

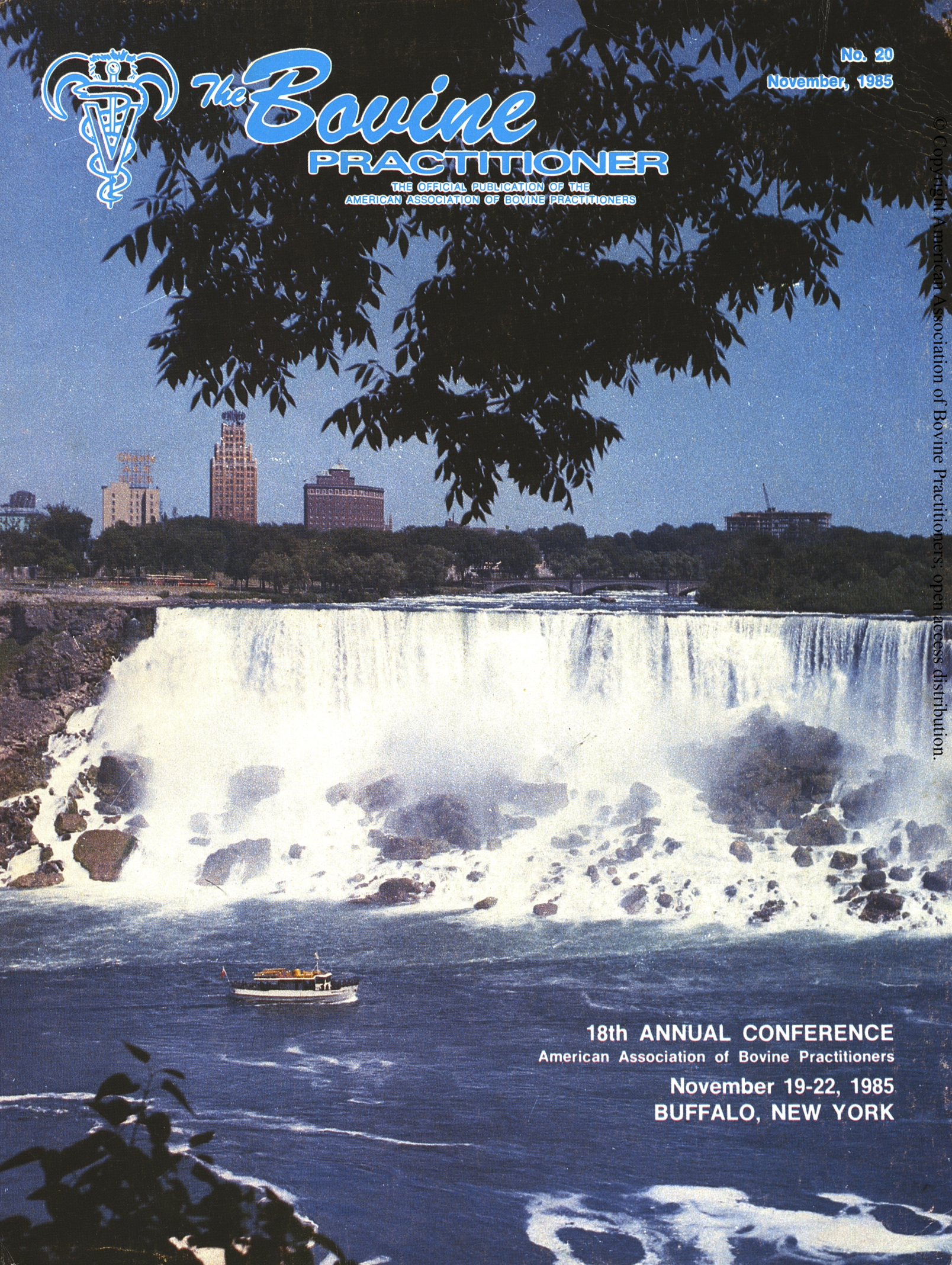


# The Bovine PRACTITIONER

THE OFFICIAL PUBLICATION OF THE  
AMERICAN ASSOCIATION OF BOVINE PRACTITIONERS

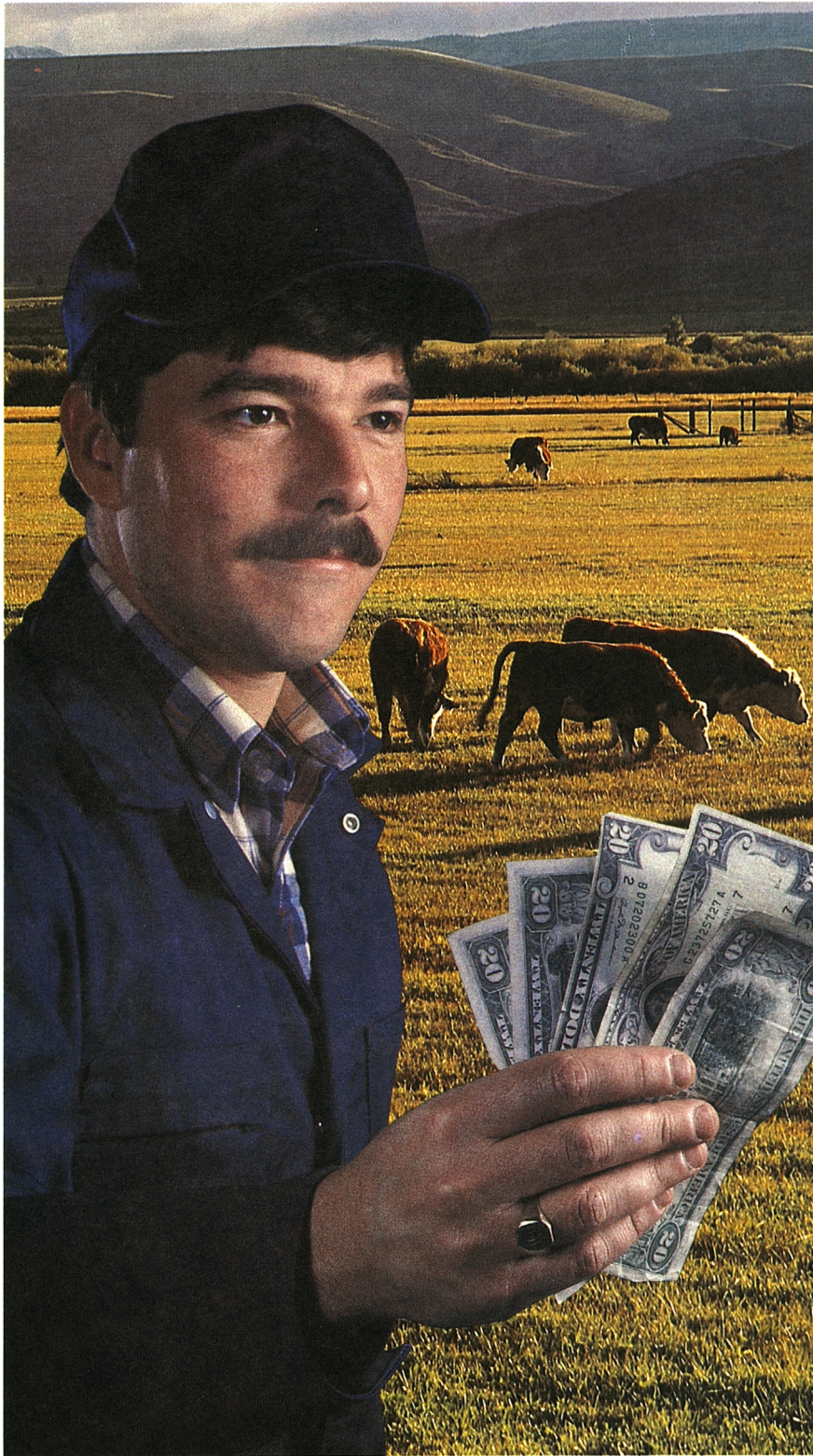
No. 20  
November, 1985

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



**18th ANNUAL CONFERENCE**  
American Association of Bovine Practitioners  
**November 19-22, 1985**  
**BUFFALO, NEW YORK**





**it pays  
to use**

**Panacur<sup>®</sup>**

(fenbendazole)

**Almost \$20.00  
on every calf I wean.**

“ Since my veterinarian convinced me on the use of Panacur<sup>®</sup> (fenbendazole) for deworming my cows and calves, I'm making almost \$20.00 extra at weaning.

Because Panacur controls weight-robbing parasites so well, my animals grow more efficiently, and gain, on average, about 32 lbs. more weight.\*

That 32 lbs. translates to almost \$20.00 extra cash in my pocket... after paying for the Panacur.

Almost \$20.00 “bonus” per calf... thanks to my vet's good advice on Panacur use.

It *pays* to use Panacur!”

**Available From Your  
Local Veterinarian**

Panacur effectively and safely removes all common gastrointestinal nematodes and lungworms in all beef cattle including breeding stock, pregnant cows and stressed cattle.

For more information call 1-800-233-7233 and ask for the Cattle Product Manager.

\*Based on well-controlled trials, calves in the Panacur group weighed on average 32 lbs. more at weaning than the control group. Data available upon request.

American Hoechst Corporation  
Animal Health Division  
Somerville, New Jersey 08876

The name and logo HOECHST are reg. TM of Hoechst AG

**Hoechst**

N394-285

Copyright 1985

Printed in U.S.A.

# The Bovine PRACTITIONER



**EDITOR:**

**Eric I. Williams, F.R.C.V.S., M.S.**  
Department of Medicine and Surgery  
College of Veterinary Medicine  
Oklahoma State University  
Stillwater, Oklahoma 74078

**ADVERTISING MANAGER:**

**Leland C. Allenstein, D.V.M.**  
306 S. Pleasant  
Whitewater, Wisconsin 53190  
Tel. No. (414) 473-2094

**OFFICERS**

- President** . . . . . **Herbert C. Lloyd, D.V.M.**  
Arcadia, Florida
- President-Elect** . . . . . **Neil G. Anderson, D.V.M.**  
Cheltenham, Ontario, Canada
- Vice President** . . . . . **George E. Washington, D.V.M.**  
Purcellville, Virginia
- Past President** . . . . . **Jenks S. Britt, D.V.M.**  
Russellville, Kentucky
- Executive Secretary-Treasurer** . . . . . **Harold E. Amstutz, D.V.M.**  
W. Lafayette, Indiana

**BOARD OF DIRECTORS**

- Roland S. Jeans, D.V.M.**  
Evansville, Wisconsin  
5th District, 1985
- William D. Blohm, D.V.M.**  
Carroll, Iowa  
6th District, 1986
- J. Harry James, D.V.M.**  
Pond Creek, Oklahoma  
7th District, 1987
- Joseph M. Wright, D.V.M.**  
Castroville, Texas  
8th District, 1985
- Donald R. Hudson, D.V.M.**  
North Platte, Nebraska  
9th District, 1986
- Gene W. Sellick, D.V.M.** .  
Alexander, New York  
1st District, 1987
- Joe E. Manspeaker, V.M.D.**  
Ellicott City, Maryland  
2nd District, 1987
- David G. McClary, D.V.M.**  
Auburn, Alabama  
3rd District, 1986
- Keith E. Sterner, D.V.M.**  
Ionia, Michigan  
4th District, 1987
- Michael G. Kerfoot, D.V.M.**  
Bakersfield, California  
10th District, 1987
- Erich Studer, D.V.M.**  
Carnation, Washington  
11th District, 1985
- Kenneth E. Leslie, D.V.M.**  
Guelph, Ontario, Canada  
12th District, 1986
- Gordon A. Atkins, D.V.M.**  
Calgary, Alberta, Canada  
13th District, 1987

**REPRESENTATIVES TO THE AVMA HOUSE OF DELEGATES:**

- James A. Jarrett, D.V.M.**  
Rome, Georgia
- Harold E. Amstutz, D.V.M.**  
(alternate)

**EXHIBITS MANAGER:**

**Samuel Hutchins, III, D.V.M.**  
South Barre, Vermont

THE BOVINE PRACTITIONER is published by the American Association of Bovine Practitioners, Inc., at **Frontier Printers, 205 W. 9th, Stillwater OK 74074 (phone 405-372-8500)**. Over 7000 copies are mailed to veterinarians engaged in cattle practice and allied institutions. Send new address (please include old address) to:

**Dr. Harold Amstutz, Exec. Sec.-Treas., AABP, Box 2319, W. Lafayette, Indiana 47906.**

**Editorial Board**

At the Annual General Meeting on Dec. 10, 1976, AABP members approved the appointment of an editorial board for this journal. Members of the board are Dr. Leland Allenstein, Dr. Harold E. Amstutz, and the editor, Dr. Eric I. Williams. The journal is thus an official, refereed publication.

By agreement between the Board of Directors, American Association of Bovine Practitioners and the World Association of Buiatrics, this journal will serve as a communication medium between Bovine Practitioner Associations across the world. A limited number of papers related to bovine practice will be accepted from overseas correspondents. Notices and brief reports of national conventions on cattle diseases will be accepted for publication. All communications must be presented in English and sent to the editor BEFORE JULY 15.

Copies of the Bovine Practitioner are available to non-members for \$20.00 per copy, surface mail or \$25.00 airmail (overseas).

*Cover photo courtesy of Buffalo Area Chamber of Commerce*

# TABLE OF CONTENTS

Occurrence of Hypotrichosis in Polled Hereford Cattle — <i>T. A. Olson, D. D. Hargrove, H. W. Leipold</i> . . . . .	4
A Review of the Relationship Between Mineral Nutrition and Reproduction in Cattle — <i>D. G. Pugh, R. G. Elmore, T. R. Hembree</i> . . . . .	10
Effect of Preinsemination Injection of Gonadotropin-Releasing Hormone on Reproductive Performance of Dairy Cattle— <i>J. A. Pennington, D. L. Hill, C. J. Callaban, C. M. Brown, M. D. Brown</i> . . . . .	14
Herd Health Programs in Semi-Arid Regions of North America — <i>D. A. Armstrong</i> . . . . .	18
The SVC Beef Herd Health Scheme— <i>M. H. Lowry</i> . . . . .	22
Establishing and Maintaining a Health Program Under Intensive Feedlot Conditions — <i>A. J. Edwards</i> . . . . .	28
Adaptation of Herd Health Programs to Microcomputers— <i>D. C. Blood</i> . . . . .	32
Evaluation of USDA-Licensed Biologics for Use in Cattle— <i>D. W. Gregory</i> . . . . .	36
New Concepts in Helminth Control in Cattle— <i>J. Armour</i> . . . . .	40
A New Method of Tick Control in Cattle— <i>H. D. Hamel</i> . . . . .	44
Nutrition and Disease— <i>R. W. Phillips</i> . . . . .	47
Dairy Cow Nutrition—Panel Discussion— <i>J. Britt, B. Harrington, M. Hutjens, T. Lesch, David McCrary</i> . . . . .	52
The Role of the CVM/FDA Advisory Committee— <i>G. F. Hoffsis</i> . . . . .	62
The Present Status of Milk Production and Applicable Criteria Conducive to Its Amelioration in Udder-Producing Countries— <i>E. Mayer</i> . . . . .	66
In-Depth Look at Veal Production— <i>A. H. Andrews</i> . . . . .	77
The Presence and Persistence of Transmissible Drug Resistance Factors in the Coliform Intestinal Flora of Calves Reared in an Intensive System — <i>B. J. Venter</i> . . . . .	79
Clinical Assessment and Surgical Management of Umbilical Masses in Calves — <i>D. F. Smith</i> . . . . .	82
Cloprostenol and Dinoprost Tromethamine in Experimental and Field Trials Treating Unobserved Estrus in Dairy Cows— <i>B. Seguin, H. Momont, L. Baumann</i> . . . . .	85
A Comparison of Subcutaneous and Oral Administration of <i>Brucella abortus</i> Strain 19 in a Large Infected Dairy Herd— <i>P. Nicoletti, F. W. Milward</i> . . . . .	91
The National Mastitis Awareness Campaign in England and Wales — <i>P. G. Francis</i> . . . . .	94
Challenges in the Further Development of Dairy Herd Health and Management Programs— <i>N. B. Williamson</i> . . . . .	97
Effect of Abraded Intramammary Device (IMD) on Milk Somatic Cell Count and Intramammary Infection— <i>G. Ziv, M. J. Paape, W. D. Schultze</i> . . . . .	102
Prevalence and Antibiotic Therapy of Teat Canal Infections During the Dry Period of Dairy Cows— <i>J. H. duPreez, A. S. Greeff</i> . . . . .	106
Remote Access to Central Data Base to Provide Programmed Herd Health Records for the Dairy Client— <i>D. L. Vrooman</i> . . . . .	110
Adaptive Changes of the Ruminal Mucosa and Their Functional and Clinical Significance— <i>G. U. Dirksen, H. G. Liebich, E. Mayer</i> . . . . .	116
The Toxicology of Sulphur and Nitrate in Ruminants— <i>A. P. Knight</i> . . . . .	121
The Effect of Anti-Prostaglandin Therapy in an Acute Respiratory Distress Syndrome Induced in Experimental Cattle by the Oral Administration of 3, Methylindole— <i>I. E. Selman, E. M. Allan, H. A. Gibbs, A. Wiseman, R. Dalglish, W. B. Young</i> . . . . .	124
Current Resistance Patterns of Bacterial Pneumonia Pathogens and Therapeutic Considerations— <i>W. Gedek, A. Endres, G. Dirksen</i> . . . . .	128
A New Approach to Vaccination for Infectious Bovine Rhinotracheitis (IBR) and Bovine Viral Diarrhea (BVD) Using a Ballistic Implantation System— <i>D. W. Johnson, F. R. Paul, C. C. Muscoplat, J. F. Drake</i> . . . . .	133
Practical Aspects of General Anaesthesia in Cattle— <i>A. D. Weaver</i> . . . . .	136
Practical Aspects of Anaesthesia of the Bovine Digit— <i>R. S. Jones</i> . . . . .	140
Production of Transit Fever with Isolates of <i>Pasteurella Haemolytica</i> A1— <i>A. Wise- man, E. M. Allan, H. A. Gibbs, E. I. Selman</i> . . . . .	141



The Sub Clinical Laminitis Syndrome— <i>P. R. Greenough</i> . . . . .	144
Bovine Pinkeye—Etiology and Pathogenesis— <i>R. F. Rosenbusch</i> . . . . .	150
Student Clinical Report—Tetanus in a Prepartum Dairy Heifer— <i>F. Metzger, Jr.</i> . . . .	153
Observations on the Epidemiology of Bluetongue Virus Infections in the Caribbean and Florida— <i>E. P. J. Gibbs, E. C. Greiner</i> . . . . .	155
Transmitters and Potential Transmitters of Malignant Catarrhal Fever— <i>B. J. H. Barnard</i> . . . . .	158
Milk Antitrypsin As a Marker of Bovine Mastitis— <i>T. Mattila, M. Sandholm</i> . . . .	161
Conference on Malignant Catarrhal Fever . . . . .	162
American Association of Bovine Practitioners Embryo Transfer Committee Report . . . . .	169
Akadane Disease of Cattle in Australia— <i>W. J. Hartley</i> . . . . .	171
Evaluation of Flunixin Meglumine in the Treatment of Foot and Mouth Disease — <i>A. M. Benitz, J. D. L. Vieira, J. A. P. Prado, G. C. Darsie, S. A. Petzhold, P. E. Reckziegel, J. C. F. Teixeira</i> . . . . .	173
An Attempt to Induce Tolerance to <i>Haemonchus placei</i> in New Born Calves— <i>J. A. van Wyk, H. M. Gerber</i> . . . . .	173
Botswana Vaccine Institute: An Example of International Cooperation for Control of Foot and Mouth Disease in Eastern and Southern Africa— <i>J. J. Guinet, J. Falconer, F. Guillemain, M. Lombard</i> . . . . .	174
"Dairy-Man": A Computerized Health and Herd Management System for Dairy Cows— <i>A. Neria, E. Mayer</i> . . . . .	174
Maintenance Mechanisms for Foot-and-Mouth Disease Virus in the Kruger National Park and Potential Avenues for Its Escape into Domestic Animal Populations — <i>G. R. Thompson, R. G. Bengis, J. J. Esterhuysen, A. Pini</i> . . . . .	175
Membership Application . . . . .	176
Eighteenth Annual Convention . . . . .	i
1985 AABP Conference Exhibitors . . . . .	viii
AABP 1985 Program Committee . . . . .	xii
AABP Officer—Message from the President . . . . .	xiii
Re-Elected Directors . . . . .	xv
New Directors . . . . .	xvi
In The News . . . . .	xvii
Buffalo, New York . . . . .	xviii
XIV World Congress on Diseases of Cattle . . . . .	xix
President, World Association for Buiatrics . . . . .	xxi
Bovine Practitioners in France . . . . .	xxii
XXIII World Veterinary Congress . . . . .	xxii
Darwoby Revisited—A View From the Flat . . . . .	xxiii

## Advertisers' Index

Albion Laboratories . . . . .	43
American Hoechst Corporation . . . . .	Inside Front Cover
Fort Dodge Laboratories . . . . .	Inside Back Cover
Insta-Tape Inc. . . . .	65
International Minerals and Chemical Corporation . . . . .	9
Kamar, Inc. . . . .	114, 115
MSD-AGVET . . . . .	39
Norden Laboratories . . . . .	23, 127, Back Cover
Pfizer . . . . .	31
Schering Corporation . . . . .	27
Syntex Animal Health, Inc. . . . .	17
Upjohn . . . . .	160, 161