Universal Dairy Equipment, Inc.

11100 N. Congress Ave., Kansas City, MO 64153-1222

Universal Dairy Equipment, Inc. is a full-line dairy equipment company dedicated to focusing on the future of the dairyman. Our commitment is to provide the dairyman with efficient and economical milking systems installed with the Right Angle Parlor, Commander Feeder, Automatic Take-Off, Kleen-O-Matic and other Universal equipment.

229,328

The Upjohn Company

7000 Portage, (9510-190-47), Kalamazoo, MI 49001

Welcome to the American Association of Bovine Practitioners Conference. Our representatives are on hand to discuss programs involving Lutalyse, Naxcel, Mastitis products and practice building ideas. Detailed information on these products is also available for your use. We look forward to seeing you.

102,104

Veterinary Concepts®, Inc.

P.O. Box 39, Spring Valley, WI 54767

Veterinary Concepts®, Inc. will display its many unique specialty plastic products. VCI® feature products will include new delivery systems manufactured by Genesis Industries, including the Pro-Ject syringes for the large animal practitioner. Additionally, many new devices for reproduction will be shown for the first time.

416

Veterinary Designed Instruments, Inc.

P.O. Box 430, Lakefield, Ontario, Canada, K0L 2H0

Introducing a new Portable Surgery Table! Designed by a veterinarian, this 45-pound table stores in a clinic closet, is height-adjustable to reduce back strain, and supports animals weighing up to 400 pounds in all possible surgical positions. Veterinarians say the table makes surgeries less frustrating and uncomfortable.

304

Veterinary Learning Systems

425 Phillips Blvd., #100, Trenton, NJ 08618

Veterinary Learning Systems publishes *The Compendium on Continuing Education for the Practicing Veterinarian*, *Equine Veterinary Journal North American Edition*, and *Veterinary Technician* — all respected journals offering important, practical review articles for veterinarians and staff. Optional continuing education programs are available with *The Compendium* and *Veterinary Technician*. VLS also produces *Video Forum*, a quarterly, multitematic videotape, as well as custom educational video programs. VLS is publisher of numerous books, symposium proceedings, newsletters, and other custom publications specifically for the veterinary community.

222

Veterinary Practice Publishing Co.

P.O. Box 4457, Santa Barbara, CA 93140

315,317

West Agro, Inc.

11100 N. Congress Avenue, Kansas City, MO 64153

Udder Health Products and Milk Progesterone Diagnostic Test.

418

Western Veterinary Supply, Inc.

P.O. Box 82656, Oklahoma City, OK 73148

Western Veterinary Supply, Inc. is a full-line Veterinary Distributor for you, the Bovine Practitioner. We have distribution branches in Nebraska, Kansas, Oklahoma and Amarillo and Austin, Texas, to serve you. Please come by the booth to see what products and manufacturers Western has to offer.

See page XXVI
for Exhibit
Floor Plan

Indianapolis: The Crossroads of America



Indianapolis, the state capital, is Indiana's largest city. Its 1980 population of 700,807 made it the nation's 13th largest city. Aptly called the Crossroads of America, transportation has been central to the city's development. In the 1830's the Hoosier capital stood at the junction of the National and Michigan roads. Later it became the hub of a railroad network and, briefly, the center of a vast interurban system. The 20th century brought the automobile and the railroad's successful rival, the truck. Today a system of interstate highways extends from Indianapolis in more directions than from any other city in the United States.

The city's location has made it important commercially and industrially. It is not only near the geographic center of the state but also lies within 700 miles of 65 percent of the nation's population. More than 1,400 manufacturing firms are located in the metropolitan area, providing jobs, many transportation related, for over 106,000 (1987) men and women. Another 489,000 jobs are held in the nonmanufacturing sector which, as the nation's economy moves toward service or informational priorities, is expanding faster than manufacturing.

In spite of its size, until a few years ago Indianapolis projected the image of an overgrown town. Located on a plain and possessing wide avenues permitting easy commuting, the city grew outward rather than upward. This small-town atmosphere had both positive and negative connotations. Indianapolis was acclaimed as the comfortable home of the "typical" American and ridiculed as "Indiana-no-place." Regardless of which meaning one placed on it, the accuracy of the then prevailing image

changed in the 1980s as city redevelopment, to the tune of several billions of dollars, reshaped it physically.

In 1820 the General Assembly reluctantly recognized that Corydon was an inconvenient location for the state capital. It appointed a commission to find a new site in the unsettled lands to the north. The commissioners agreed on a location at the confluence of the West Fork of the White River and Fall Creek. They thought that this place offered the advantages of a navigable stream, fertile soil, and a central position. The legislature quickly ratified the choice of the site, but argued for several days over a name for the new city. Representative Marston G. Clark earnestly promoted the name Tecumseh, but few found it acceptable. (After all, the great Shawnee war chief had been dead less than 10 years.) Jeremiah Sullivan of Jefferson County finally suggested the name Indianapolis. At first, the legislators greeted the word with derision, but, perhaps worn out from so much talking, eventually adopted it with little dissent.

The Fall Creek location had limitations as a site for a town. The land was swampy and cut across with ravines filled with stagnant water-excellent breeding grounds for mosquitoes. In the summer of 1821 virtually everyone in the settlement came down with malaria. During that grim summer the settlement lost 25 people, mostly children. The White River proved only marginally navigable. Floatboats and keelboats could make the voyage upriver in the spring, but steamboat travel proved all but impossible. During the 1828-29 season Gov. Noah Noble offered a reward of \$200 to the first captain to navigate a steamboat to the capital

city, but no one collected. The only steamboat ever to make it all the way to Indianapolis was the *Robert Hanna* which did so in 1831. The vessel spent six unprofitable weeks on a sandbar on its return voyage, an experience which discouraged later attempts to reach the city.

Samuel Merrill moved the state's properties to Indianapolis in the fall of 1824. It took 10 days for Merrill's wagons to cover the 125 miles from Corydon. By that time the settlement's population had grown to about 100 families. The physical appearance of the town hardly conveyed the image of a state capital. The first view of Indianapolis was disappointing to young Hugh McCulloch, who recalled having seen few towns "so utterly forlorn as Indianapolis appeared to me in the spring of 1833."

In 1831 the General Assembly authorized the construction of a statehouse. This building was of an unusual style, best described as a Parthenon with a dome. W. R. Holloway, an early historian of the city, disapproved of the Greek style. He regarded it as unsuitable for a flat country and considered the dome an unforgivable error in judgement. A later historian, Jacob P. Dunn, defended the building on the ground that an "American capitol without a dome is inconceivable." Both agreed that the building was constructed of inferior materials, for after a time it fell into disrepair and presented a shabby appearance.

The completion of the National and Michigan roads lessened the isolation of the wilderness capitol. By the mid-1830s Indianapolis became a major stopping point for traffic moving west on the National Road. Hopes for the Central Canal which would link the capital to the Wabash and Erie Canal were dashed by the depression of 1837—the only portion of the canal to be finished extended from the village of Board Ripple to Indianapolis. But railroads succeeded where the canal had failed. The first train, running from Madison to Indianapolis, arrived in 1847. Indianapolis was at last independent of the whims of the weather and unreliable roads. The "long reign of the wagoners," as Holloway phrased it, was at an end.

The 86-mile line was the first of several to link the city to the outside world. By 1870, 11 railroads led into Indianapolis. At first, each company built its own depot, but this soon proved inconvenient both to the railroads and to the people of the city. In 1850 three of the railroads organized the Union Railway Company, which laid a common track within the city limits and, three years later, built the nation's first union depot. By the end of the 1860's the frame structure, despite enlargements, was no longer adequate for the volume of traffic that it had to handle. In 1888 a massive brick and limestone structure replaced the original depot.

The railroads made Indianapolis an important military assembly center during the Civil War. The old and new fairgrounds became camps Sullivan and Morton. Camp Morton later became a prison for captured Confederate soldiers. Indianapolis's own regiment was the 11th Zouaves, so called because they wore uniforms and practiced the spirited drill of the French Zouave infantry. Their commander was the flamboyant Col. Lew Wallace. When the ladies of the city presented the regiment with a flag, Wallace, holding the colors aloft, ordered his troops to swear a solemn oath to avenge the humiliation of Buena Vista. (Jefferson Davis, the new president of the Confederacy, had accused an Indiana regiment of cowardice during that Mexican War battle.)

The war acted as a stimulus to the city's growth. Between 1860 and 1870 the city's population grew by 159 percent. The

depression of the 1870's brought labor unrest and the great railroad strike of 1877. In Indianapolis comparatively little violence accompanied the strike. The 1880's brought recovery from depression, and Indianapolis emerged as an important manufacturing center.

Indianapolis's central location and its excellent rail connections also attracted many other types of business. In 1872 Lyman S. Ayers bought out R. N. Smith and Company's Trade Palace and founded the department store chain which has figured prominently in the city's history. Four years later Col. Eli Lilly opened the small laboratory which was to grow into the giant pharmaceutical company. It was natural that the railroads themselves would become important employers. In 1890 railroads car construction and repair shops were the city's fourth largest employer. Probably most important was the Big Four's Beech Grove shops which opened in 1905.

During the latter part of the 19th century Indianapolis grew into a city of impressive buildings and beautiful homes. A number of imposing buildings were added to the landscape during this period—an ornate three-story county courthouse with a 97-ft high clock tower, the elegant English Opera House and Hotel which graced the Circle until 1949, Tomlinson Hall civic auditorium, and a new statehouse completed in 1888 for slightly more than \$2 million. In 1902 the city dedicated its new centerpiece, the Soldiers and Sailors Monument. The election of Benjamin Harrison as president of the United States in 1888 seemed a kind of recognition of the rising importance of the young city. In February 1889 a proud Indianapolis sent the new president and his wife off to Washington with a parade that took a full hour to cover the 15 blocks from his home on N. Delaware St. to Union Station.

Early in the 20th century Indianapolis became the center of an electric interurban system which covered most of Indiana and extended into neighboring states. The first interurban line to enter Indianapolis was the Indianapolis, Greenwood and Franklin Traction Company, which began operating cars from Greenwood on January 1, 1900. Interurban traffic grew at a dizzying rate. In 1904 over three million passengers entered and left Indianapolis on these electric rail lines. On September 12 of that year the largest interurban station in the world, the Indianapolis Traction Terminal, opened. It included a nine-story office building and train shed sheltering nine tracks. The terminal offered the services of a railroad union station, such as office space for the companies, baggage facilities, ticket counters, and provided passengers with the convenience of a central station in downtown Indianapolis. In 1918, the peak year, 128,145 trains passed through the station and serviced 7,519,634 passengers.

Indianapolis's name also became closely linked with another new form of transportation, the automobile. We may never know the names of all the cars produced in the city, but more than 70 have been identified. Many of the names are now unfamiliar, but others, such as Duesenberg, Stutz, or Marmon, are legendary in automotive circles. The Indianapolis auto industry produced its share of colorful personalities. Most notable was Carl G. Fisher. Born in Greensburg, Fisher quit school at 12 and made his way to Indianapolis where he opened a bicycle shop. Fascinated with speed and the excitement of racing, Fisher became well known as a daredevil cyclist. His interest naturally led him to automobiles, both in selling and racing them. In 1904, in partnership with James A. Allison, he formed the Prest-O-Lite Company which made acetylene head lamps.

Indianapolis earned a reputation as a producer of expensive, luxury automobiles. The Cole, Duesenberg, Stutz, and Marmon were built for the few with money to enjoy style and high-quality workmanship. Between 1920 and 1935 the Duesenberg plant produced fewer than 1,500 cars. Each was a mechanical and artistic marvel, but the market for such fine-quality transportation was limited and profitability was marginal. Some Indianapolis firms found it hard going even in good times—the Cole Motor Company folded in 1925. The depression of the 1930's proved fatal to the remaining Indianapolis automakers.

The development of the motor truck has probably had as great an impact on the history of the city as the railway. By 1908 a practical heavy-duty truck had been developed and was in use in Indianapolis. In 1914 the stockyards found it necessary to create a division for livestock delivered by truck. Five years later 35 motor express routes operated out of Indianapolis.

During the early decades of the 20th century Indianapolis continued to grow. By 1920 the city's population exceeded 300,000. In that year there were more than 1,000 manufacturing establishments in the city, employing about 50,000 workers. The city's fortunes crashed with those of the rest of the nation in 1929. In October 1933 over 10,000 families were on relief in Marion County. The manufacturing work force sank to about 30,000.

The Second World War brought Indianapolis out of the depression. By 1939 the local economy began to improve as the federal government expanded its national defense program. Allison expanded to produce high-speed fighter plane engines, and Curtiss-Wright opened the largest aircraft propeller factory in the United States in the old Marmon auto plant. Bridgeport Brass made artillery, Kingan and Company and Van Camp Packing Company produced army rations, and Eli Lilly made drugs to treat tropical diseases. Labor surplus became labor scarcity. In 1942 the War Manpower Commission declared Indianapolis a "labor shortage area."

During the 1950's Indianapolis became famous as a city that resisted federal intrusion into local affairs. The opposition to federal aid was bipartisan, both Democrats and Republicans shunning federal funding for flood control, urban renewal, and school lunches. The city was able to raise \$13 million for hospital construction without seeking federal aid, and the \$22 million City-County Building was financed exclusively through local revenue bonds.

On another front, beginning in the 1960's the city began a dramatic turnaround in its outward appearance. "Indianapolis: A

Born-again Hoosier Diamond in the Rust," is the way the *Smithsonian* magazine in 1987 captured the startling transformation of the previous two decades. Leading the attack on "Naptown's reputation as a drab and declining community was the Greater Indianapolis Progress Committee (GIPC), a citizens' volunteer advisory and research body formed in 1965 through the leadership of banker Frank E. McKinney and then-Mayor John J. Barton. The GIPC, still in existence, was the first of several civic organizations that along with government incentives and enormous benevolence of Lilly Endowment, spearheaded the city's renaissance, beginning with the establishment on the city's far northwest side of the nearly 3,000-acre Eagle Creek Park and Reservoir, the nation's largest urban park complex.

Indianapolis had long achieved recognition for its 500 mile race and its hockey and minor league professional baseball teams. The completion of Market Square Arena in 1974 as home of the Indiana Pacers of the National Basketball Association (NBA) followed by four years the movement to Indianapolis of the Amateur Athletic Union headquarters. This blend of amateur and professional athletics struck local leaders in the mid-1970s as the prescription for the city's future. The Hoosier's traditional love of competitive sports in combination with Indianapolis's existing health and recreational facilities seemed tailored to advancing the city to world-class sports status, even becoming the "Amateur Sports Capital of the World."

It is generally conceded that as Indianapolis enters the last decade of the century the task will not center on major physical developments. The city has renewed itself. Its image is positive throughout the country. Calling Indianapolis now a "farm with streetlights" has no reference point unless one remembers the not-too-distant past. The National League of Cities ranked it the fifth most successful American city in economic development between 1983 and 1988. From March 1987 to March 1988 it was the nation's 17th fastest growing area for new jobs. Its economy is diversified and is able to withstand, as it did in the early 1980s, any serious national downturn. In the 1990s the city can turn to matters, such as improving education, revitalizing neighborhoods, housing the homeless, and generally improving the quality of life for all its residents.

Information provided by the Indianapolis Convention and Visitors Association from Indiana: A New Historical Guide (Indiana Historical Society-1989)

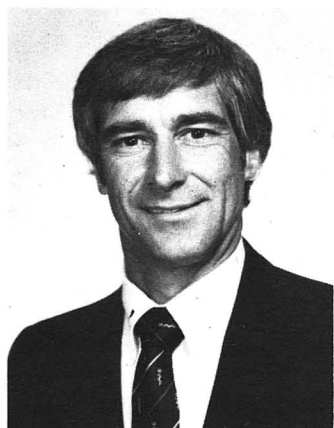


Indianapolis Motor Speedway Hall of Fame Museum: displays include winning race cars, specialty cars and racing memorabilia.

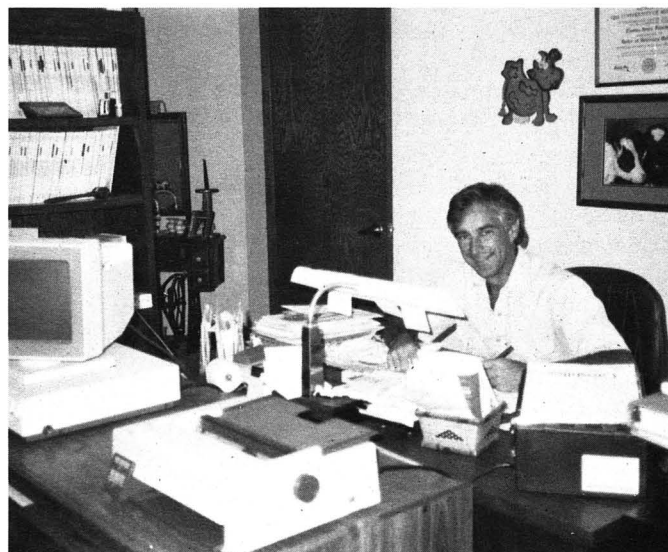


Veterans Memorial Plaza

AABP Officers



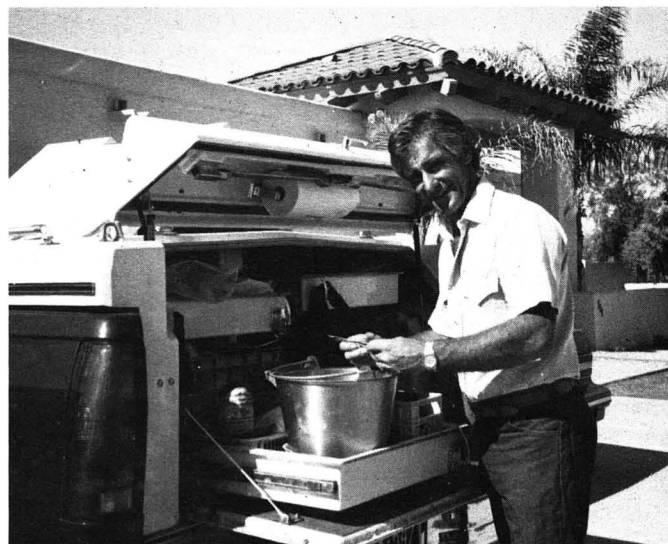
President
Thomas J. Fuhrmann
DVM
Tempe, Arizona



Dr. Thomas J. Fuhrmann, Tempe, Arizona, is the new President.

Dr. Fuhrmann received the B.S. degree from the University of Wisconsin in 1970 and the DVM from the University of Minnesota in 1974. He is engaged in private practice in Tempe, Arizona and is the owner of Dairy Services of Arizona—a herd health practice servicing large dairies in the Southwest. He is an advisor to United Dairymen of Arizona and works with the cooperative in administering their milk quality enhancement programs. Dr. Fuhrmann is a consultant to Masstock International and works with a 12,000 cow herd in the Middle East.

Dr. Fuhrmann was the continuing education liaison person for the AABP for 5 years and was actively involved in planning the highly successful 1987 AABP meeting in Phoenix, Arizona. He was the Seminar Coordinator for the 1988 Calgary meeting. Dr. Fuhrmann has served on the executive committee and Board of Directors of the National Mastitis Council; Chairman, Mastitis Committee of USAHA and is a member of AVMA and Arizona VMS. He was the chairman for the 1989 meeting in Kansas City. Dr. Fuhrmann and his wife Joanne enjoy traveling, golf, and gardening.



Message from the President

To Colleagues:

Organized veterinary medicine plays a significant role in each of our professional lives. As members of AABP, we are part of one of the largest and finest specialty groups in veterinary medicine. While we each face daily individual challenges in our practices, collectively, we can address the issues of the industry we serve and the profession we represent with greater influence through the organized approach.

A prime objective for AABP this year has been to renew and improve relations with other organizations. We have been very active and the result is a generally higher regard for cattle practitioners than we have ever experienced before. For example, AABP joined with FDA, both their CVM and the Milk Safety Branch of CFSSAN, to instruct state dairy regulators on new drug labeling and storage regulations on dairy farms. AABP members were also provided with this same information. The result is unified application of those regulations for our clients, America's dairy farmers. The result is also a newfound respect by federal and state regulators for the role cattle practitioners can play in implementing residue avoidance controls.

In another area, the Academy of Veterinary Consultants (AVC) and AABP teamed up to help NCA refine the Technician Certification portion of their Beef Quality Assurance Program. The result is the development of a technician training program that augments the services cattle practitioners provide, as well as ensuring feedlot producers and packers of supplying safe, high quality beef to the market. The result is also a higher regard by cattlemen for professional veterinary input into their problems and their programs.

AABP was called upon by the milk industry to comment on allegations of residue contamination of milk. In a forthright manner, we acknowledged the facts and described numerous efforts underway to curb irresponsible drug use in food-producing animals. The result is renewed respect and confidence in our profession by special interest groups and consumers.

Again, AABP worked with the AVMA and National Milk Producers Federation to develop a 10 point "On-Farm Drug Residue Prevention Quality Assurance Program" for the dairy industry. It is the only program of its kind to deal with the milk residue problem at the grass-roots level—between the dairy farmer and his veterinarian. The result can be residue elimination; and it has to be accomplished through a major effort by our profession.

AABP invited the AVMA, AVC, Livestock Conservation Institute and the pharmaceutical industry to a meeting this spring to discuss the challenges of new biotechnology. Whether it is BST, genetic engineering or animal welfare, cattle practitioners face controversial, possibly even ethical challenges in the 1990's. The results of that meeting can provide us all with a prepared plan and a sound proactive position on controversial biotechnological issues.

AABP's involvement with other organizations results in individual benefits to each member. Through the newsletter, publications, special mailings and our annual meeting, any practitioner can keep current with all the issues facing animal agriculture. Then he/she can set his/her own course of action to respond to those issues. The challenge is always to be the solution, not the problem. For AABP to continue to be proactive, it will need strong, involved members. It has dedicated and concerned staff, a prudent yet industrious board, and enthusiastic and supportive committees. AABP is poised to continue to serve animal agriculture and represent its members through the challenges of the 90's.

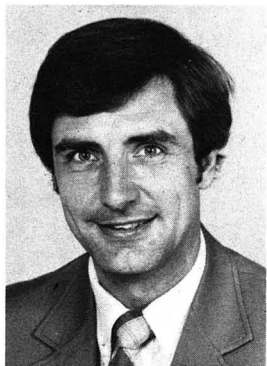
It has been a pleasure to be closely associated with an organization that has gained so much respectability by so many. I am proud to be associated with each and every AABP colleague. I thank each of you for the privilege of allowing me to serve AABP as your president.



Thomas Fuhrmann

New Publication Dates

Due to the Annual Meeting being held in September, *The Bovine Practitioner* will be published in September each year. It is anticipated that *The Proceedings* will be available earlier in the New Year. (hitherto in April).



President-Elect

David G. McClary
DVM
Atlanta, Georgia



Vice President

Gordon A. Atkins
DVM
Calgary, Alberta, Canada

Dr. David G. McClary, Atlanta, Georgia, is the President-Elect. A native of Kentucky, Dr. McClary received the BS degree from Western Kentucky University in 1970; the DVM degree in 1974 and the MS degree in 1982 from Auburn University; he became a Diplomate, American College of Genealogists in 1982.

Dr. McClary was engaged in private practice in Campbellsville and Hodgenville, Kentucky for several years. He was a resident, Large Animal Clinic, Auburn University, from 1978 to 1982, and Assistant Professor, Dairy Section Head, Large Animal Clinic at Auburn University from 1982 to 1988. He left to become a Research Specialist, Lilly Research Laboratories at Greenfield, Indiana in 1988. Since 1989 he has been a research scientist, Dairy Field Research, Southeastern District.

Dr. McClary represented District 3 on the AABP Board of Directors from 1983 to 1988. He is a member of the AVMA, Alabama VMA, Indiana VMA, American Dairy Science Association, National Mastitis Council, Society for Theriogenology, a Diplomate, American College of Theriogenologists, and the American Association of Industrial Veterinarians. Dr. McClary is program chairman for this year's convention.

Dr. Gordon A. Atkins, Calgary, Alberta, Canada is the new Vice President. He has represented District 13 on the AABP Board of Directors since 1985.

Dr. Atkins was born in Calgary and raised on a dairy farm in the area. He received the DVM degree from Western College of Veterinary Medicine, University of Saskatchewan, Saskatchewan in 1973. He joined a three man large animal practice in Calgary which has since grown to a six person practice which is primarily dairy and equine. Dr. Atkins's primary interests are herd health and nutrition.

Dr. Atkins is a member of the Canadian and Alberta VMA and is past president of the Calgary District Large Animal Practitioners Association. He is a member of the advisory committee for the dairy program at Old College. Dr. Atkins is a member of the Canadian Holstein Association, past president of the Southern Alberta Holstein Club and is involved in breeding, showing and judging Holstein cattle.

Dr. Atkins was chairman of the Local Arrangement Committee for the AABP Convention in Calgary in 1988 and is serving as Seminar Coordinator for this year's Convention.

Dr. Atkins and his wife, Jo Anne, have two children; Douglas and Kerry.

Executive Vice President

Treasurer

AABP Advertising Manager

AVMA Delegate

Director Re-Elected



Harold E. Amustutz
DVM
West Lafayette, Indiana
(also AVMA
Alternate Delegate)



Roland S. Jeans
DVM
Evansville, Wisconsin



Leland C. Allenstein,
DVM
Whitewater, Wisconsin



Robert H. Keith
DVM
Monroe, Wisconsin



Duane N. Rice
DVM
Lincoln, Nebraska
District 9

New Directors



A. Andrew Overby
DVM
Harmony, Minnesota
District 6

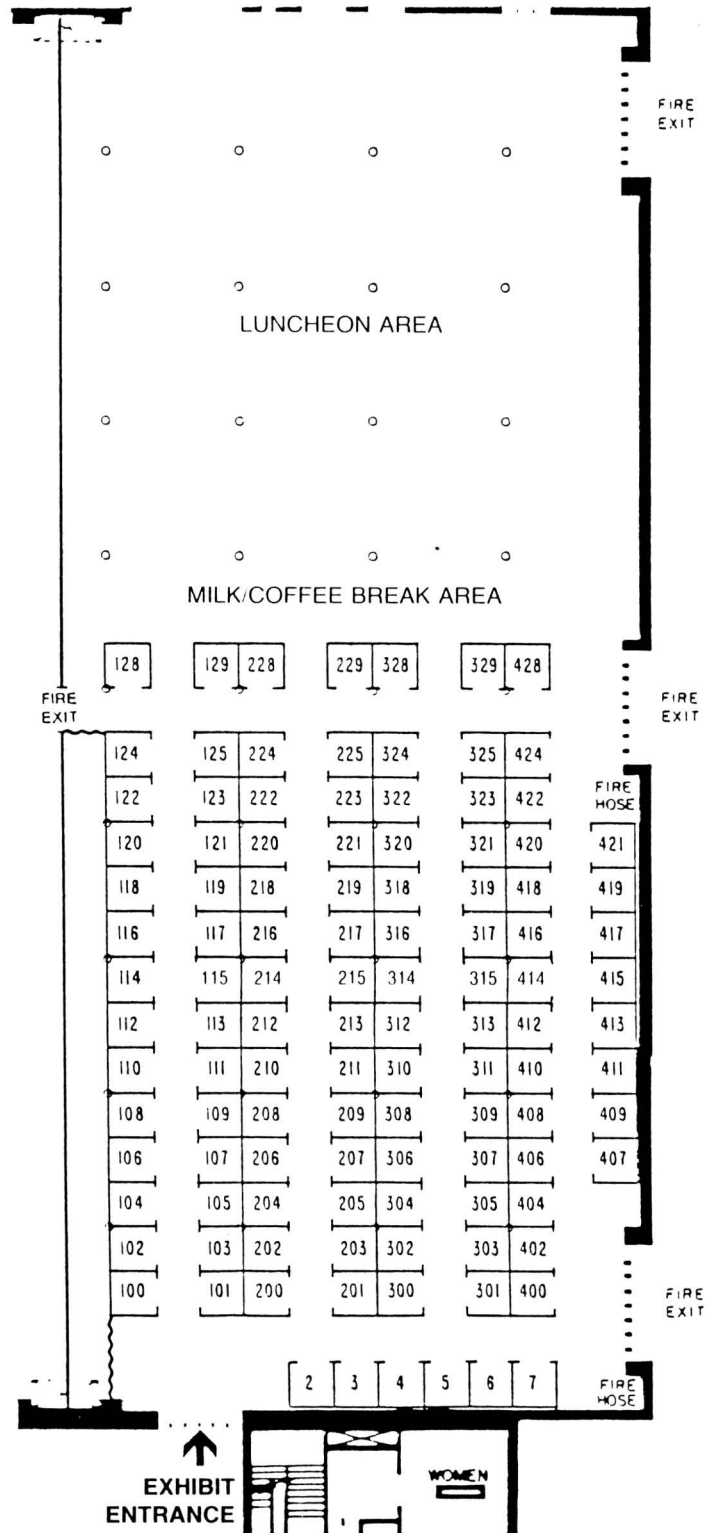
Dr. A. Andrew Overby, Harmony, Minnesota is the new Director for District 6 (Minnesota and Iowa) Dr. Overby was born in Moorhead MN. He graduated from Barnesville High School in 1962 and took two years of pre-veterinary training at North Dakota State University. He received the DVM degree from the University of Minnesota in 1968. Dr. Overby has been engaged in large animal practice in Harmony since 1968. He and his wife, Nancy have three daughters, Sarah-second year pre-vet student at the University of Minnesota; Chris, a senior at Harmony High School and Jenny, a ninth grade student in Harmony. Dr. Overby enjoys hunting, fishing, skiing and raising mules.



Dr. Deborah A. Stark,
DVM
Guelph, Ontario, Canada
District 12

Dr. Deborah A. Stark, Guelph, Ontario, Canada is the new Director for District 12 (Eastern Canada) She is the first female member to be elected to the Board of Directors. Dr. Stark was raised on a dairy farm in Southwestern Ontario. She received the DVM degree from Ontario Veterinary College in 1982 and worked in a mixed practice in Forest, Ontario for 4 years, also in practices at Owen Sound and Fisherville. Dr. Stark joined the Ministry of Agriculture and Food as an extension veterinarian in 1987 where she is still employed. She completed a Master's degree in Business Administration from Wilfrid Laurier University in the Spring, 1990. She is a member of the Canadian VMA and the Ontario Association of Bovine Practitioners.

EXHIBIT FLOOR PLAN Indiana Convention Center Indianapolis, Indiana



© Copyright American Association of Bovine Practitioners; open access distribution.

Dr. Elmer Woelffer Honored



Dr. and Mrs. Elmer Woelffer

At the 1990 Wisconsin State Holstein Convention which kicked off the centennial year celebration for the Association in Green Bay, WI on February 25-27, Dr. Elmer Woelffer, Oconomowoc, Wisconsin received the Don Gillett Service Award.

Dr. Woelffer along with James Herriot, is an Honorary Life Member of the American Association of Bovine Practice. He is still actively engaged in his cattle reproduction consultant practice. He was a regular contributor to *Hoard's Dairyman* for many years.

AABP Animal Health Forum

Positioning for the '90s

The American Association of Bovine Practitioners held an Animal Health Forum - Positioning for the '90s on May 10-11, 1990 at the Monsanto Agricultural Company facility in St. Louis, Missouri. The program was arranged by Dr. Ashley Green, chairman of the AABP Public Relations Committee.

Attending the meeting in addition to the AABP officers and directors were representatives from the Academy of Veterinary Consultants, the Livestock Convention Institute, the National Cattlemen's Association and AVMA Staff.

The Forum was the first in a series of spokesperson awareness and media training sessions with a goal of assessing the bovine industry's current status and to form strategies for the future. The following issues were addressed:

- Quality assurance of food of animal origin
- Biotechnology
- Animal welfare
- Shortage of veterinarians interested in food animal practice

The meeting opened on May 10 with a group discussion on biotechnology highlights and challenges presented by The Animal Sciences Division, Monsanto Agricultural Company Staff followed by a tour of their facilities including biotechnology manufacturing processes, plant selection and development and laboratory animal areas.

The program continued with presentations on consumer perceptions and receptivity. The group then visited the Dardenne Technical Center and toured the research farm.

On May 11, the Forum continued at the Sheraton Plaza Hotel. Items discussed were biotechnology highlights and challenges, and food safety/quality assurance, (presented by FDA, NCA, AVMA and AABP representatives) and animal welfare. The luncheon speaker was John Lang, Livestock Conservation Institute.

The afternoon was devoted to a news media training session led by Karen Marshall and Julie Tockman of Hill and Knowlton, Inc. a public relations company in St. Louis. The participants had an opportunity to be interviewed on videotape by one of the six PR professionals who coached them on how to prepare for interviews. Each tape was replayed and critiqued by the instructor and participant.

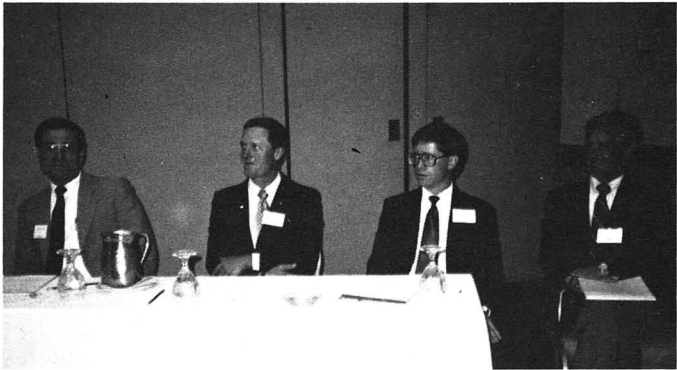
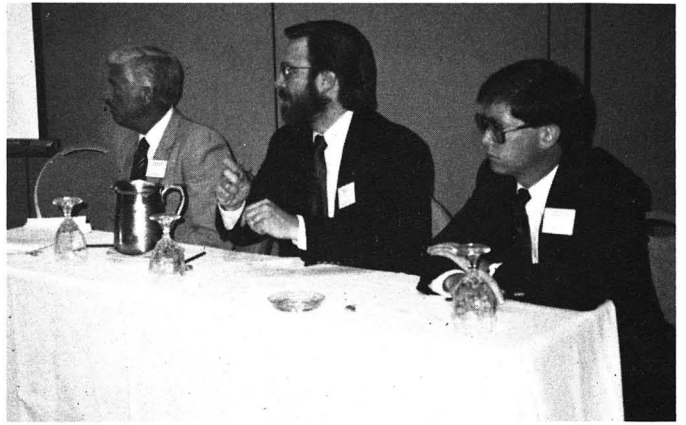
Dr. Thomas Fuhrmann, AABP President, in his remarks at the close of the session stated that board members had an opportunity to review the issues and challenges facing the profession, adding "In addition to bi-

otechnology, animal welfare and food safety issues, the AABP must also be concerned about interesting veterinary students in food animal careers and increasing the role for women in food animal medicine and in our organization. The AABP cannot progress by operating in a vacuum. We have to interact with auxiliary organizations and industry by sharing views and cooperating to achieve mutual goals. As evidenced by this meeting, active, functioning committees can provide the mechanism to address such issues. This meeting also demonstrates that commercial pharmaceutical firms can be productively involved with the veterinary profession in ways other than those designed to market products."



Dr. Lee Miller, Vice President, Animal Science Division, Monsanto Agricultural Co. (left) assisted by Dr. Ashby Green, Public Information Manager, presenting AABP President Thomas Fuhrmann with a biotechnology paperweight.





Pan Pacific Veterinary Conference: Veterinarians and the Environment

Sydney, Australia
May 13-17, 1991

The Australian Veterinary Association and New Zealand Veterinary Association's annual conference, to be held in Sydney from May 13 to 17 next year, will be the most comprehensive veterinary conference in Australia's history.

The conference, titled Pan Pacific Conference on Veterinarians and the Environment, will bring together the many diverse groups interested in animal health and well-being within a soundly-managed environment.

A packed scientific program will include more than 200 sessions in veterinary research and the environment; practice management and marketing; small animal medicine and surgery; horses; cattle, sheep and deer; intensive animal production; companion animals and the human-animal bond; zoos, wildlife and conservation; and animal welfare.

Veterinarians from all over Australia and New Zealand, from the Asian-Pacific nations, from North America, Europe and Africa, will be attending the conference to share views and experiences, and to hear the latest in each veterinary field from acknowledged world leaders-people like:

- Gerald Guest, director of the US FDA's Centre for Veterinary Medicine and chairman of WHO's Codex committee on residues of veterinary drugs in food
- Mike Rickard, CSIRO chief of animal health, and Alan Royal, NZ Ministry of Agriculture MAF Tech manager, leading team symposia on animal research and the environment

- Professor Phil Summers, of Australia's James Cook University, a leader in international development programs and animal production in developing countries
- Baxter Black the "cowboy vet" from the USA-a beef specialist with a line in philosophy for the whole profession
- Karen Gavzer of the American Veterinary Medical Association, expert in practice management and marketing
- John Kelly, director of Sydney's Taronga Zoo

The social program will make full use of Sydney's attractions, and registration will include an evening "Open House" overlooking Sydney Harbour in Sydney's famous Opera House.

Registration for those who are not AVA or NZVA members will be \$500 in Australia and \$NZ750 in New Zealand for five days of sessions in nine venues.

Concession rates of \$250 are available for students, graduates in their first two years, and veterinary allied persons such as vet nurses and administrators, or others accompanying registered veterinarians.

Accommodation at a good range of prices will be available within walking distance or a short ride by monorail or ferry, of the Darling Harbour Convention Centre on the Harbour foreshore.

For more information or registration forms, contact Ingrid Schmidt at National Australia Travel, 14th floor, 23 Hunter Street, Sydney, Australia, 2000. Fax 61 2 231 1336

Attention AABP Members

The Proceedings of our 23rd Annual Convention will be published in two parts. Part one will include all papers presented at the Dairy Section and will be published by the National Mastitis Council. Part two will include the cow-calf and feedlot sections; practice tips, research summaries and convention highlights published by AABP.

XXIV World Veterinary Congress

Rio De Janeiro, Brazil
South America
August 18-23, 1991

INVITATION

Dear Colleague,

The XXIV WORLD VETERINARY CONGRESS will be held in Rio de Janeiro, Brazil, from 18 to 23 August 1991.

On behalf of the World Veterinary Association and of the Organizing Committee, I have the honor of inviting you to take part in this Congress.

The theme of this congress: "THE VETERINARY PROFESSION AND NORTH-SOUTH COOPERATION IN BENEFIT OF MANKIND"- will allow our colleagues from all over the world to present the results of their efforts in the many specialities into which the activities of the Veterinarian have diversified.

The scientific program will cover topics such as Animal Welfare and Advances in Knowledge on Animal Production, Public Health, the Environment and other matters, thus bringing Veterinarians face to face with the Technologies of the Future.

Welcome to Rio de Janeiro!

Cordially,

JOSELIO DE ANDRADE MOURA
World Veterinary Association-Vice President
Organizing Committee-Chairman

SCIENTIFIC PROGRAM

The SCIENTIFIC PROGRAM will cover a number of activities:

1 - Two (2) interdisciplinary LECTURES to be presented by internationally famous authorities.

2 - Three (3) PLENARY SESSIONS to discuss topics such as:

- a. Animal welfare
- b. Veterinarians and technologies of the future
- c. Animal production, Public Health and the Environment

3 - Twenty-four (24) SYMPOSIA, with a maximum of four simultaneous sessions, organized by the World Specialist Associations, presenting the state of the art in each field.

4 - One hundred and forty (140) ORAL COMMUNICATION SESSIONS, with no more than ten simultaneous sessions at the same time, covering recent research projects on specialized scientific topics.

5 - POSTER SESSIONS totaling 1,500 will be split into two shifts (morning and afternoon): additional sessions may be arranged.

6 - Unlimited VIDEOTAPES will be shown non-stop, with at least ten being shown simultaneously. Systems in use in Brazil are VHS PAL-M or NTSC.

7 - WORKSHOPS will cover specific topics informally, within a limited number of participants.

8 - Six (6) SATELLITE SYMPOSIA organized by companies and services connected with veterinary science.

9 - Technical and scientific visits to government and private institutions in Rio de Janeiro.

10 - Visits to institutions of interest to Veterinary Science located throughout Brazil, matching technical and scientific information with visits to various parts of the country such as the Amazon, the Pantanal wetlands, Sao Paulo, pig and cattle-breeding areas and many others.

GENERAL INFORMATION

Venue- The Congress will be held at Riocentro Convention Center

Official Travel Agency- HOST-TURISMO DE EVENTOS Rua Sao Clemente 407 Botafogo 22260 Rio de Janeiro RJ Brazil Tel.: (021) 246.1314 Telex: (21) 40.003 HOST BR Telefax: (021) 239-8441

Official Airline- VARIG/Cruzeiro is the official Congress carrier. Its network of agencies in Brazil and abroad is fully equipped to assist you and provide more detailed information.

Social and Touristic Program- A cultural and social program will be organized for Congress participants. Pre and post Congress tours will also be offered to participants. The IVA - International Veterinary Auxiliary - is organizing a program for wives and families accompanying veterinarians attending the Congress.

Official languages - There will be simultaneous interpretation in the official Congress languages at various sessions.

Hotel Reservations - Accommodation at various categories of hotels in different price ranges is already booked in Rio de Janeiro for the duration of the Congress. Price and hotel options will be forwarded with the next Announcement. Hotel prices are much lower than those of similar hotels in Europe and U.S.A.

Climate- August temperature in Rio de Janeiro varies from 18°C to 25°C (65°F to 77°F), dropping several degrees at night, when it is advisable to bring a light sweater.

Visa- Please check with your Travel Agent or the nearest Brazilian Consulate on whether you need a visa, or not.

Exhibition- An exhibition of scientific material and equipment will be held at the same time as the Congress at the same location and will also feature animal feeding and animal-based foodstuffs. Specialized services and bibliography (consulting, computers etc) will also be exhibited.

Transportation- For the duration of the Congress special shuttle services will be available between the main hotels and the Convention Center.

Congress Secretariat- CONGREX DO BRASIL
Rua do Ouvidor 60 Gr. 414 20040 Rio de Janeiro RJ Brasil
Tel. (021) 224-6080 Telex: 621) 32891 CERT BR Telefax 6021) 231.1492

BRAZIL - THE COUNTRY

Brazil covers about 8,512,000 square kilometers (3,285,000 square miles) and occupies half of Latin America. To the North, West and South it shapes frontiers with all South America's nations except Chile and Ecuador. Fifth largest country in the world (after the USSR, Canada, USA and China), its contrasting landscapes and characteristics resemble to several different countries within one single and exciting nation.

Almost the size of a continent, with a pleasant climate, Brazil's 130 million inhabitants are famed for their

warm hospitality. Fascinating tourist attractions range from the mysterious enchantment of the tropical rainforest in the North to palm-fringed beaches lining the Northeast. The Southwest is rich with relics of colonial Brazil, and the South has a strong Old World flavor with its German and Italian immigrant colonies. The new capital Brasilia soars above the rolling hills of the Center-West. Rustic, modern and picturesque blend into a country that offers something for every taste.

RIO DE JANEIRO - HOST CITY

One of the world's major resort cities, Rio de Janeiro today has some 12 million inhabitants. Known as the Marvelous City, it brings together golden beaches and spectacular mountains to form a luminous landscape with its own unique charm.

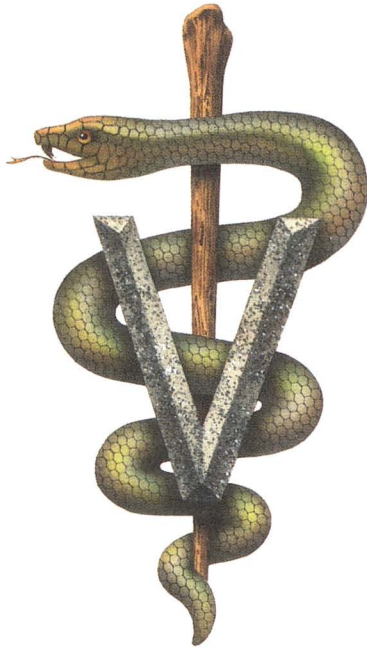
All this natural beauty is backed by efficient infrastructure of a major metropolis, making Rio a modern, cosmopolitan city.

ORGANIZING COMMITTEE

Dr. Joselio de Andrade Moura - Chairman
Prof. Dr. Milton Thiago de Mello - Scientific Committee
Prof. Dr. Jadyr Vogel - Secretary
Dr. Josinete Barros de Freitas - Treasurer
Dr. Sergio Bogado - Local Committee
Dr. Rene Dubois
Dr. Noelio Costa
Dr. Raul Casas Olascoaga
Dr. Michael Bedoya

SCIENTIFIC COMMITTEE

Prof. Dr. Milton Thiago de Mello - Chairman
Prof. Dr. Walker Andre Chagas
Prof. Dr. Jose de Angelis Cortes
Dr. Moyses Nathan Honigman
Prof. Dr. Rogerio S. Piccinini



Ultimate Care

Cattle and hog producers know to call on you for effective herd health management.

When that care requires effective therapy, choose the ultimate cure, Liquamycin® LA-200®. For pneumonia in hogs and shipping fever in cattle caused by *Pasteurella*, and pinkeye in cattle caused by *Moraxella bovis*, the treatment to call on is Liquamycin LA-200.

With its unique 2-pyrrolidone formulation and the highest concentration

of oxytetracycline available (200 mg/ml), LA-200 achieves high therapeutic blood levels within minutes after injection. Then it sustains those high blood levels for three full days—three times as long as conventional oxytetracyclines.

You simply won't find better antibiotic value, efficacy or convenience. A recent study compared a single injection of Liquamycin LA-200 to three daily doses of Naxcel® and three doses of conventional oxytetracycline for treatment of



Ultimate Cure

acute respiratory infections in cattle. LA-200 offered the highest therapeutic success rate and the lowest treatment cost.

Producers count on you for the ultimate care of their livestock. For a cure that complements the quality of your care, LA-200 is the ultimate choice.

Liquamycin LA-200. The medicine that's stronger, longer.

pfizer

© Copyright 1989, Pfizer Inc. All rights reserved.



Respirvac[®] stops pneumonia* cold!

© Copyright American Association of Bovine Practitioners; open access distribution.



Just one shot protects your cattle.

A dose of Respirvac[®] now can save you a lot of money later. It's proven protection against *Pasteurella haemolytica*, considered the #1 cause of pneumonia (shipping fever). This deadly disease can kill cattle in just one or two days, often without warning. Survivors may never fully recover.

90% reduction in pneumonia damage!¹

In a rigorous direct challenge, Respirvac decreased pneumonia damage by 90%.² Equally dramatic results were achieved in feedlot trials involving thousands of cattle. Death rates declined sharply and there were far fewer pulls. Vaccinated animals also responded much more rapidly to antibiotic treatment.³ Respirvac works!

Respirvac is easy to use, too. Just one 2 cc dose injected SubQ (under the skin) is all it takes to vaccinate your cattle against *Pasteurella haemolytica*.

Put the "Pneumonia Shot" in your vaccination program.

Ask your veterinarian or feedlot consultant to use Respirvac for unsurpassed pneumonia protection. One dose does the job, saving you time, labor and medication costs. When the wind blows cold, it's good to know your cattle are protected with Respirvac.



* Prevention of pneumonia due to *Pasteurella haemolytica*.
¹ Due to *Pasteurella haemolytica*.
² Data on file at SmithKline Beecham Animal Health.
³ *Calf News*, March 1988.

SB
SmithKline Beecham
Animal Health