

The Bouine PRACTITIONER

THE OFFICIAL PUBLICATION OF THE AMERICAN ASSOCIATION OF BOVINE PRACTITIONERS



40th ANNUAL CONVENTION

American Association of Bovine Practitioners Vancouver, British Columbia September 20-22, 2007



ISSN 0524-1685



The Bouine PRACTITIONER

Vol. 41, No. 2 Summer, 2007

EDITOR: ROBERT A. SMITH, DVM 3404 Live Oak Lane Stillwater, Oklahoma 74075 Tel: (405) 372-8666 FAX (405) 743-8422 PRINTER: Frontier Printers, Inc. 205 W. 9th Stillwater, Oklahoma 74074

OFFICERS

President	Charlie Hatcher, DVM
	College Grove, Tennessee
President-Elect	Mike Bolton, DVM
	Belding, Michigan
Vice President	Richard Wallace, DVM
	Champaign, IL
Past President	John Ferry, DVM
	Belleville, New York
Executive Vice President	M. Gatz Riddell, Jr., DVM
	Auburn, Alabama
Treasurer	Mark Wustenberg, DVM
	Bay City, Oregon
Parliamentarian	Rich Meiring, DVM
	Marysville, Ohio

BOARD OF DIRECTORS

Roger Saltman, DVM Cazenovia, New York 1st District, 2007 Bob Cloninger, DVM

Centre Hall, Pennsylvania
2nd District, 2009

Art Donovan, DVM Gainesville, Florida 3rd District, 2007

Richard Wiley, DVM Wooster, Ohio 4th District, 2008 **Glen Johnson,** DVM Reedsburg, Wisconsin 5th District. 2009

Bill Seglar, DVM Johnston, Iowa 6th District, 2007

Shawn Blood, DVM Guymon, Oklahoma 7th District, 2008 Glenn Rogers, DVM Aledo, Texas

8th District, 2009 **John Schnackel**, DVM Fort Collins, Colorado 9th District, 2007

John Lee, DVM Merced, California 10th District, 2008 Scott Waltner, DVM

Mount Vernon, Washington 11th District, 2008

Reny Lothrop, DVM

Cambridge, Ontario, Canada 12th District, 2007

J. Egan Brockhoff, DVM Olds, Alberta, Canada 13th District, 2008

AVMA DELEGATE:

EXHIBITS MANAGER:

ADVERTISING AGENCY:

Mark Spire, DVM Manhattan, Kansas

Samuel Hutchins, III, DVM

South Barre, Vermont

J. T. O'Brien & Assoc.

12118 Nieman Road

Overland Park, Kansas 66213

913-402-8383 Fax: 913-897-9047

THE BOVINE PRACTITIONER is published by The American Association of Bovine Practitioners, Inc., at Frontier Printers, 205 W. 9th, Stillwater, OK 74074 (Tel: 405-372-8500; FAX 405-372-8523). Over 6000 copies are mailed to veterinarians engaged in cattle practice and allied institutions. Send new address (please include old address) to:

AABP, P.O. Box 3610, Auburn, AL 36831-3610 Tel: 1-800-269-2227; FAX 334-821-9532 e-mail: aabphq@aabp.org http://www.aabp.org

THE BOVINE PRACTITIONER is the official publication of The American Association of Bovine Practitioners, published in the spring and summer annually. It also serves as a communication medium between bovine practitioner organizations around the world. All manuscripts and communications must be presented in English.

Copies of THE BOVINE PRACTITIONER are available to non-members for \$25.00 per copy, surface mail, or \$36.00, airmail (foreign). Contact editor for details.

@American Association of Bovine Practitioners, 2007 · All Rights Reserved · The Bovine Practitioner · ISSN 0524-1685

Fortieth Annual Conference

of the

American Association of Bovine Practitioners Vancouver, British Columbia, Canada

Greater Vancouver is located on the mainland in the southwest corner of British Columbia, the westernmost of Canada's 10 provinces. Greater Vancouver is made up of 18 municipalities that occupy 2,930 square kilometres on and around the Fraser River delta.

A metropolitan hub, the City of Vancouver is located on the Burrard peninsula. It borders the Pacific Ocean inlet called the Strait of Georgia, the Coast Mountains and the lush green farmlands of the Fraser Valley.

Vancouver shares the Burrard peninsula with municipalities Burnaby, New Westminster, Coquitlam, Port

Coquitlam and Port Moody, which are all to the east. To the north—separated from the peninsula by the Burrard inlet—West Vancouver, Lions Bay, North Vancouver, Belcarra and Anmore are located on the south slope of the majestic Coast mountain range. To the south—on the opposite shore of the Fraser River—are Richmond, Delta, Surrey, White Rock and Langley.

Twenty-four miles south of downtown Vancouver is the Canada-US boundary.

Across the Strait of Georgia is the provincial capital city of Victoria, on Vancouver Island.

Vancouver is strategically located mid-way between Western Europe and the Asia Pacific.

Moderated by the Pacific Ocean currents, Vancouver's

weather is the mildest in Canada with daytime temperatures averaging 20 degrees Celsius (70 degrees Fahrenheit) in summer to 2 degrees Celsius (35 degrees Fahrenheit) in winter.

Spring comes early, with flowers generally in full bloom by early March. Late summer and autumn days—through October—tend to be warm and sunny. Winter is the rainy season. An annual rainfall of 144 centimetres (57 inches) translates into excellent skiing on the Coast Mountains.

The altitude is at sea level; the time zone is Pacific.

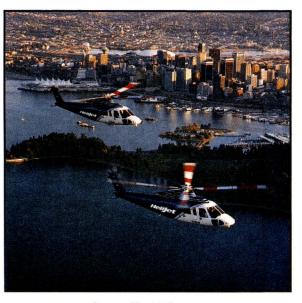
The city of Vancouver's population is 582,000. The greatest per cent of the population (35 per cent) is between ages 25 and 45 years. Greater Vancouver has a total population of 2.2 million.

Official languages are English and French.

Reflecting the region's strategic geographical proximity to several world urban centres and trading partners, it is composed of a large mix of ethnic groups.

Because the city is multicultural, it's also multilingual. Its people speak many different languages and follow the many traditions of their native lands. After English and Chinese, the most common mother tongue languages spoken are Punjabi, German, Italian, French, Tagalog (Philippino) and Spanish. More than half of Vancouver's school age children have been raised speaking a language other than English.

The Canadian dollar is worth about the same as a US dollar. Many establishments accept US dollars and Japanese ven.



Courtesy of Tourism Vancouver
The Greater Vancouver Convention and Visitors Bureau

There are three levels of taxation that affect visitors to Vancouver. There is a 10 per cent accommodation tax. And on the sale of most goods and the provision of most services, there is a seven per cent provincial sales tax (PST) as well as a six per cent goods and services tax (GST) charged. A GST rebate can be claimed by visitors. For more information on the GST rebate contact Revenue Canada Excise Customs and (604.666.1492). Tax on liquor is 10 per cent.

It's easy to get to Vancouver. The scenic TransCanada Highway runs east-west and Highway 99 runs north-south through the city.

The Vancouver International Airport is located about 20

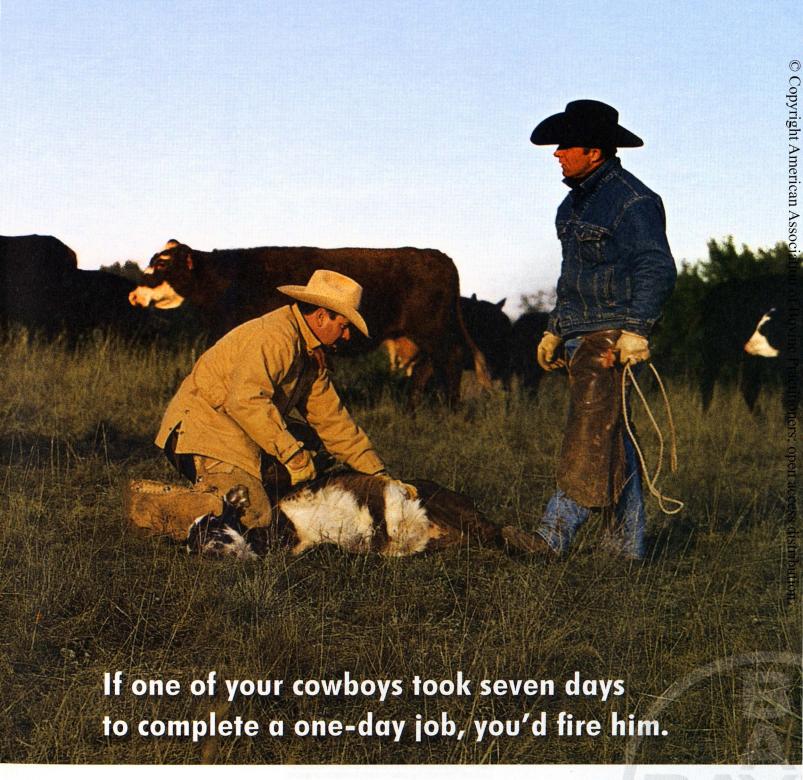
minutes from downtown. It is served by major airlines offering direct service to Vancouver from many Canadian, United States and international points of departure. Several smaller airlines and charter services also utilize the Vancouver International Airport. Vancouver's downtown inner harbour is also served by floatplanes and helicopters.

Between the airport and downtown, transfer service is readily available by shuttle bus (\$12), limousine (\$39), or taxi (\$20-30).

Pacific Central Station—the terminus for transcontinental passenger rail and bus service—is located at Main and Terminal Streets in downtown Vancouver. VIA Rail, the Rocky Mountaineer (seasonal) and Amtrak offer regularly scheduled passenger rail service.

Tourism Vancouver operates a visitor information centre at the Plaza Level, Waterfront Centre, 200 Burrard Street (604.683.2000).

See you in September!



It should be no different with your BRD antibiotic. Why waste a week playing wait-and-see with a long-lasting therapy that may increase his chances of dying or becoming a chronic?* Single-dose Baytril® 100 (enrofloxacin) rapidly attacks and kills the three major bacteria that cause BRD, helping calves look and feel better in hours, and get back to work in a day. You know the drill; you turn to the one that gets the job done and done right. Baytril 100. Right the first time.® Extra-label use of this product in food-producing animals is prohibited.







Baytril® 100

(enrofloxacin)

100 mg/mL Antimicrobial Injectable Solution For Subcutaneous Use In Cattle Only

Not For Use In Cattle Intended For Dairy Production Or In Calves To Be Processed For Veal

BRIEF SUMMARY:

Before using Baytril® 100, please consult the product insert, a summary of which follows:

CAUTION:

Federal (U.S.A.) law restricts this drug to use by or on the

order of a licensed veterinarian.
Federal (U.S.A.) law prohibits the extra-label use of this drug in food producing animals.

INDICATIONS:

Baytril® 100 (enrofloxacin) injectable solution is indicated for the treatment of bovine respiratory disease (BRD) associated with Mannheimia haemolytica, Pasteurella multocida and Haemophilus somnus.

ADVERSE REACTIONS:

No adverse reactions were observed during clinical trials. For medical emergencies or to report adverse reactions, call 1-800-

ANIMAL SAFETY:

Safety studies were conducted in feeder calves using single doses of 5, 15, and 25 mg/kg for 15 consecutive days and 50 mg/kg for 5 consecutive days. No clinical signs of toxicity were observed when a dose of 5 mg/kg was administered for 15 days. Clinical signs of depression, incoordination, and muscle fasciculation were observed in calves when doses of 15 or 25 mg/kg were administered for 10 to 15 days. Clinical signs of depression, inappetance, and incoordination were observed when a dose of 50 mg/kg had been administered for 3 days. No drug-related abnormalities in clinical pathology parameters were identified. No articular cartilage lesions were observed after examination of stifle joints from animals administered 25 mg/kg for 15 days.

A safety study was conducted in 23-day-old calves using doses of 5, 15, and 25 mg/kg for 15 consecutive days. No clinical signs of toxicity or changes in clinical pathology parameters were observed. No articular cartilage lesions were observed the stifle joints at any dose level at 2 days and 9 days following 15 days of drug administration.

An injection site study conducted in feeder calves demonstrated that the formulation may induce transient reaction in the subcutaneous tissue and underlying muscle. No painful responses to administration were observed.

WARNING

Animals intended for human consumption must not be slaughtered within 28 days from the last treatment. Do not use in cattle intended for dairy production. A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal.

HUMAN WARNINGS:

For use in animals only. Keep out of the reach of children. Avoid contact with eyes. In case of contact, immediately flush eyes with copious amounts of water for 15 minutes. In case of dermal contact, wash skin with soap and water. Consult a physician if irritation persists following ocular or dermal exposures. Individuals with a history of hypersensitivity to quinolones should avoid this product. In humans, there is a risk of user photosensitization within a few hours after excessive exposure to quinolones. If excessive accidental exposure occurs, avoid direct sunlight. For customer service or to obtain product information, including a Material Safety Data Sheet, call 1-800-633-3796. For medical emergencies or to report adverse reactions, call 1-800-422-9874.

PRECAUTIONS:

The effects of enrofloxacin on bovine reproductive performance, pregnancy, and lactation have not been adequately determined. Subcutaneous injection can cause a transient local tissue reaction that may result in trim loss of edible tissue at slaughter.

Baytril® 100 contains different excipients than other Baytril® products. The safety and efficacy of this formulation in species other than cattle have not been determined.

Quinolone-class drugs should be used with caution in animals with known or suspected Central Nervous System (CNS) disorders. In such animals, quinolones have, in rare instances, been associated with CNS stimulation which may lead to convulsive seizures.

Quinolone-class drugs have been shown to produce erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species. No articular cartilage lesions were observed in the stifle joints of 23-day-old calves at 2 days and 9 days following treatment with enrofloxacin at doses up to 25 mg/kg for 15 consecutive days.

NADA # 141-068, Approved by FDA

Bayer HealthCare LLC Animal Health Division Shawnee Mission, Kansas 66201 U.S.A.



Bayer

Table of Contents

Case Report – Effects of an Unintended High Dose of Monensin on Milk Production and Milk Fat	
in a Dairy Herd	
Jocelyn Dubuc, Denis DuTremblay, Luc DesCôteaux, Jean Baril, Randal Bagg, Gordon H. Vessie	72
Feedyard Manager and Veterinarian Responses to a Delphi-like Feedyard Biosecurity Survey	
Aric W. Brandt, Michael W. Sanderson, Brad D. DeGroot, Daniel U. Thomson	77
Failure to Eliminate the Anaplasma marginale Carrier State in Beef Cows Following Multiple Treatments	
with Long-acting Injectable Oxytetracycline	
Justin O. Wallace, Larry C. Hollis, Chris D. Reinhardt, Johann F. Coetzee, David G. Renter,	
Donald Llewellyn, Twig T. Marston	84
Sexed Semen: Economics of a New Technology	00
John Fetrow, Mike Overton, Steve Eicker	88
Characterization of an Outbreak of Anthrax in Animals in North Dakota: 243 Cases (2005)	01
Mafany Ndiva Mongoh, Neil W. Dyer, Charles L. Stoltenow, Margaret L. Khaitsa	01
Effect of Different Castration Methods on Growth Performance and Behavior Responses of Postpubertal	
Beef Bulls	11
R.L. Rust, D.U. Thomson, G.H. Loneragan, M.D. Apley, J.C. Swanson	.11
Case Report – Urinary Bladder Rupture, Urolithiasis, and Azotemia in a Brangus Bull: a Herd Approach P. Melendez, O. Rae, C. Risco	ດ1
Ultrasonographic Distribution and Duration of Udder Edema in Post-partum and Over-bagged Dairy Cows	Z I
Kenneth R. Waller III, Robert T. O'Brien, Sheila M. McGuirk	20
Efficacy of a New Sustained-Release Intraruminal Selenium Bolus	49
B.J. Renquist, J.W. Oltjen, M.L. Sween, D.K. Flavell, C. Maas	3/
Effects of Frequent Functional Foot Trimming on the Incidence of Lameness in Lactating Dairy Cattle	04
B. I. Smith, M. A. Kristula, D. Martin	38
A Field Study Comparing Fecal Egg Count Reduction, Weight Gain and Product Safety in Stocker Cattle	00
Treated with either Moxidectin or Ivermectin with Clorsulon	
T.A. Yazwinski, C.A. Tucker, J.G. Powell, J. Reynolds, Z.B. Johnson, J.J. Moore, C. Prewett,	
D. Griffin, B. Haller	46
Effects of Short Term Exposure of Feeder Cattle to Calves Persistently Infected with Bovine Viral	
Diarrhea Virus	
Elliot T. Stevens, Daniel U. Thomson, Guy H. Loneragan, Nels Lindberg	51
Advertisers Index	
Tid voi bisois ilidon	
Addison Biological Laboratory, Inc.	110
Agri Laboratories, LTD	
Bayer HealthCare LLC	
Fort Dodge Animal Health	
Intervet	
Pfizer Animal Health back co	
Schering-Plough Animal Health Corporation	
•	

Cover photo courtesy of Tourism Vancouver

Abstracts were translated to French by Dr. Guy Beauchamp and reviewed by Dr. Emile Bouchard.

Notice to Readers

All statements, opinions and conclusions contained in articles in *The Bovine Practitioner* are those of the author(s), and are not necessarily those of the American Association of Bovine Practitioners (AABP) unless specifically approved by the AABP Board of Directors.



Dr. Dale M. Grotelueschen

Gering, NE

Editorial Review Board 2007

Articles in *The Bovine Practitioner* with the "Peer Reviewed" banner have been reviewed by two to four Editorial Review Board members. Reviewers for 2007 included:

Dr. N. Kent Ames	Dr. Thomas B. Hairgrove	Dr. Larry Moczygemba	Dr. Roger L. Saltman
E. Lansing, MI	Haskell, TX	Beeville, TX	Cazenovia, NY
Dr. David E. Anderson	Dr. Clair M. Hibbs	Dr. Sandra E. Morgan	Dr. George Saperstein
Manhattan, KS	Lynden, WA	Stillwater, OK	Pomfret Center, CT
Dr. Mike D. Apley	Dr. Larry C. Hollis	Dr. Julia M. Murphy	Dr. Jan K. Shearer
Manhattan, KS	Manhattan, KS	Hadensville, VA	Gainesville, FL
Dr. Kerry S. Barling	Dr. Bruce L. Hull	Dr. Arden J. Nelson	Dr. Mark F. Spire
Iola, TX	Westerville, OH	Windsor, CO	Manhattan, KS
Dr. Ruth Blauwiekel	Dr. Breck D. Hunsaker	Dr. Gene Niles	Dr. Lynn E. Steadman
Colchester, VT	Preston, ID	Konowa, OK	Chadron, NE
Dr. Jenks S. Britt	Dr. Max B. Irsik	Dr. Mel E. Pence, Jr.	Dr. D.L. Step
Bowling Green, KY	Gainesville, FL	Tifton, GA	Stillwater, OK
Dr. Cary R. Christensen	Dr. Lee Jones	Dr. Arun P. Phatak	Dr. Shaun Sweiger
Shawnee Mission, KS	Curtis, NE	Waterford, CA	Oklahoma City, OK
Dr. Billy R. Clay	Dr. James A. Kennedy	Dr. Daniel R. Posey	Dr. Flint Taylor
Stillwater, OK	Rocky Ford, CO	College Station, TX	Albuquerque, NM
Dr. Vickie L. Cooper	Dr. Bob L. Larson	Dr. D. Owen Rae	Dr. John U. Thomson
Ames, IA	Manhattan, KS	Gainesville, FL	Ames, IA
Dr. Lionel Dawson	Dr. Terry W. Lehenbauer	Dr. Jerry R. Roberson	Dr. Lynn Upham
Stillwater, OK	Stillwater, OK	Knoxville, TN	Tulare, CA
Dr. Bill DuBois	Dr. Fred D. Lehman	Dr. Karen C. Rogers	Dr. Sarel Van Amstel
Mustang, OK	Shawnee Mission, KS	Greeley, CO	Knoxville, TN
Dr. John W. Ferry	Dr. Howard D. Levine	Dr. Christine A. Rossiter	Dr. David T. Von Tungeln
Belleville, NY	S. Woodstock, CT	Newport, VT	Calumet, OK
Dr. James G. Floyd, Jr.	Dr. David G. McClary	Dr. Gary P. Rupp	Dr. Bradley J. White
Raleigh, NC	Auburn, AL	Clay Center, NE	Manhattan, KS
Dr. James H. Fountaine	Dr. C. Pat McCoy	Ryan Ruppert	Dr. Steven E. Wikse
Kenyon, MN	Starkville, MS	Centennial, CO	College Station, TX
Dr. Dee Griffin	Dr. Pedro Melendez	Dr. Michael W. Sanderson	Dr. Lou Anne Wolfe
Clay Center, NE	Gainesville, FL	Manhattan, KS	Sapulpa, OK
Dr. Daniel L. Grooms	Dr. William L. (Bill) Mies	Dr. Patricia B. Scharko	Dr. Amelia R. Woolums
Williamston, MI	College Station, TX	Lexington, KY	Athens, GA