

15th ANNUAL NORTHEAST OHIO REGIONAL DAIRY CONFERENCE



“Reproductive Issues Facing Today’s Dairy Farms”

Featured Speaker - Dr. Jeffrey S. Stevenson



February 19, 2014

**Buckeye Event Center
Dalton, Ohio**

**Presented by the Dairy Veterinarians of the
Killbuck Valley Veterinary Medical Association**



Killbuck Valley Veterinary Medical Association

President: William Yost, D.V.M.

Treasurer: Carlton Schlatter, D.V.M.

The Killbuck Valley Veterinary Medical Association is an association of veterinarians in private practice, teaching, research, and industry in the geographic area surrounding the path of Killbuck Creek. The association is affiliated with the Ohio Veterinary Medical Association at the state level, and includes veterinarians primarily in OVMA District 8; we also include some veterinarians from District 7 to the north and District 4 to the west.

The purposes of the Killbuck Valley VMA are to provide professional continuing education to our membership, provide a conduit for the membership to communicate with the OVMA, and provide public service as needed to our geographic area and local communities as our professional expertise allows.

Our annual dairy producer meeting is made possible with the generous support of local businesses and is a public service of our group, recognizing the importance of the dairy industry in our local geographic area as well as the state of Ohio in general. By our continued support of this type of educational meeting for Ohio dairy industry personnel, we of the KVVMA are striving to maintain and expand this important industry, insure the continued production of dairy products of the highest quality, and improve and protect the well-being of the dairy cow herself.

We welcome you to our 2014 meeting. We hope you find the meeting educational and stimulating.

15th ANNUAL NORTHEAST OHIO REGIONAL DAIRY CONFERENCE

**February 19, 2014
Buckeye Event Center
Dalton, Ohio**

“Reproductive Issues Facing Today’s Dairy Farms”

SCHEDULE

- 9:00 - 9:55 AM:** Registration, Continental Breakfast and Visit with Exhibitors
- 9:55 - 10:00 AM:** Welcome and Opening Remarks
Dr. William Yost - KVVMA President
- 10:00 - 10:45 AM:** Featured Speaker – Dr. Stevenson
Reproductive Anatomy and Activity Monitoring in Heat-Detection Programs
- 10:45 - 11:15 AM:** Break and Visit with Exhibitors
- 11:15 - 12:00 PM:** Featured Speaker – Dr. Stevenson
Update on Timed AI Programs
- 12:00 - 1:15 PM:** Lunch (provided) and Visit with Exhibitors
- 1:15 - 1:30 PM:** *Updates on Dairy Promotion, Legislation & Regulatory Issues*
– Scott Higgins, CEO, ADA Mideast and ODPa
- 1:30 - 2:15 PM:** Dairy Farmer Panel: *How We Achieve Reproductive Success*
- 2:15 - 2:45 PM:** Break and Visit with Exhibitors
- 2:45 - 3:30 PM:** Featured Speaker – Dr. Stevenson
Removing Bottlenecks that Limit Pregnancy Rates
- 3:30 PM:** Door Prizes (*must be present to win*)
Adjourn



Dr. Jeffrey S. Stevenson

FEATURED SPEAKER

Dr. Stevenson was born in Salt Lake City and attended Utah State University, graduating with a B.S. in Dairy Science in 1975. He then entered graduate school at Michigan State University and received his M.S. in Dairy Science in 1977. In 1980, he received his Ph.D in Animal Physiology from North Carolina State University. He was then appointed Assistant Professor in the Department of Animal Sciences and Industry at Kansas State University. By 1992, Dr. Stevenson was promoted to Professor, and his current responsibilities include teaching undergraduate and graduate courses, as well as being the faculty coordinator for the Kansas Artificial Breeding Service Unit (KABSU).

Dr. Stevenson's research interests include synchronization of estrus and ovulation in dairy and beef cattle and early embryo survival in cattle. He has served on the editorial boards of *Journal of Dairy Science*, *Journal of Animal Science*, and *Animal Reproductive Science*. He has received numerous awards and recognition for his research in dairy reproduction, authored or coauthored numerous journal articles, papers, and book chapters, and has been a contributing author for the Artificial Breeding column in *Hoard's Dairyman* since June 1992.

*We gratefully acknowledge the support of our sponsors,
without whom this meeting would not be possible.*

Please take time to visit with those sponsors
who are present today, and thank those
who are not present when you encounter them.

The veterinarians of the Killbuck Valley Veterinary Medical Association would like
to thank all of our sponsors for their continued support of this educational
effort for the dairy industry. A strong dairy industry is a tremendous asset
for all of us in northeastern Ohio.

**We would like to thank the Dairy Farmers of America, DMS and Smith
Dairy for their generous donation of milk and ice cream.**

A complete listing of today's sponsors
included in this book are as follows:

Gold Sponsors

ABS Global, Inc.
American Dairy Association
Bayer Animal Health
Boehringer Ingelheim
COBA/Select Sires
Curry Lumber
Elanco Animal Health
Farm Credit Services
First National Bank
H&H Industries
Hubner Seed
Merck Animal Health
MWI Veterinary Supply
Novartis Animal Health
Parnell Living Science
PNC Bank
Zoetis Animal Health

Silver Sponsors

ADM/Alliance Nutrition
Agri-King
AgriLabs
American Farm Products
Animal Health International
Best Forage
Bio-Vet
Byron Seeds
Critter Blankets
DHI Cooperative
Dr. Pitzen and Associates
Farmers State Bank
Genex/Cri
Gerber Feed
Harold's Equipment
Haudenschild Insurance
Hill's Farm Supply
Holmes Laboratory, Inc.
IBA
ImmuCell Corporation
Lowe & Young
Maibach Tractor
Mast-Lepley

Maysville Elevator
Merial Animal Health
MultiMin USA
Mycogen Seeds
New Pittsburgh Veterinary Clinic
OARDC/FAHRP
PBS Animal Health
Prenger's Inc.
Prince Agri Products
Reberland Equipment
Semex, Inc.
Shearer Farm Equipment
Stein-Way Equipment
Sunrise Supply
Tech Mix
Town & Country Co-Op / Land O'Lakes
Valent USA Corporation
Vaughan Insurance
Wayne SWCD
W.G. Dairy Supply/Lely
Witmer's Feed & Grain
Woodlyn Acres Farm
Martin D. Yoder Livestock

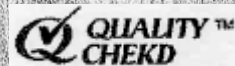
Bronze Sponsors

Agri-Nutrition Consulting
B&K Concrete
Baker's Acres
Cargill
Commodity Blenders
Forage Analysis Ration Management
Hummel Group
Imhoff Breeding/Ag Bagging
Kalmbach Feeds
L.E. Sommer - Kidron, Inc.
Loudonville Equity
Nutrition Physiology Co.
Producer's Livestock
RC Farms
Revive Microbials
Sterling Farm Equipment
Trouw Nutrition USA
Tyler Grain & Fertilizer
VitaPlus Corp

SMITH'S

THE DAIRY IN THE COUNTRY®

1381 Dairy Lane
P.O. Box 87
Orrville, Oh 44667
Ph: (330)683-8710
Fax (330)683-1079
(800)776-7076
www.smithdairy.com



Dairy Farmers of America *is the premium provider of market opportunities for farmers and a value-added supplier of innovative dairy products and food components for customers around the world.*

DMS 
Dairy Marketing Services

Thank You

Smith Dairy
and

**Dairy Marketing Service &
Dairy Farmers of America**

for donating milk, cheese and ice cream

EFFECTIVE AND EFFICIENT MILK MARKETING



ABS PRIMETIME® GENOMIC SIREs



BALISTO dam: De-Su 199-ET VG-85 (photo: Beth Herges),

BELUGA dam: Vision-Gen Super Bonnie-ET VG-86 (photo: Billy Heath-reversed)

USDA-CDCB 12/13 gPTA/PTA Rel. 76% BALISTO, Rel. 75% BELUGA

29HO16714 De-Su 11236

BALISTO

Bookem x Watson x O Man x Rudolph

29HO16698 Pen-Col

BELUGA

O-Style x Super x Givenchy x BW Marshall

The ABS Primetime lineup offers a diverse group of high ranking sires from the industry's most sought-after cow families. BALISTO and BELUGA are two of the highest gTPI and NM\$ bulls in the industry and their families are consistently transmitting profitable genetics.

Contact your local ABS Representative today to add BALISTO and BELUGA to your herd or to get more information on other outstanding ABS Primetime genomic sires.

Brian Good 419-217-0315
Randy Kruse 419-681-4481
Aaron Short 330-614-5098
Ray Jackson 937-597-9429

Jonathan Barnes 260-307-6126
Mark "Buck" Owen 330-317-7758
Roger Sundberg 330-466-2588

©2014 ABS Global, Inc. • 1525 River Road, DeForest, WI, USA
1.800.ABS.STUD • www.absglobal.com



Your Dairy Associations Working For You:



Increasing sales and demand of U.S. dairy products by:

- Creating lifelong dairy consumers by empowering youth through Fuel Up To Play 60 to choose healthy foods like lowfat and fat free dairy
- Building and maintaining consumer confidence in dairy through our Meet Ohio Dairy Farmers campaign
- Working with strategic partners like Mc Donald's and Domino's to create more dairy friendly menu items for consumers
- Educating health professionals and consumers about how dairy can fit into a healthy lifestyle



www.Drink-Milk.com
www.OhioDairyFarmers.com



Protecting the future of Ohio's dairy farmers by:

- Speaking with one voice to address critical issues that may impact Ohio's dairy industry
- Working with Ohio's leadership and state agencies to monitor and assess the impact of rules and regulations
- Providing farmer input on proposed rules and new agricultural techniques related to water quality issues
- Promoting the use of National Dairy FARM Program™ Milk and Dairy Beef Drug Residue Prevention Manual
- Engaging with animal and human health stakeholders to address the antibiotic resistance issue

**Join ODPA Today
& Make Your Voice Count!**

www.ODPA.org



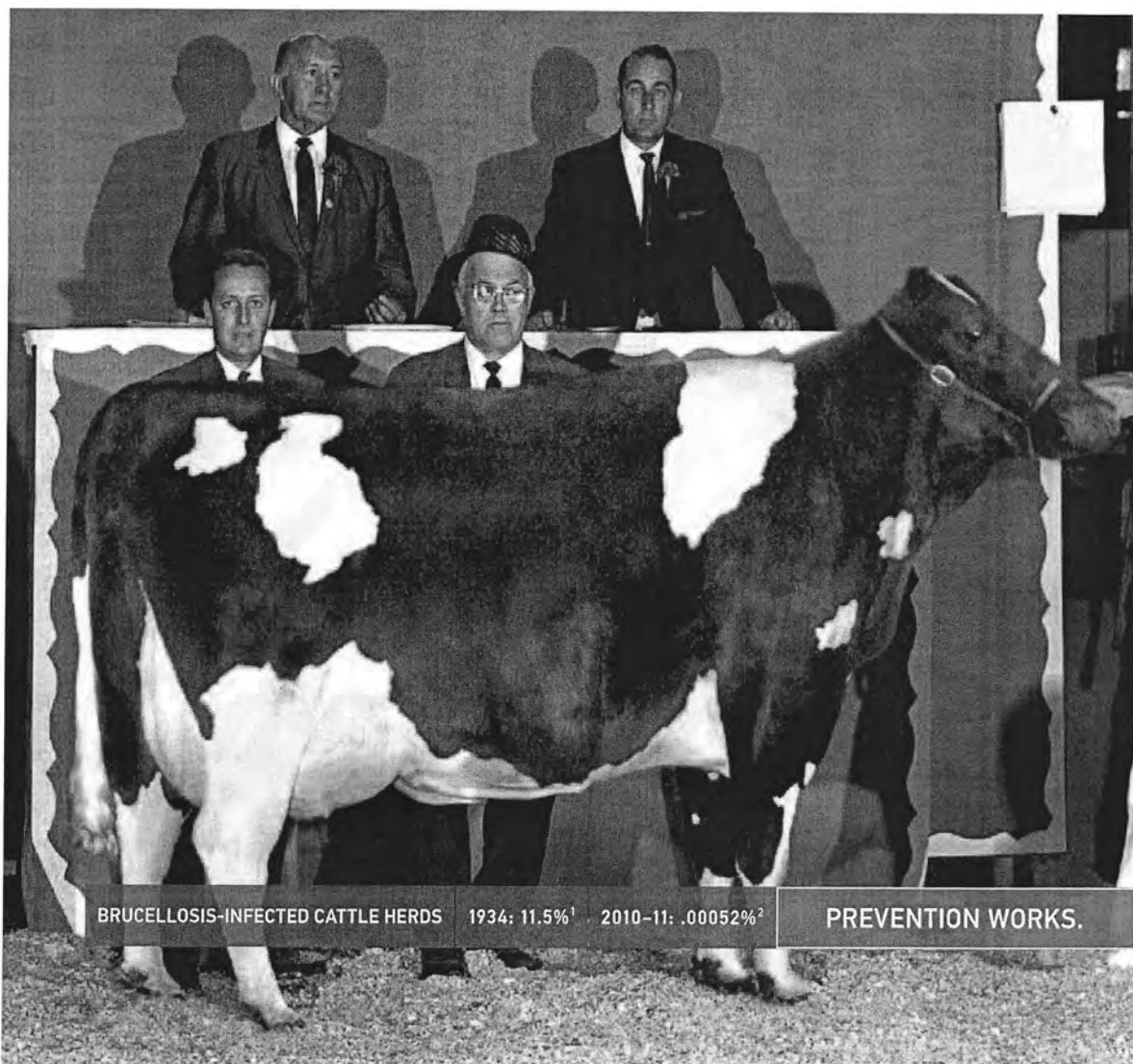
Transforming livestock production

Bayer Animal Health has over 100 years of global experience in providing innovative, scientifically proven products that help veterinarians and producers preserve the health and profitability of food animal production. We remain a committed partner in successful livestock production today and in the future.



Bayer HealthCare
Animal Health

<http://www.bayer-ah.com>



BRUCELLOSIS-INFECTED CATTLE HERDS 1934: 11.5%¹ 2010-11: .00052%² PREVENTION WORKS.

History has proved how powerful disease prevention can be. We believe that preventing disease is a more effective way to maintain animal health than simply treating problems as they arise. We are committed to providing the tools and innovation that help your client's cattle reach their maximum potential. Because, like you, we believe that prevention truly is the best medicine.

For more information, contact your Boehringer Ingelheim Vetmedica, Inc. representative or visit BIVIPreventionWorks.com.

¹ Ragan VE. The Animal and Plant Health Inspection Service (APHIS) brucellosis eradication program in the United States. USDA APHIS, Veterinary Services. Available at: http://www.iasc.org/iascience/viewarticle.asp?article_id=367. Accessed Sept. 20, 2011.

² USDA APHIS. Brucellosis-Affected Herds, 2010-2011. Available at: http://www.aphis.usda.gov/animal_health/animal_diseases/brucellosis. Under "Brucellosis Disease Information," click on "Accumulated 12-Month Herd Infection Rate." Then, download status-by-st.xls. Accessed Sept. 20, 2011.

©2012 Boehringer Ingelheim Vetmedica, Inc. BIV18000-Ad17



Fertility Without Compromise

Select Sires NEVER compromises when it comes to fertility. Unlike some other A.I. companies, Select Sires provides both our in-house data along with industry evaluation to give you the information that you want to know about sire fertility. While leading the industry with elite sires for Sire Conception Rate (SCR), Select Sires delivers the quality genetics you have come to expect. ***Stick with the proven leader in the A.I. industry - Select Sires!***



7HO9722 JERMIAH

		<u>SCR</u>
7HO9722	JERMIAH	+4.5
7HO10904	COLT P-RED	+3.7
7HO9841	HULK	+3.2
7HO9918	MCFLY	+3.2
7HO9754	DAYTON	+3.1
7HO9961	DIENER	+3.0
7HO9346	AUTOPILOT	+2.9
7HO10233	MIZZOU	+2.9
7HO10433	SUBRARO	+2.9
7HO9989	MOSEBY	+2.8



7JE1036 PAT

		<u>SCR</u>
7JE1036	PAT	+5.3
7JE865	KYROS	+4.8
7JE962	SUCCESS	+4.0
7JE859	RILEY	+3.8
7JE860	ECLIPES-P	+3.5
7JE886	MILES	+3.3

Looking at all available fertility values of individual sires can help improve pregnancy rates. Through evaluation of the Composite Fertility Index (CFI) and Sire Conception Rate (SCR), along with intense semen quality evaluations, 14 of the above 16 high SCR bulls, earn the designation of Superior Settler. Turn to Select Sires for fertility without compromise - ***because you deserve more than just a pregnancy.***

 **Superior
Settler™**

COBA



Since 1946

www.cobaselect.com -- 800-837-2621
District Sales Manager: Kevin Hinds -- 614-205-7173



CURRY LUMBER & POLE BUILDING CO

331 W. Henry St. ~ Wooster, OH 44691

www.currylumber.com

330 264-5223

More than 160 Years of Service



AGRICULTURAL RESIDENTIAL EQUESTRIAN COMMERCIAL

REMODELING

ROOFING

INSULATION

GARAGE DOORS

GUTTERS





Elanco



Elanco



Contact your local Elanco
Representative for details:

Dick Knight 419-651-0695
Jim Stefanak 330-472-9926

You know
farming.
We know farm
financing.

*Farm Credit offers loans, leases
and crop insurance.*



***farm*CREDIT**
MID-AMERICA

WOOSTER OFFICE

382 West Liberty Street
Wooster, OH 44691

Call 800-216-9651 or go to e-farmcredit.com

Farm Credit is an equal opportunity provider.





**For dependable agricultural lending,
quick response and decisions made locally...
Contact your nearest First National Bank
for all of your agricultural business needs.**



Mark Witmer
President & CEO
markwitmer@discoverfirstnational.com



Tom Stocksdales
Senior Vice President
Agricultural Business & Community Banking
(330) 464-7596
tomstocksdales@discoverfirstnational.com



FirstNationalBank

Orrville
112 W. Market Street
Orrville, OH 44667
(330) 682-1010

1320 W. High Street
Orrville, OH 44667
(330) 682-2881

Salem
2424 E. State Street
Salem, OH 44660
(330) 337-7756

Dalton
12 W. Main Street
Dalton, OH 44618
(330) 828-2227

Kidron
4950 Kidron Road
Kidron, OH 44636
(330) 857-3101

Lodi
106 Ainsworth Street
Lodi, OH 44254
(330) 948-1414

Massillon
211 Lincoln Way East
Massillon, OH 44646
(330) 832-7441

2312 Lincoln Way NW.
Massillon, OH 44647
(330) 833-1622

Mt. Eaton
15974 E. Main Street
Mt. Eaton, OH 44659
(330) 857-4301
(330) 359-5476

Apple Creek
7227 East Lincoln Way
Apple Creek, OH 44606
(330) 264-8070

Seville
4885 Atlantic Drive
Seville, OH 44273
(330) 769-3105

Smithville
153 E. Main Street
Smithville, OH 44677
(330) 669-2611

Wooster
4192 Burbank Road
Wooster, OH 44691
(330) 263-5303

1725 Cleveland Road
Wooster, OH 44691
(330) 263-1725



Member
FDIC

Garage and Shop Lighting

Before



After



Better Light Using Less Energy



Ceiling Fixtures



Workbench / Shop
Fixtures



Vapor Proof
Fixtures

Featuring
Vi-Tek 93 Plus



Lights by H&H®
F3278 Vi-Tek 93+ GOLD
Made in Germany low mercury
1-800-637-3853 50/60
www.lightsbyhh.com

50,000 Hour
5 Year Warranty
Instant On

Lights
By H&H
Go Green!

H&H Industries, Inc.
800-637-3853
www.lightsbyhh.com





INCREASE YOUR SILAGE PRODUCTION POTENTIAL

Contact your local Hubner™ Dealer or Representative for more information on how our Milk MaxSM Silage Research Program can help you increase your silage production potential.

Mike Yoder
District Sales Manager
(330) 243-0267

Amy Hoy
Dairy Nutrition Manager
(724) 263-4778



JIM BROWN
TRUMBULL and ASHTABULA
(330) 240-9363

HARRY NEUENSCHWANDER
COLUMBIANA County
(330) 831-1736

HOWARD WITHERS
MAHONING County
(330) 398-5770

SCOTT MOORE
HOLMES and COSHOCTON
(330) 763-0411

MIKE ROZZO
TRUMBULL County
(330) 770-7487

KRIEG FARMS
ASHTABULA County
(440) 422-3392

ED DEWITZ
OTTOWA County
(419) 266-1299

MARK TURNEY
WAYNE County
(330) 465-2709

HOLMES AG SERVICE
HOLMES and WAYNE
(330) 279-2501

MT. EATON ELEVATOR
HOLMES and WAYNE
(330) 359-5028

MT. HOPE AG CENTER
HOLMES and WAYNE
(330) 674-0416

STEVE GERBER
WAYNE and MEDINA
(330) 465-3646

GERBER & SONS-TUSCARAWAS
HOLMES, COSHOCTON, CARROLL and STARK
(330) 897-6021

ED MONTER
STARK County
(330) 206-2250



Hubner Seed & Design™ is a trademark of American Seeds, LLC. ©2014 Monsanto Company. 35972 1-23-14

Don't Worry About Losing Her to Scours

Peace of Mind Comes with Guardian® Vaccine



See your veterinarian or animal health supplier for more information.

Finally, there's a scours vaccine you can count on! Guardian vaccine is a trustworthy and convenient tool for limiting neonatal calf losses. In fact, in a recent nationwide survey of Guardian vaccine users, 98.4% of 132 respondents (veterinarians and producers) said they would use Guardian vaccine again because of its broad spectrum of protection and flexible dosing schedule.

Guardian vaccine has everything you want in scours protection, from reliability to convenience. Use Guardian vaccine once, and it'll be your scours vaccine for life, for peace of mind.

Guardian®
FINALLY. RELIABLE SCOURS PROTECTION

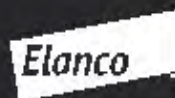
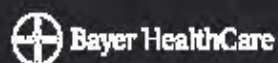


Copyright © 2006, Schering-Plough Animal Health Corporation. All rights reserved. Guardian is a registered trademark of Schering-Plough Veterinary Corporation. SPAH-GRD-58F-D



MWI Veterinary Supply

is here for
all your dairy
needs.



Phone: (800) 824-3703
Online: www.mwivet.com

your business • your success • our goal



FROM ZERO TO PROTECTION IN TEN DAYS FLAT.

NUPLURA PH UNMATCHED PNEUMONIA PROTECTION

NUPLURA™ PH is the first and only U.S. cattle vaccine proven to deliver onset of immunity in 10 days against *Mannheimia (Pasteurella) haemolytica*. Developed with cutting-edge molecular technology, NUPLURA PH contains the purest antigen form available in a pneumonia vaccine. The result is an efficacious, smooth vaccine that is demonstrated safe for use in calves as young as 28 days old.

For fast-acting defense against *Mannheimia haemolytica*, look no further than new NUPLURA PH. Contact your veterinarian or Novartis Animal Health representative to learn more.

INTRODUCING



NUPLURA™ PH

The image displays a variety of PARNELL Synchronizovet products. In the background, two large boxes are visible: 'GONAbreed + estroPLAN Synchronization Pack 200 COW' and 'GONAbreed + estroPLAN Synchronization Pack 200 HEIFER'. In the foreground, there are several smaller boxes, vials, and syringes. A diagram at the top right illustrates two sample regimens for treatment. The diagram shows the timing of GONAbreed and estroPLAN injections relative to estrus and fixed time AI.

GONAbreed®
(gonadoreline acetate)

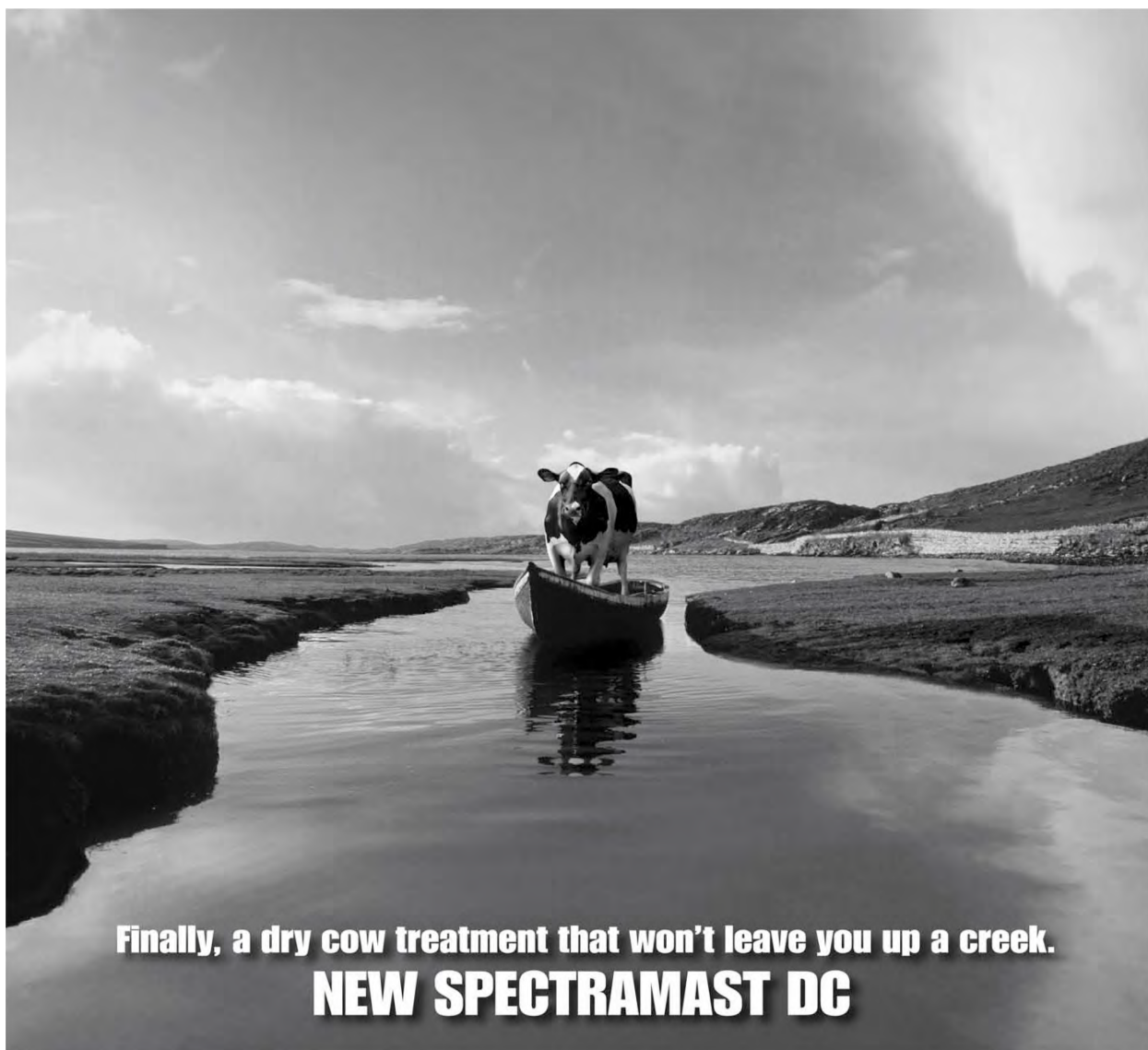
estroPLAN®
(cloprostenol sodium)

For more information, visit www.mySYNCH.com
or call 1-800-88PARNELL (1-800-887-2763)



James E Pittman Jr
Vice President, Agricultural Banking
Phone: 330-684-6007
Fax: 330-682-8080
Cell: 330-464-7948
james.pittmanjr@pnc.com

Member of PNC Financial Services Group
101 W Market Street
Orrville, Oh 44667

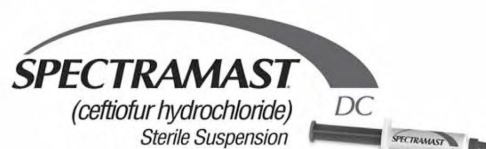


Finally, a dry cow treatment that won't leave you up a creek.
NEW SPECTRAMAST DC

With new SPECTRAMAST® DC (*ceftiofur hydrochloride*) Sterile Suspension, there is finally a dry cow therapy that offers you options instead of restrictions. Options that can give your dry cow program a flexibility and effectiveness it never had before.

- **Attacks More Major Pathogens** to provide proven efficacy against *Staphylococcus aureus*, *Streptococcus dysgalactiae* and *Streptococcus uberis*.
- The **Shortest Meat Withdrawal** allowing you to maximize your management options.
- **Zero Milk Discard*** so you can get them back in the milking string faster.

*Inappropriate dosage or treatment intervals with SPECTRAMAST DC and or failure to complete a minimum dry cow period (30 days) may result in violative milk residues. As with all drugs, SPECTRAMAST DC should not be used in animals found to be hypersensitive to the product.



Dry off without the trade off.™

zoetis™

SPECTRAMAST is a registered trademark of Pharmacia and Upjohn Company LLC, a division of Pfizer Inc. ©2006 Pfizer Inc. All rights reserved. SPM05038

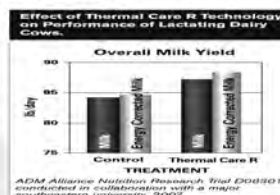


ADM Alliance Nutrition® has developed a patent-pending technology to enhance dairy profitability.



Thermal Care™ R for effective heat stress relief
ADM, on-farm, and university research has shown cows on Thermal Care R produce more milk versus control animals in the presence of heat stress. Dairy cows on trial at a major southeastern university produced **3 lb more milk and 3.9 lb more energy corrected milk daily** on Thermal Care R compared to control cows.

For more information, contact:



ANIMAL NUTRITION

DAIRY

BEEF

SWINE

BROW FEED

SPECIALTY

COMBINATION ANIMAL

www.admani.com

866-666-7626

AN_DairyHelp@adm.com



KEY DAIRY PROGRAM



Focuses on our Client Profitability by:

- Maximizing Forage Quality
- Optimizing Rumen Health and Digestion Efficiency
- Minimizing Post Calving and Herd Health Problems
- Increasing Milk Production without Compromising Herd Health



800-435-9560 | WWW.AGRIKING.COM



StressMate™ A new way to handle stressed calves



Feeding Instructions

Provide 10 mL orally immediately following birth. Can be fed alone or in milk, milk replacer or electrolytes for 3 consecutive days.

StressMate is a trademark of Sterling Technology.
© 2013 Agri Laboratories Ltd.
All rights reserved.

All calves are at-risk calves



- For newborns experiencing stress
- For colostrum-deprived calves
- Stimulates natural defenses
- Works quickly, even after gut closure

For more information visit: www.healthydifferencecalf.com

Distributed by
Agri Laboratories, Ltd.
St. Joseph, MO 64503



Control Butyric Acid and Maximize Every Bite!

SilagePro® with CATALYST 5 enzymes

- 4-day fermentation
- 5% more silage at feed-out
- Increased rate of fiber digestion
- Higher starch retention

Over one million tons treated last year alone!



More milk per ton
of silage fed



American Farm Products

For more information call
Larry Jones, Ph.D 607-591-9727

Animal Health
INTERNATIONAL



- Committed to strong customer relationships
- Knowledgeable, Experienced Inside Sales Team
- Accurate, reliable order fulfillment
- Online Scripting
- FDA and AMDUCA compliant

MINDY THORNBURG

Outside Sales Representative
740 255 0277 – direct
800 735 8387 – inside sales team

Animal Health Solutions
Since 1967



PROUD SUPPORTER OF OHIO'S DAIRY INDUSTRY

**Take a bite out of your
biggest expense,
FEED COSTS!**



Feed costs are your biggest expense on the dairy. The better your forage quality, the lower your feed costs. Improve your herd health, milk components, and your bottom line with better forages from BEST FORAGE.

WE KNOW, WE ARE DAIRY FARMERS TOO!

Ohio & MI State Corn Silage Yield & Quality Winning Hybrids
World Forage Superbowl Alfalfa Finalists
Premium Forage Grasses & Clovers
Spring, Summer & Fall Annuals for Forage
The Best Cover Crops Available


BEST FORAGE

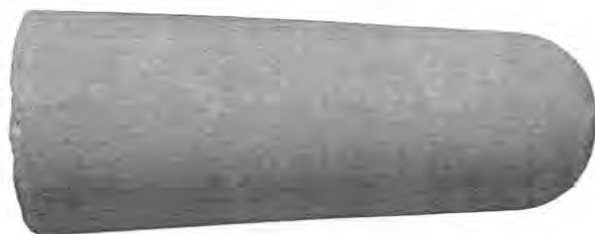
Best Seed, Best Knowledge, BEST FORAGE

www.bestforage.com

888-836-3697

QuadriCal®

Solid fresh cow support™



More calcium in multiple forms
for delivery when she needs it.

For more information please contact:

Hans Maybach

Bio-Vet Regional Sales Representative

440-212-1632



Bio-Vet, Inc.
300 Ernie Drive
Barneveld, WI 53507
800-246-8381
www.bio-vet.com

Feb2014

FOR MORE PRODUCTION AND A HEALTHIER HERD, ASK THE

High Energy Forage Experts

We know what works because we grow the
products we sell on our own farms.



Byron Seeds Solutions™

Premium High Energy Forage Mixes

Tailored high energy blends and mixes that work
in harmony with your farm's unique conditions
for better results.



MASTERSCHOICE

- Unique broad leaf absorbs more sunlight
- Kernels contain more sugar & digestible fiber for increased energy

BARENBRUG

Great in Grass

Byron is a key regional distributor



Kingfisher® Alfalfa & Blends

- High energy forages; feed more forage, less grain
- Significant yield increases in milk / meat per acre
- Plant disease resistant and organic varieties

Place your seed orders now!



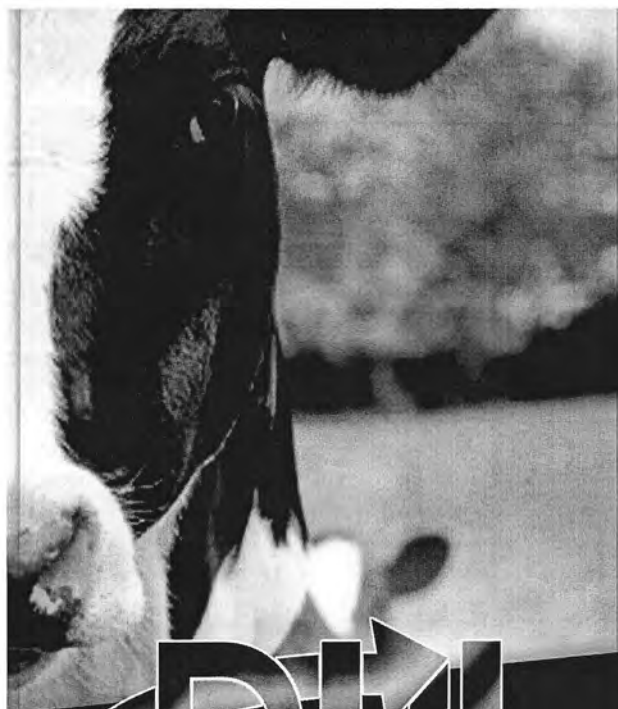
1-877-995-2490

Rockville, Indiana Dealer inquiries welcomed

World
Forage
Analysis
Superbowl

6 of 10

finalists by Byron Seeds



TRADITIONAL DHIA SERVICES

Including management reports, action lists,
and SCC bulk tank contribution report.

DAIRY HERD MANAGEMENT SOFTWARE

PCDART - affordable, easy to use, complete
Pocket Dairy - on the go management software
for Android devices

LAB SERVICES

biOPRYN® - blood pregnancy testing for
beef or dairy cattle

Johnes - blood or milk test

Butterfat, Protein, Somatic Cell Count,

Milk Urea Nitrogen

Milk Pregnancy Testing

P.O. BOX 28168 • COLUMBUS, OH 43228
1-800-DHI-OHIO | 614-545-0460
WWW.DHICOOP.COM

afimilk®

sight gets tough?



AfiAct

More than automatic Heat Detection
Your eyes on the farm



24-7-all year Heat Detection • Fertility Management and
Comfort Monitoring • Save labor and drug costs • The only
tag that monitors cows wellbeing



Vital know-how
in every drop

www.afimilk.com





Keep your animals warm & dry. We specialize in blankets for small animals. Calf, Goat, Cria, Lamb, Sheep haybags.

FREE brochure and pricing.

Dealers Welcome.

8240 TR 654, Fredericksburg, OH 44627

Dr. Pitzen and Associates, Inc.

“Experienced Cutting Edge Dairy Nutrition”

happyhealthycows.com

phone: 330-715-2077 toll free: 866-263-1551

Join our growing list of clients in 11 states, to see the difference yourself.

We help our clients see these improvements:

- | | |
|--------------------------|-----------------------------------|
| *Increased profit | *Better performance |
| *Lower feed costs | *Better forage quality |
| *Healthier cows | *Increased feed efficiency |



Farmers State Bank

Your neighbor. Your partner. Your bank.

West Salem
(419) 853-4631

Ashland-E. Main St.
(419) 281-7110

Ashland-S. Baney Rd.
(419) 281-2554

Rittman
(330) 925-4617

Marshallville
(330) 855-8234

www.farmersstate-oh.com

1-800-350-2844



Meet our new Agricultural Lender, John Varner
Call for an appointment today!

(419) 496-2464

or email: jvarner@farmersstate-oh.com

Member FDIC 



BULL POWER



1JE00711 PLUS

- #1 Daughter-Proven JPI™
- +1719 Milk • +70 Fat
- +3.3 SCR • +1.7 Type



1H010788 JACEY

- +\$825 LNM
- +1716 Milk • +2.8 SCR
- +1.9 DPR • +2.58 Type

PEOPLE POWER



PROGRAM POWER



CONTACT A GENEX REP TODAY!

Toby Schaub - Uniontown, OH - 330-715-0256

Benjamin Hickerson - Bradford, OH - 937-726-7241

Terry Weiker - Republic, OH - 419-618-0834

William Michael T. Gable - Orrville, OH - 330-466-3755

Eric Miller - Millersburg, OH - 330-231-7732

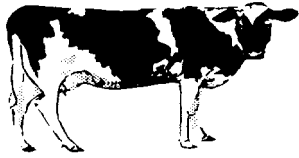
Josh Kepler - Shreve, OH - 330-464-2586

James Cole - Bloomville, OH - 419-722-9524



Genex
Cooperative, Inc.
A Subsidiary of Cooperative Resources International





SERVING THE OHIO DAIRY INDUSTRY

GERBER FEED SERVICE

3094 Moser Road

P. O. Box 509

Dalton, OH 44618

1-800-358-9872 • 330-857-4421

FAX: 330-857-1602

HAROLD'S EQUIPMENT, INC.

animat INC.

**GEA
HOULE**

TRIOLIET

Patz

2120 CR 168

Dundee, OH 44624

www.haroldsequipment.com

330-893-2348

1-800-905-0940

Fax: 330-893-3459

Insurance is *our* field.



Haudenschild Agency

Matt Stewart · John Kinkopf · Eric Haudenschild

Visit either of our convenient locations:

15162 State Route 39, Loudonville, OH 44842

4973 Cleveland Rd., Wooster, OH 44691

Phone: 419-994-5555 Toll Free: 888-305-5555

www.haudenschildagency.com



Hastings Mutual

INSURANCE COMPANY

Proud Past, Strong Present, Exciting Future!

www.hastingsmutual.com

Laboratory Testing Services For Organic, Sustainable, and Conventional Growers

- Soil Testing (Lawn, Gardens, Produce, Deer Food Plots, Pastures, Field Crops, etc.)
- Drinking Water Suitability & Bacteria (Humans and Animals)
- Animal Nutrition for Companion to Large Animals (Hay, Grain Mixes, Feedstuffs, Etc.)

Holmes Laboratory, Inc.

3559 US 62

Millersburg, Ohio 44654

1-800-344-1101

www.holmeslab.com

IBA, INC. 27 PROVIDENCE ROAD, MILLBURY, MA 01527 PHONE: 508-865-6911

SAM VANCE
330-466-2603

TERRY VANCE
330-435-6814

LUKE MAST
330-763-3367

BILL ROGERS
419-368-4934

IBA OF OHIO 8786 GEYERS CHAPEL RD., CRESTON, OHIO 44217 PHONE: 330-435-6814

Serving Dairy Farmers from Coast to Coast

WHY BE ONLY HALF PROTECTED?

WHEN YOUR CALVES ARE EXPOSED AND UNPROTECTED, SO IS YOUR BOTTOM LINE.

Don't risk calf health by delaying immunity. Dry-off scours vaccines can cause a variable response, jeopardizing scours protection for the calf. And, scours vaccines given to the calf itself take response time and require delay of the critical colostrum feeding. First Defense® delivers specific antibodies to the gut for immediate protection against disease, and provides additional immunoglobulins to be absorbed into the bloodstream for extended protection.

DON'T LEAVE YOUR CALVES EXPOSED.
DELIVER IMMUNITY WITH FIRST DEFENSE.

One bolus per calf delivers Immediate Immunity

Easiest scours product to use with most accurate dosage

Guaranteed levels of K99+ E. coli and coronavirus antibodies to prevent disease

No refrigeration required



WWW.IMMEDIATEIMMUNITY.COM | 800-466-8235
VISIT WWW.FACEBOOK.COM/IMMEDIATEIMMUNITY
FOR CALF RAISING TIPS.

LOOK FOR
OUR OTHER
PRODUCTS

First Defense
Technology
gel tubes and bulk powder



Selling service and parts since 1949!



FENDT

KRONE



MASSEY FERGUSON

KINZE



Trimble

M-Hale



Fliegl
AGRO-CENTER

WALLENSTEIN

Quicke

TUBE-LINE
MANUFACTURING LTD

REMLINGER



**7058 East Lincoln Way
Wooster, Ohio 44691**

**Phone 330-262-6111 • Fax 330-262-1822
www.loweandyoung.com**



AGCO
Your Agriculture Company

HESSTON

SUNFLOWER



Maibach Tractor

13701 Eby Road • Creston, Ohio 44217
(330) 939-4192 • (888) 808-9934
www.maibachtractor.com

USED EQUIPMENT

Come Visit, Call Or Check Out Our Website
For All Your Oliver New, Used Or Remanufactured Parts. *We Know Oliver!*



AGCO
Your Agriculture Company

HESSTON

SUNFLOWER



JAMESWAY

**DON'T LET VALUABLE
NUTRIENTS BURN OFF!**

NEW! NUTRI-JECTOR™
High Speed Injection System



**NUTRI-JECTOR
FEATURES and BENEFITS:**

- 7 mph operating speed
- Low HP requirement
- Operates in high trash
- Optimum root-zone placement
- High strength toolbar
- Active sub-surface mixing
- High application rates
- Minimal surface disturbance



**COMMERCIAL SERIES...
Built for custom haulers!**



VISIT OUR WEBSITE TO SEE OUR
COMPLETE LINE OF
MANURE EQUIPMENT!

www.JameswayFarmEq.com
819-845-7824

JAMESWAY FARM EQUIPMENT, INC.
FACTORY: St. Francois-Xavier (Quebec)
USA WAREHOUSE: Tomah, WI

Mast•Lepley (330) 264-9292

AG • HARDWARE • TURF
www.mastlepley.com



**VETERINARY DAIRY LINIMENT™
SPRAY**

Contains a natural colorant to indicate treated animals

INGREDIENTS

Active Ingredients: Natural sources of Wintergreen (2.5%),
Menthol (1.5%) and Camphor (1.0%)

Other Ingredients: Purified Water, Aloe Vera, Kosher Glycerin, Lecithin,
Glyceryl Monostearate (derived from palm fatty acids), Stearic Acid,
Cetyl Alcohol (derived from coconut fatty acids), Xanthan Gum, Natural
Plant Oils of Tea Tree, Eucalyptus, Grapeseed, Jojoba, Watercress
and Chamomile, Methylparaben, Propylparaben, Natural Color



Maysville Elevator, Inc
10583 Harrison Rd
Apple Creek, OH 44606
Ph# 330-695-4413

Nathan Yoder Cell# 330-464-6493

Feeds, Conventional & Organics



Maysville Elevator, Inc.
10583 Harrison Rd
Apple Creek OH 44606
330-695-4413

Tim Yoder cell# 330-904-5565
Horse - Pet - Poultry - Livestock Feeds

IVOMECS® EPRINEX® (eprinomectin)

WHY KILL 39 SPECIES AND STAGES OF PARASITES? BECAUSE WE CAN.

**EPRINEX® kills 39 species and stages of parasites.
That's more than any other brand.¹ Period.**

It kills everything from worms to biting and sucking lice to mange mites to grubs and probably that other one you're thinking about. And with up to 99.9% efficacy.¹



**Learn about our best in class products
and access rebates at BestInClassDairies.com.**

¹ Based on FOI summaries and label claims.



IMPORTANT SAFETY INFORMATION: No meat or milk withdrawal is required when used according to label. Do not use in calves intended for veal or unapproved animal species as severe adverse reaction, including fatalities in dogs, may result.
©IVOMECS, EPRINEX and the CATTLE HEAD LOGO are registered trademarks of Merial Limited.
©2012 Merial Limited, Duluth, GA. All rights reserved. RUMIEEP1128-A (05/11)

UDDERSTANDING MARGIN

Cornell University studies injecting
MULTIMIN® 90 in dairy cows at:

1: dry-off, 2: 30 days before calving, and 3: 35 days in milk
indicated **MULTIMIN® 90** injected cows had:

↓ Somatic
Cell Count

↓ Subclinical
Mastitis

↓ Clinical
Mastitis



↓ Stillbirths

↓ Endometritis

Full Studies Available By Request

WWW.MULTIMINUSA.COM

1.866.269.6467 | 1.970.372.2302

Videos at YouTube
"Multimin USA" Channel



R₁ REQUIRED

Protected by U.S. Patent # 7,285,292
Copyright © 2014. All Rights Reserved. A201402-03

 Dow AgroSciences

Mycogen[®]
SEEDS


Silage-Specific[™]
CORN HYBRIDS

Digestibility that delivers. When grain prices are high, our highly digestible, low-lignin content BMR hybrids become an even better value. That's because with BMR, producers can feed a higher-forage diet – saving money on grain and maximizing ROI.

www.Silage-Specific.com

Jason Hargreaves | (614) 905-7487 | jmhargreaves@dow.com



The Ultimate Pasteurization Solution



Your Local Source for Batch Milk Pasteurizers

800-262-9509

New Pittsburg Large Animal Veterinary Clinic
npvc@bright.net | dairytechinc.com | newpittsburgvetclinic.com
330-264-7787 | fax: 330-262-5251 | 1436 West Old Lincoln Way, Wooster, Ohio 44691

Dairytech
INCORPORATED



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Food Animal Health Research Program

1680 Madison Avenue Wooster, OH 44691

Voice 330-263-3744


Fax 330-263-3677

OHIO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER

OHIO STATE UNIVERSITY EXTENSION



Why pay more?



pbsanimalhealth™

Where the health of your animals comes first

Top 5 reasons to discover PBS Animal Health

- 1. EVERYDAY LOW PRICES!**
- 2. WIDE SELECTION** of livestock and equine health products and supplies – vaccines, dewormers, ear tags, supportives, instruments and more.
- 3. UNIQUE SELECTION** of pet products and supplies.
- 4. KNOWLEDGEABLE**, friendly staff who can help you find exactly what you need.
- 5. CONVENIENTLY LOCATED** in Ohio.

Visit one of our 5 PBS Animal Health stores and start saving today!

Want to save fuel?

Call **800-321-0235** or log on to **pbsanimalhealth.com** to place an order for delivery to your farm or to request a **FREE** copy of our catalog... no fuel needed.

Prescription fulfillment service is available with shipment from our Massillon warehouse right to your farm! Rx required.



Order by 4pm Today, Eastern Time Shipped Today!



2780 Richville Dr. SE Massillon, OH 44646 Phone 330-834-9252	New location! Pickaway Crossing Shopping Center 23507 S.R. 23 South Circleville, OH 43113 Phone 740-474-7394	2029 U.S.R. 127 St. Henry, OH 45883 Phone 419-925-8800
3188 Lincoln Way East Wooster, OH 44691 Phone 330-262-1596	2721 Progress Way Wilmington, OH 45177 Phone 937-382-4572	



#1 source for all your livestock products right here in Ohio

KV14



Prenger's Inc.



Serving Dairymen since 1949

Introducing our newest location serving Northeast Ohio

879 Kidron Rd.
Orrville, OH 44667
PH 330-857-6955
FAX 330-857-3014

GEA

GEA Farm Technologies
GEA Milking & Cooling
WestfaliaSurge



GEA

GEA Farm Technologies
GEA Milking & Cooling
WestfaliaSurge

A Healthy Immune System Starts with Good Nutrition.

A cow's natural immune system needs to be healthy to fight the stresses of:

- Production and reproduction
- Molds and mycotoxins in feed
- Pathogens in the environment

Maintaining a healthy immune system can:

- Reduce somatic cell count
- Reduce incidences of mastitis
- Reduce incidences of metritis
- Reduce death loss and culls

Make sure your herd's nutrition is optimal by feeding two ounces per cow per day of OmniGen-AF nutritional supplement.



PRINCE AGRI PRODUCTS, INC.

Advancing Nutrition for Healthy Animals®

Good Nutrition is Right Up Your Feed Alley, and Ours.

OmniGen-AF[®]
Advanced Formula
NUTRITIONAL SUPPLEMENT



Tom Elliott, Area Sales Manager • tom.elliott@princeagri.com • (217) 358-2315

Your Harvesting Specialist

CLAAS



Tractors

REBERLAND



EQUIPMENT, INC.

5963 Fountain Nook Rd. • Apple Creek, Ohio 44606

330-698-5883 Ext. 108 / Cell 330-466-2333

vlewie@aol.com

LARRY "LEWIE" LEWIS

INDUSTRIAL TRUCK MOUNTS



Semex ai24TM
PUT TIME ON YOUR SIDETM



before
clinical signs of illness

WITH BOTH RUMINATION MONITORING AND HEAT
DETECTION CAPABILITIES WE CAN'T PUT MORE HOURS IN
YOUR DAY, BUT WE CAN PUT MORE TIME ON YOUR SIDE!

**SEMEX[®]**

Genetics for Life[®]

Patrick Twining: cell 440.429.7273 Wellington, Ohio 44090



“Your John Deere Headquarters”



**Open Weekdays 8:00am-5:00pm
Saturdays 8:00am-12:00pm**

www.ShearerEquipment.com



Wooster

7762 Cleveland Rd.
Wooster, OH 44691
Fax: 330-345-9348
Ph: 330-345-9023

Mansfield

2715 W. Fourth St.
Mansfield, OH 44906
Fax: 419-529-4838
Ph: 419-529-6160

Mt. Vernon

496 Harcourt Rd
Mt. Vernon, OH 43050
Fax: 740-392-6166
Ph: 740-392-6160

Monroeville

13 Ft. Monroe Ind. Parkway
Monroeville, Ohio 44847
Fax: 419-465-4577
Ph: 419-465-4622

Copley

3500 Copley Rd.
Copley, OH 44321
Fax: 330-668-9073
Ph: 330-666-8400

Medina

999 Lafayette Rd.
Medina, OH 44256
Fax: 330-723-6260
Ph: 330-722-1411



STEIN-WAY
Equipment

DCC Waterbeds...



- *Provide superior cow comfort
- *Improve herd health
- *Increase milk production
- *Are easy to maintain
- *Lower bedding costs
- *Simplify manure management

DCC Waterbeds
Dual Chamber Cow Waterbeds

12335 Emerson Rd, Apple Creek, OH 44606

800-599-2040 330-857-8700 www.steinwayequipment.com

Manufacturers of heavy duty...

Gates Freestalls
Head-locks Bale Feeders

NUTRA-GLO™

NUTRITIONAL FEED SUPPLEMENT FOR ALL RUMINANTS

Nutra-Glo™ is a unique 3-in-1 Supplement that's making its way into a rapidly increasing number of Dairy Farms across the Eastern US & Canada.

Original and Organic Products Available



Contains:
• Vitamins and Minerals
• Organic chelates
• Prebiotic metabolites

• 1 gal. lasts 1 month for 42 cows •

Now Available at Over 350 Locations.

...including over 100 Ohio & Pennsylvania Farm Stores, Shops & Mills.

Discover Your Herd's Maximum Potential!

—Also available: Nutra-Glo™ for Horses, Organic Ruminants, Dogs, Poultry and Humans—



• Ohio and Pennsylvania dairymen have been feeding it for over 8 years.

• The average herd shows a production increase of 3-5 lbs./cow/day.

• Lots of reports on somatic cell count and conception rates.

• Original and Organic products available... @ 12¢ - 13¢/cow/day respectively.

First 50 pp. Use down bookies

We ship UPS

WHOLESALE/RETAIL
Sunrise Supply, LLC
P.O. Box 104
Winesburg, OH 44690

866 • 704 • 2374

Help improve fresh cow health. Rehydrate. Recover. Perform.

Fresh Cow YMCP Plus®
• Speeds recovery after calving post freshening
• Studies have shown reduced metabolic issues
• Helps maximize milk production



The TechMix Fresh Cow Protocol.

Designed and proven to help improve cow health and performance post freshening



Rumen Yeast Caps®
• Helps stimulate appetite
• Helps to prevent Ketosis
• Maintains peak production levels



Bovine BlueLite®
• Prevents dehydration
• Replenishes needed electrolytes
• Encourages water intake

To ensure a fresh cow gets the required nutrients for good health through transition, veterinarians recommend our Fresh Cow Protocol. Fresh Cow Protocol is triple powered, with three products that deliver the right nutrition and health at the right time. Help improve health and performance in your herds with Fresh Cow Protocol. Call 877-466-6455 for a FREE copy of our Fresh Cow Protocol nutritional guide.

TechMix

Rebuilding nutrition & health

TechMix, LLC • 740 Bowman St • PO Box 221 • Stewart, MN 55395 • 887.466.6455 • TechMixInc.com



800/551-5081
www.to-feed.com



PURINA

Working together to bring new products, research, technology and quality service to dairymen.

GROWTH SHOULDN'T STOP WHEN THE TEMPERATURE DROPS.

Give them the energy they need, when they need it with:

AMPLI-CALF[®]
COOL WEATHER STARTER



www.amplicalf.com



*Products That Work,
From People Who Care[®]*

www.valent.com



Valent offers innovative, effective solutions to help growers and farmers produce high quality, high yield crops.



Vaughan
INSURANCE

Insurance One
Auto • Home • Farm • Commercial • Life • Health



Thank you for letting Vaughan Insurance Agency and Insurance One Agency serve your unique needs.

We partner with Mennonite Mutual Insurance Company who provides specialized coverage and personalized loss control services to farms and agribusinesses at a competitive price.

Contact Buddy or Tim Vaughan for a free, no obligation, review of your farm or agribusiness.

Vaughan Insurance
1516 West High Street
Orrville, Ohio
330-682-0369

Insurance One Agency
175 N. Bever Street
Wooster, Ohio
330-264-9164

Proudly representing:



MENNONITE
MUTUAL



Wayne Soil & Water Conservation District

We are here to help you with...

- ◆ Conservation Planning
- ◆ Nutrient Management Planning
- ◆ Planning & Technical Assistance
- ◆ Natural Resource Information
- ◆ Tree Seedling Sale
- ◆ Educational Programs
- ◆ New Construction Storm Water Reviews
- ◆ Best Management Practices

Wayne SWCD
Located in the County Adm. Bldg
428 W. Liberty Street
Wooster, Ohio 44691

Phone: (330)-262-2836
Fax: (330)-262-7422
Check out our website!
www.wayneswcd.org

Conserving our Natural Resources for over 60 years!
Visit the website for info about rain barrels, ponds, trees,
CAP's, oil & gas leasing, water quality trading, soils & more.





**TODAY'S
CALVES
ARE TOMORROW'S
HIGH PERFORMANCE COWS**

Contact your local
Lely Center Dealer today!



www.lely.com

innovators in agriculture

W.G. Dairy Supply • 12993 Cleveland Road PO Box 2224 • Creston, OH 44217
• Phone: 330-435-6522 • Toll Free: 800-821-3952 • www.wgdairysupply.com



www.witmersfeed.com



P.O. Box 7
3770 Renkenberger Road
Columbiana, Ohio 44408
Toll Free 800-878-0888
Office 330-482-4321
Fax 330-482-0305

**Provider of Quality Premixes,
Protein Supplements
and Complete Feeds**

**Ability to Forward Contract
Individual Commodities
as well as Complete Mixes**

**Qualified Dairy
Nutritional Consultants
and a Technical Service
Veterinarian on Staff**

**Will Work with
Outside Nutritionists**

**Contact Us or See Our
Website For More Details**

**Servicing Northeast Ohio
and Western Pennsylvania Since 1978**

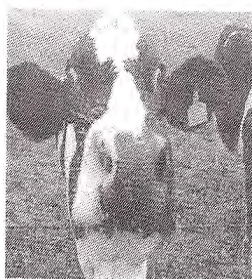
Woodlyn Acres Farm, LLC

Hay, Baleage, Grain, & Straw
Scott & Fred Myers



647 S. Kurzen Rd.
Dalton, Ohio 44618
jdhay73@hotmail.com

Scott's Cell: 330-465-2248
Fred's Cell: 330-465-8216
Farm & Fax: 330-828-8849



10084 E. Lincoln Way
Kidron, OH 44636
330/683/3520
330/621/5008 (Martin)
330/621/1000 (Glen Beachy)
330/204/8859 (Wayne Coblenz)
330/683/3720

Special thanks
for the continued
support of all our
customers!

Trucking Available!

Martin D. Yoder Livestock



- ✓ **Experienced:** Over 20 successful years in dairy nutrition
- ✓ **Knowledgeable:** Connected with dairy herds throughout the U.S.
- ✓ **Unbiased & Independent:** Works with a variety of area mills

Ken Steele, Independent Consultant

Agri-Nutrition Consulting, Inc.

330 E. Easton Rd., Creston, OH 44217

Cell (330) 465-8327 anckensteele@yahoo.com

B & K CONCRETE CONSTRUCTION

12340 Warwick Rd • Marshallville, OH 44645

Cell. 330-466-8274

Fax 330-855-7010 Off. 330-855-6453
www.bkconcreteconstruction.com



Baker's Acres

6609 Ashland Road

Wooster, Ohio 44691

330-621-1609

haymaker2@earthlink.net

Hay, Balage, and Straw



Michele Lahmers
Dairy Focus Consultant
(419) 651-2081

Brent Hostettler
Dairy Focus Consultant
(330) 465-1747

Move your business forward with Cargill Animal Nutrition



Commodity Blenders, Inc.

10510 Myers Rd. • West Salem, OH • 419-846-3155

www.commodityblenders.com

Where your **"Bottom Line Results"** are our priority.

Bruce Keener, President
b.keener@commodityblenders.com



**FORAGE ANALYSIS
RATION MANAGEMENT
F.A.R.M. SERVICE**

BEN MERCER - Consultant
Phone 868-6334
Fax 868-4133

15979 Freed Street
Minerva, OH 44657



Hummel
Group

Insurance & Wealth Management

Berlin
Hummel Group
330-893-2600

Wadsworth
Allen & Hartzell
330-335-2521

Orrville
Hummel Group
330-683-1050

Wooster
Taylor Agency
330-345-3536

www.hummelgrp.com
www.facebook.com/HummelGroup

**We Offer Quality
Protection for:**

Home
Auto
Farm
Business
Health
Life
Financial Services

**A.I. Breeding
Service**

Dairy • Beef Semen
Nitrogen • Supplies



AG-BAG
SEALED FEED STORAGE SYSTEMS

Custom Bagging
Large Square Baling
Wrapping • Manure Tanking

Allen Imhoff & Sons
8391 Lattasburg Road
West Salem, Ohio 44287

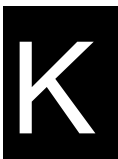
Phone/Fax: 330-264-9825 or 800-215-9825
Machines • Plastics • Inoculants • Twines • Net Wraps

Roger R. Inkrott
2874 Morning Hill Drive
Wooster, OH 44691

Home: 330-262-3895
Home Fax: 330-262-3895
E-mail: INKR4U@AOL.COM
Cell: 330-465-8880

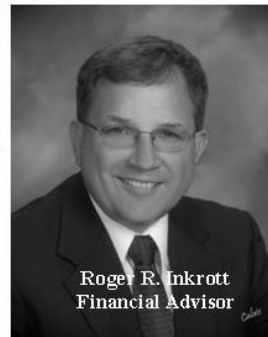
KALMBACH FEEDS, INC.
7148 State Hwy. 199 Upper Sandusky, OH 43351

Orders: 888-771-1250 Office Fax: 419-294-4350



246 W. Liberty St., Suite A
Wooster, OH 44691

Office & Fax 330.601.0741
Cell 330.465.8880
rinkrott@sagepointadvisor.com



Roger R. Inkrott
Financial Advisor

Securities and investment advisory services offered through
SagePoint Financial, Inc., member FINRA/SIPC and a registered investment advisor.
New Direction Financial Services Ltd. is not affiliated with SagePoint Financial, Inc.,
or registered as a broker-dealer or investment advisor.



"Serving Northeast Ohio
Agriculture Since 1907"
Box 230 - Kidron, OH 44636
330-857-2031 - 1-800-221-8036

**Your Dairy
Feed Specialists.**



Purina Mills

Loudonville
Farmers
Equity



Cell Ph: 419-651-4468

Todd Ardrey, Dairy Feed Nutritionist

Office Ph: 800-624-4811

514 W. Main St., Loudonville, OH 44842

See Todd for all your cattle, animal health, nutrition, and herd management needs!



Proud to Support the 15th Annual Wayne County Dairy Conference

Charles A. Jamison, DVM, Dipl. ABVP, Dairy, Technical Services Manager
Nutrition Physiology Company, LLC.

260-667-0406

cjamison@bovamine.com

Producers Livestock

in Creston, Ohio

Sale Every Monday at 12:00 pm

Selling:

Cull Dairy Cows,

Dairy Cows,

Fat Cattle, & Feeders



For replacement calves
RC FARMS
Holstein Bulls • Heifers
Beef Calves • Started Calves



Behind Sale Barn in Kidron

Roy Yoder

330-857-2506

330-473-2561 cell

Steven 330-473-7587

John 330-473-8179

P.O. Box 166
Kidron, OH 44636



"Improving Your
Bottom Line"

EXTRA

Guaranteed Results

**REVIVE
MICROBIALS, LLC**

JAMIE TROXEL

330-601-2142

troxeljamie@yahoo.com • www.revivemicrobials.com

Researched by
Dr. G. W. Snider,
Goshen, IN



CASE III

GEHL

Sterling Farm Equipment

13893 Kauffman Ave., Sterling, OH 44276
6131 Ashland Rd., Wooster, OH 44691

Kubota

Sales - Leasing - Financing

Cub Cadet



Your Resource for Innovative Solutions

MYCO-LOCK 500 NC **PROTIMAX^{plus}** **OPTIMIN[®]** Organic trace minerals

Contact: Dr. Steve Haye, Territory Sales Manager
steve.haye@nutreco.com | 330.604.8619

Trouw Nutrition INTERNATIONAL

Bill Tyler
Vice President



Tyler Grain & Fertilizer Co.
www.tylersfertilizer.com

3388 Eby Rd.
Smithville, OH 44677
Toll Free 1-800-772-9566

office: 330-669-2341
fax: 330-669-3933
mobile: 330-464-1905
email: bill@tylersfertilizer.com



Employee-Owned

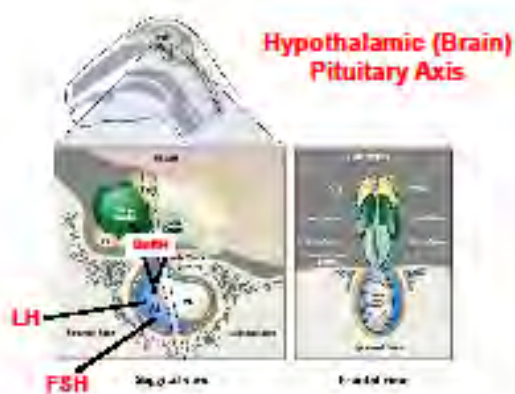
Owen Mickley • Vita Plus Dairy Specialist

omickley@vitaplus.com • 614.403.3477

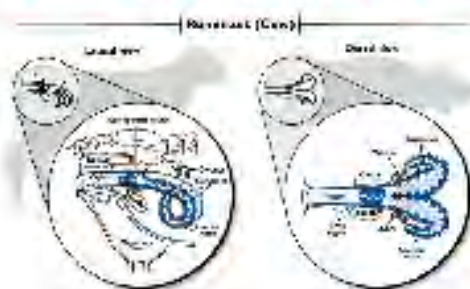
15th Annual Northeast Ohio Regional Dairy Conference

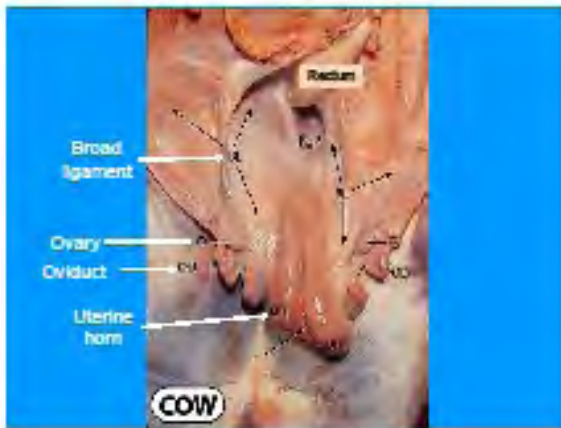
Reproductive Anatomy and Activity Monitoring in Heat-Detection Programs

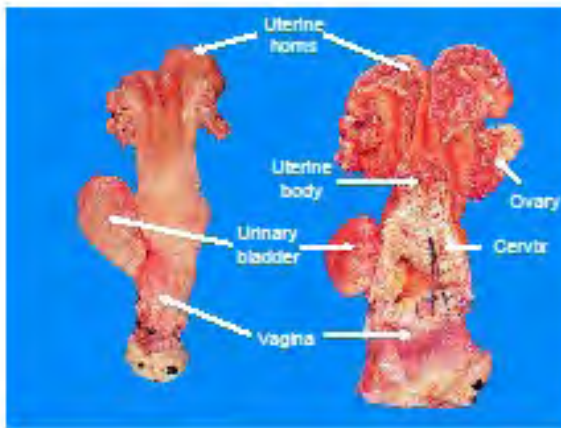
Jeffrey S. Stevenson, Ph.D.
Dept. of Animal Sciences and Industry

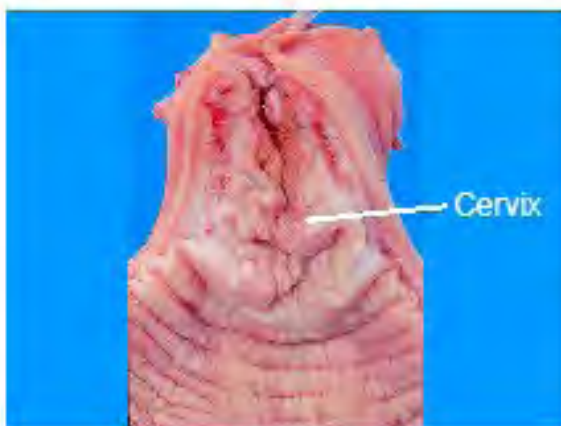


Reproductive Anatomy of the Cow

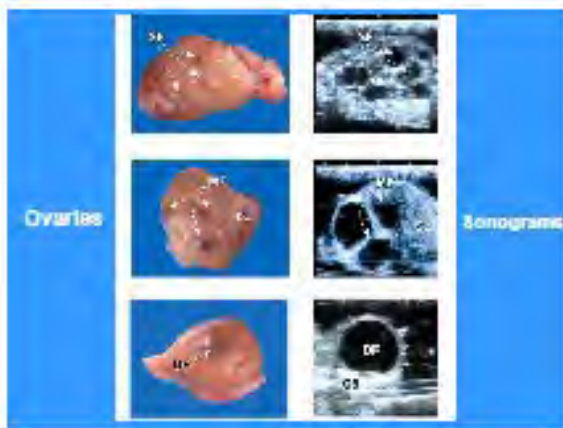


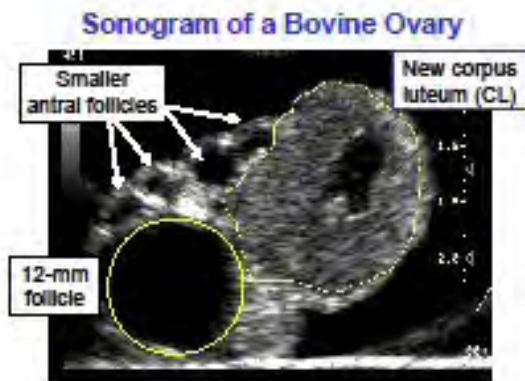




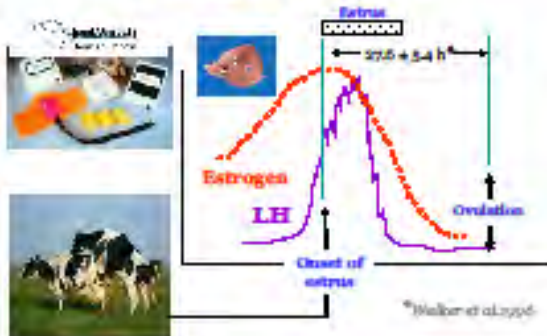


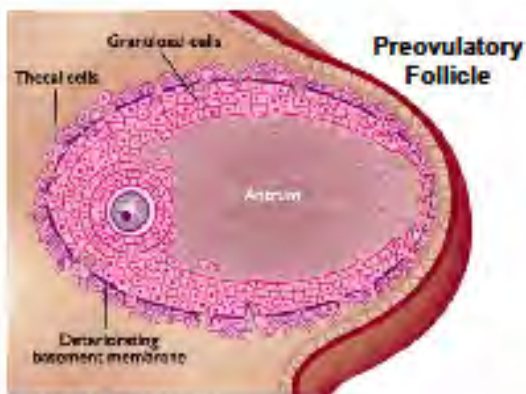




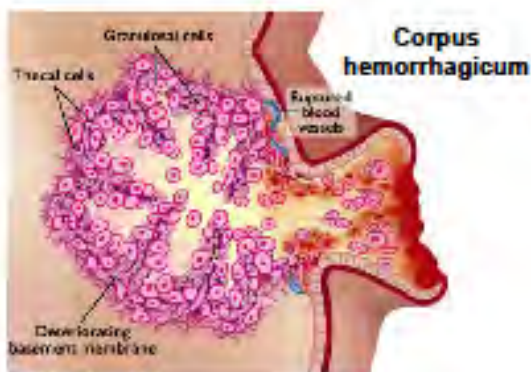


Timing of Ovulation

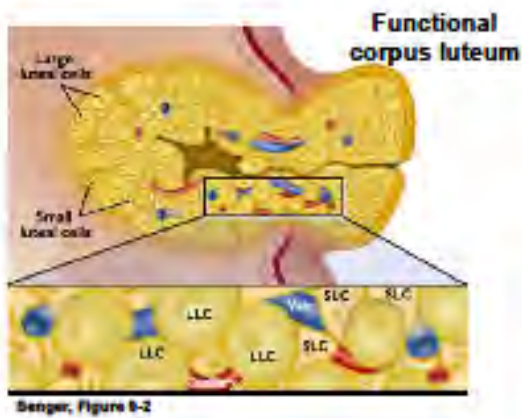




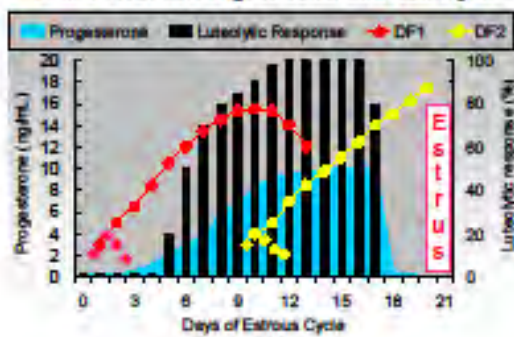
Senger, Figure 9-2



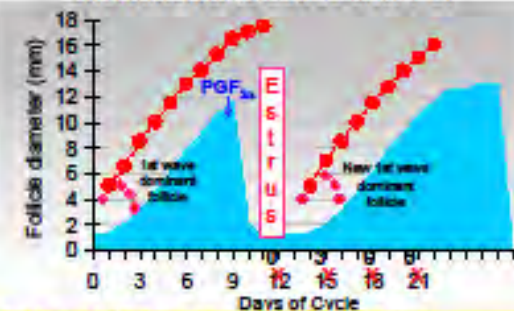
Senger, Figure 9-2



Follicle Waves, Progesterone, and Luteolysis

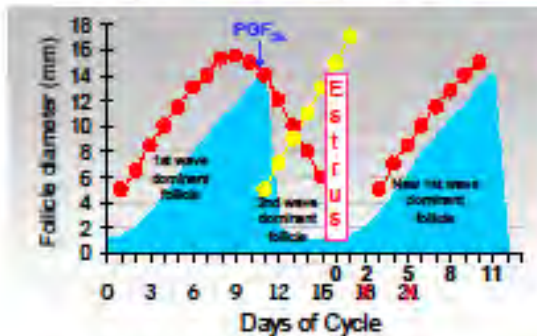


Short Interval to Estrus after PGF



PGF_{2α} = Lutalyse (5 cc), Ovalyse (5 cc), Estrumate (2 cc), or estroPLAN (2 cc)

Long Interval to Estrus after PGF



Estrus Activity



- Signs of estrus:
 - Standing to be mounted by other cows
 - Walking the fence
 - Swelling of the vulva
 - Howling
 - Clear mucous discharge



Detection of Estrus (Heat)

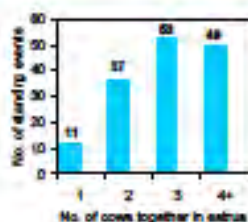
- Cow problems
 - Poor footing; sore and wet feet
 - Inadequate space for sexual behavior
 - High-producing cows show less behavior
- People problems
 - Limited visual detection
 - Chalking/painting tail heads - heat detection
 - Occasional visual heats detected
 - A.I.-breeding pregnant or luteal phase cows

Duration and Intensity of Estrus is Related to Milk Production

Item	Low	High ¹
Avg. milk, lbs/day	75 (44-88)	101 (87-130)
Days in milk	91 (50-166)	91 (50-166)
Duration of estrus, hr	11* (0.4-28)	8 (0.4-27)
Total standing events	9* (2-44)	8 (2-13)
Total standing time, sec	28* (4-138)	22 (4-73)

¹ More short duration (<9 hr) and low intensity (<3 stands).

Standing Activity is a Function of the Number of Cows in Estrus



- More mounted cows (90%) are in estrus than mounting ones (78%)
- Standing events ranged from 1 to 179
- Inclination to mount is stage-of-cycle dependent

Photo graph 109

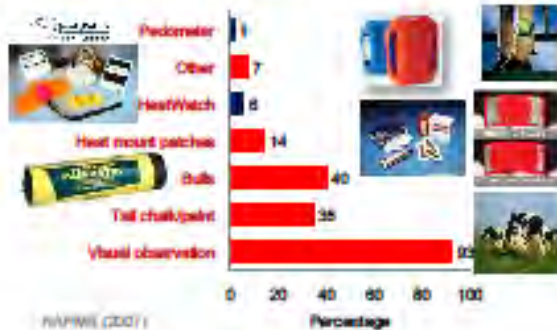


Who is Mounting?



Stage of cycle	% of heifers	Σ attempted mounts	% attempted mounts
Luteal	48.3	58	5.2
Preestrus	15.4	203	18.9
Estrus	8.8	717	66.9
Postestrus	27.5	96	9.0
Total	100.0	1,072	100.0

Heat Detection Methods on U.S. Dairy Farms



Physical Activity during Estrus



- Increased activity is a correlated trait with estrus—increases up to 400% in 93% of estrous periods (Kiddy, 1977).
- Relatively little within-cow variation from day to day when cows are NOT in estrus.

Systems Sold by an A.I. Organizations

System	Company
AffTag	ABS Global
a ²	Sarnex
ALPRO	Genex
Cow Alert	Alta Genetics
CowScout S	Accelerated Genetics
Headme	Select Sires
Select Detect	Select Sires

Slide courtesy of Dr. Ray Mehal, Select Sires Inc.

Three Basic Components



Systems Interface with Milking Parlor or by WiFi



Slide courtesy of Dr. Ray Hebel, Select Sires Inc.

Systems with Rumination, Eating, or Chewing Capabilities



Slide courtesy of Dr. Ray Hebel, Select Sires Inc.

Accelerometers

Heatime



Select Detect

Ovulation Prediction

When does ovulation occur relative to increased activity?

Experimental Design

- Lactating Holstein cows were enrolled in the study beginning at 50 DIM.
- Estrus was induced by 25 mg PGF_{2α} (PG) or 100 µg GnRH i.m. 7 days before PG or spontaneous estrus
- Ovarian scans begun at 14–16 h and repeated every 3 h.

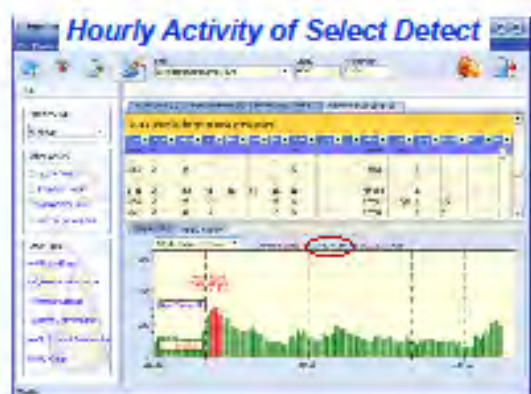
Select Detect™ Automated Activity Monitors (n = 133)



Heatwatch® pressure-sensitive rump-mounted transmitters (n = 56)





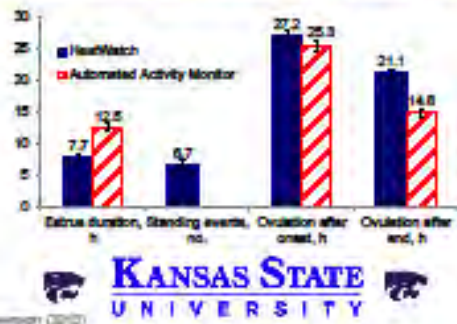


HeatWatch
 First stand at 8:53 p.m. (1/7)
 Last stand at 5:56 a.m. (1/8)
 Heat duration of 9 hr 3 min
 Stood 15x for total of 25 sec
 Ovulated 29 hr after first stand

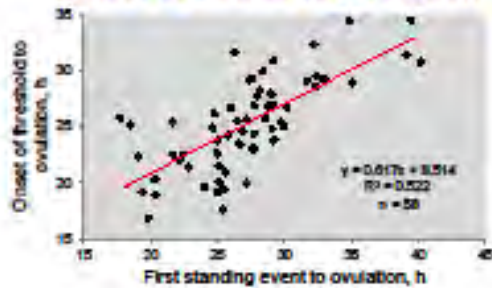
Select Detect
 Threshold at 10:00 p.m. (1/7)
 Ovulated 1:55 a.m. (1/9)
 Ovulated 28 hr after threshold



Activity and Estrus Characteristics Associated with Ovulation Prediction



Onset of Estrus to Ovulation



Survey of 219 German Dairy Farmers¹

Question	Response (%)
Agreed that heat-detection rate had increased	93.1
Agreed that reproductive management had become easier	92.3
Satisfaction with the system	94.1
Would install the system again	94.5

¹ Heatime system (SCR Engineers Ltd., Netanya, Israel); herd size averaged 97 cows.
Source: Michels et al. (2013)

Conception Rates using Activity Monitors

Within Herd Comparison: Timed AI vs. Activity Monitors

Cows were enrolled randomly at calving in 832-cow dairy located in central Pennsylvania:

- Timed AI program (n = 414)



- AI according to the activity system (n = 394)

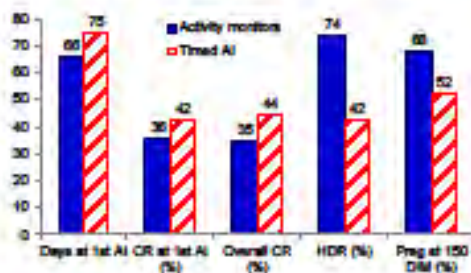
for the first 3 services starting at 50 DIM.



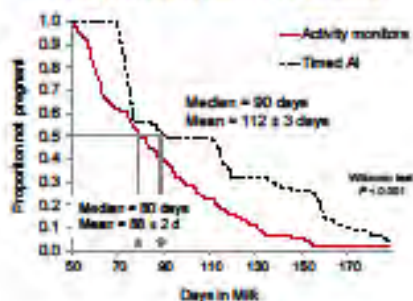
Distribution of First Services



Activity Monitors vs. Timed AI



Proportion Not Pregnant

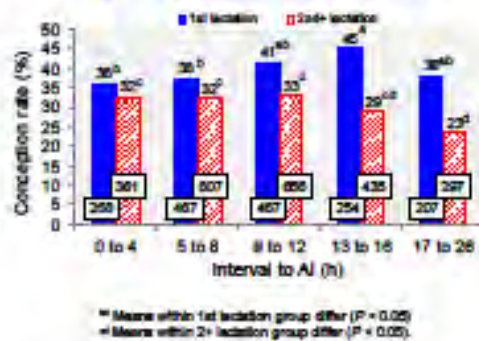


Benchmarks Before and After Activity Monitor Installation¹

	Dairy A		Dairy B		Dairy C		Dairy D		Dairy E	
Item	Def	Act	Def	Act	Def	Act	Def	Act	Def	Act
Milk (lbs)	82	91	80	87	82	87	85	91	85	92
21-d PR (%)	13	22	16	22	15	23	23	28	13	18
1 st CR (%)	25	40	40	45	35	37	30	32	25	39
All CR (%)	25	32	39	33	31	30	33	36	18	30
DIM	182	175	180	177	210	189	180	189	210	182
HDR (%)	81	88	85	89	82	87	83	78	58	83
DFS	69	80	73	72	74	74	75	73	71	70

¹ 2011 Repro Invitational Parallel, Scaled Data

Pregnancy Outcomes in 19 herds



Take Home Messages

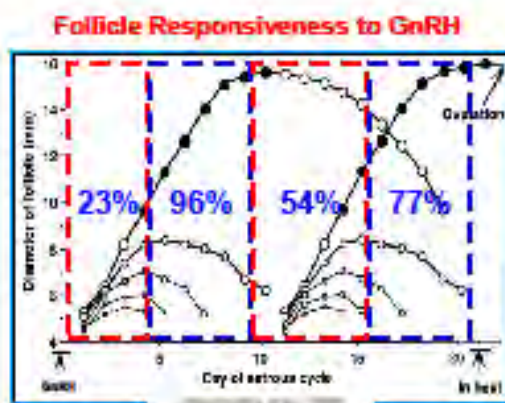
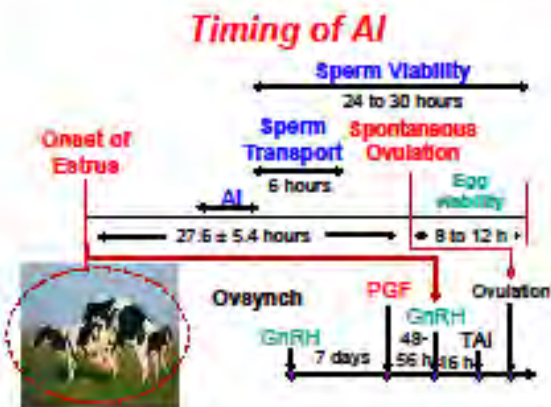
- Time of ovulation relative to start of increased activity or standing estrus is predictable:
 - Standing estrus = 27.2 ± 0.6 h
 - Activity monitor = 25.3 ± 0.6 h
- Automated activity monitors increase heat-detection rates, but may not increase conception rates.
- Activity monitors reduce inter-insemination intervals and help get cows pregnant at a faster rate.
- Activity monitors add value to the reproductive management program, but do not identify all heats.

**15th Annual Northeast Ohio
Regional Dairy Conference**

Update on Timed AI Programs

Jeffrey S. Stevenson, Ph.D.
Dept of Animal Sciences and Industry

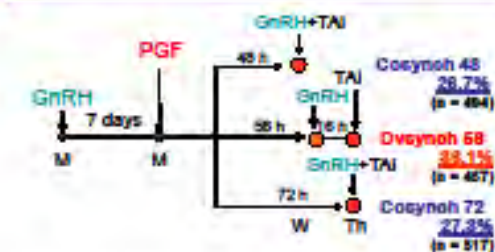




Take Home Summary #1

Where possible, administer second Ovsynch GnRH injection at 56 hours after PGF and 12 to 16 hours before timed AI

Timing of Second GnRH Injection of Ovsynch



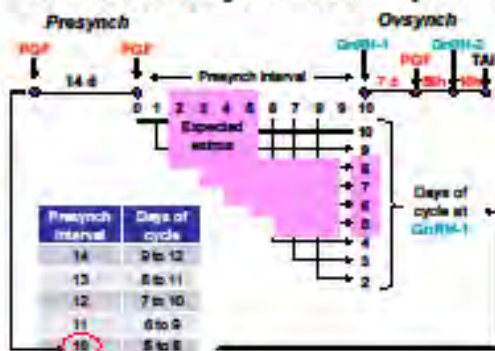
Johnson et al. (2009)

Take Home Summary #2

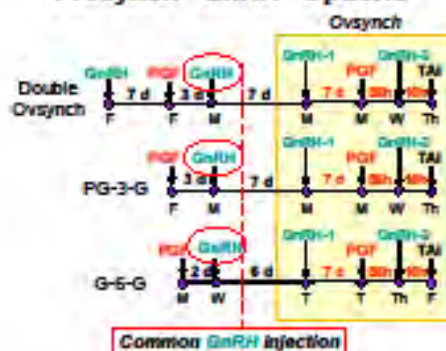
Presynch "GnRH" options
synchronize ovulation more precisely
than Presynch "PGF" options



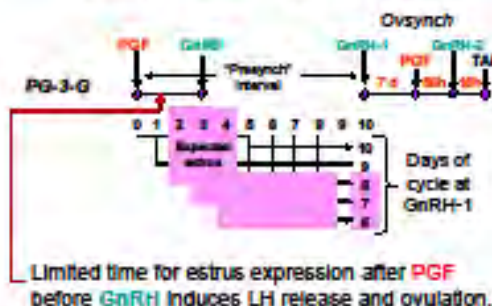
Standard Presynch "PGF" Options



Presynch "GnRH" Options



Presynch "GnRH" Options



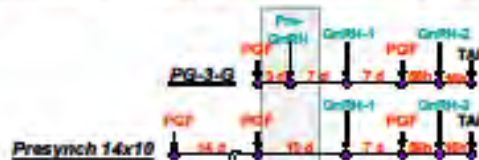
Take Home Summary #3

Compared with Presynch "PGF" options, Presynch "GnRH" options improve fertility because of increased progesterone and more cows have a CL to start Ovsynch.

PG-3-G vs. Presynch-10

Table 1. Ovarian characteristics after Pre-GnRH.

Traits	Treatment				
	n	PG-3-G	n	Presynch	P-value
Progesterone, ng/mL	87	0.60 ± 0.1	85	0.61 ± 0.1	0.236
Ovulation, %	105	90.0	105	53.0	<0.001
Follicle size, mm	104	13.1 ± 0.5	105	14.6 ± 0.5	0.038



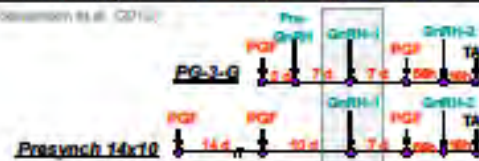
Olesen et al. 2010

PG-3-G vs. Presynch-10

Table 2. Ovarian characteristics after GnRH-1.

Traits	Treatment				
	n	PG-3-G	n	Presynch	P value
Progesterone, ng/mL	87	3.48±0.5	85	2.79±0.5	0.050
CL per cow, no.	104	1.4±0.08	105	1.0±0.07	0.002
Cows with CL, %	105	94.3	105	76.2	0.001
Ovulation, %	105	79.0	105	65.6	0.130
Follicles ovulated, no.	80	1.2±0.05	89	1.3±0.05	0.117

Olesen et al. 2010

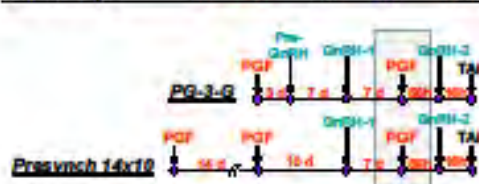


PG-3-G vs. Presynch-10

Table 3. Ovarian characteristics after PGF_{2α}.

Traits	Treatment				P value
	n	PG-3-G	n	Presynch	
Progesterone, ng/mL	87	5.94 ± 0.4	85	5.11 ± 0.4	0.120
CL per cow, no.	103	2.2 ± 0.1	100	1.7 ± 0.1	<0.001
Cows with CL, %	105	97.1	105	92.4	0.219

Olesen et al. 2010



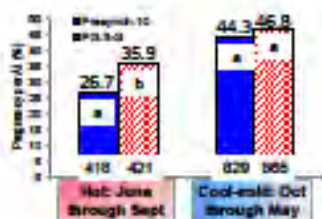
Olesen et al. 2010

Take Home Summary #4

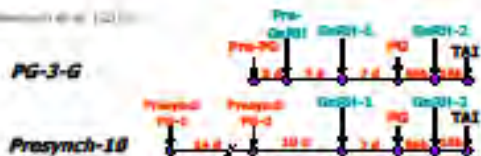
Presynch "GnRH" options increases pregnancy per AI during summer compared with Presynch "PGF" options



Benefits of a Presynch "GnRH" Option during Summer



© 2009 Kansas State University



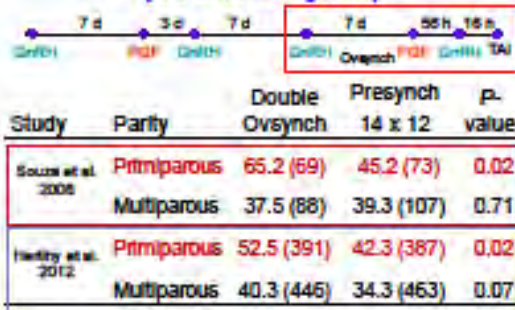
GnRH + PGF_{2α} + Estrus Detection (Control) vs. Ovsynch during Summer

Item	Control	Ovsynch
Cows attempted to AI	218	207
AI submission rate, %	58.7	100
Conception rate, %	32.0	33.3
Pregnancy rate, %	17.9	33.3

© 2009 Kansas State University



Benefits of Presynch "GnRH" (Double Ovsynch)

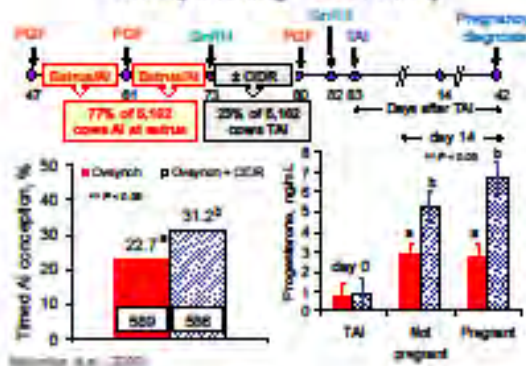


Take Home Summary #5

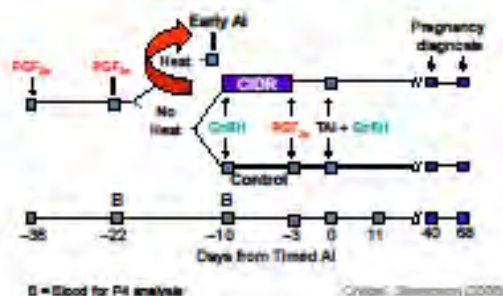
Combining heat detection with timed AI programs (including CIDR inserts) can reduce costs of hormonal inputs



"Cherry Picking" CIDR Study



"Cherry Picking" CIDR Study



AI at Estrus then Ovsynch ± CIDR in Seven Dairy Herds

Item	Estrus and AI	Control Ovsynch	Ovsynch + CIDR
% pregnant			
No. of cows	1,652	815	871
Day 38	35.9	33.4	37.9
No. of cows	1,362	721	769
Day 62	34.9*	30.0*	34.9*

*Different ($P < 0.05$).

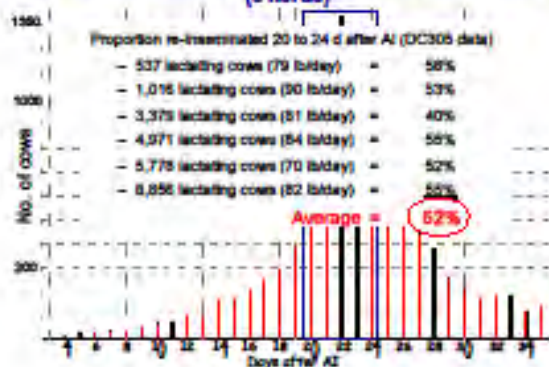
Cryan, Stevenson et al., 2008

Summary

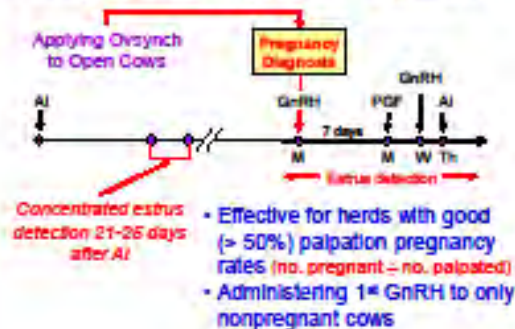
Timed AI at First Service

- Ovsynch: inject second GnRH at 56 hours after PGF (12 to 16 hours before timed AI).
- Presynch "GnRH" options >>> Presynch "PGF" options:
 - Synchronize ovulation more precisely
 - Improve fertility because of increased progesterone and more cows have a CL to start Ovsynch
 - Increase fertility during summer compared with Presynch "PGF" options or estrus detection.
- Combining heat detection with timed AI programs can reduce costs of timed AI programs.
- Use of progesterone inserts benefits anovulatory cows, "poor-estrus expression" cows, and cows without a CL at the onset of Ovsynch.

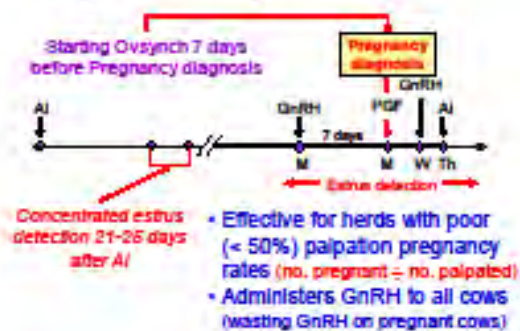
Pattern of Return to Estrus of Lactating Dairy Cows (6 herds)



Resynch-Ovsynch: Option 1



Resynch-Ovsynch: Option 2

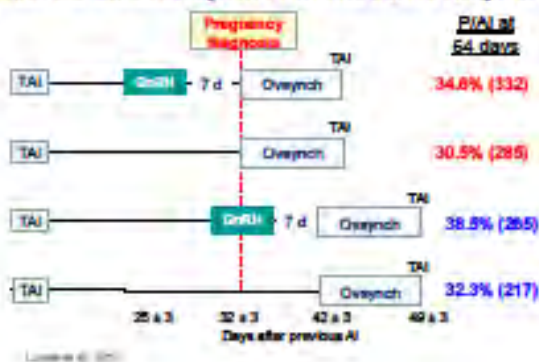


Take Home Summary #6

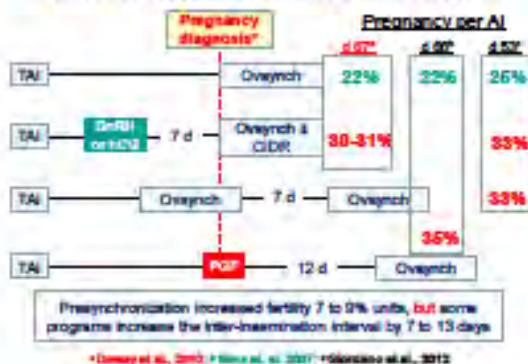
Presynchronization before
Resynch protocols may
improve conception rates



Different GnRH-Presynch Protocols before Resynch



Different Presynch Protocols before Resynch

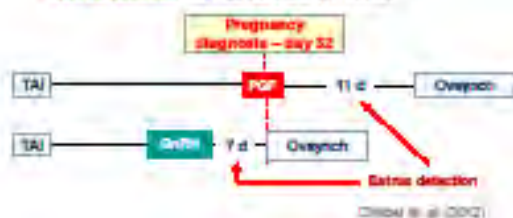


Most Resynch studies only evaluated timed AI pregnancy outcomes and did not include heat detection



Resynch – AI at Estrus or Timed AI

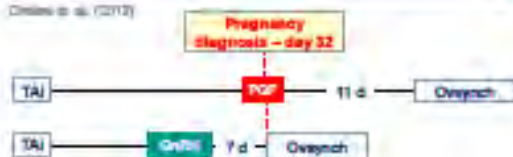
- Study conducted in 2 dairies (MI and WI)
 - Total of 918 cows enrolled at 32 ± 4 d after AI
 - Two presynchronization protocols tested
 - Estrus detection:** MI – tail paint and WI – Affixis



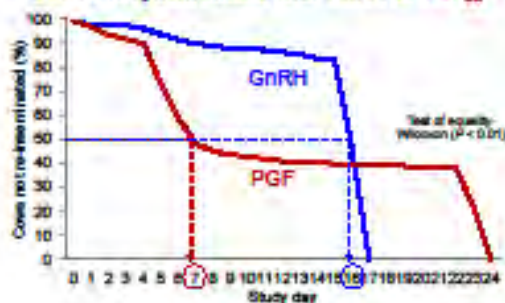
Reproductive Performance of Non-pregnant Cows Presynchronized with GnRH or PGF_{2α}

Item	GnRH	PGF	P value
Cows submitted to the TAI protocol, %	89.8	40.3	<0.01
Interval to AI, days (± SEM)	15.0 ± 0.2	13.0 ± 0.4	<0.01
PAI 32 days, %	42.3	39.3	0.43
PAI 67 days, %	37.0	35.4	0.70

Ondra et al. (2012)



Pattern of Re-insemination of Non-pregnant Cows Presynchronized with GnRH or PGF_{2α}



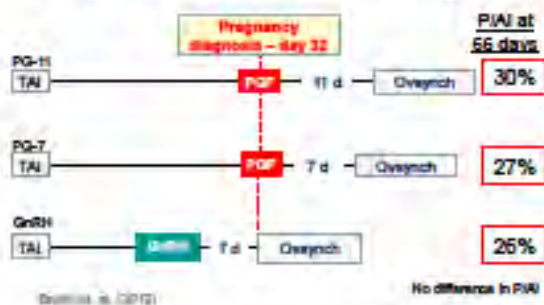
Chen et al. (2012)

Take Home Summary #7

GnRH/hCG reduces estrus expression and PGF promotes estrus detection

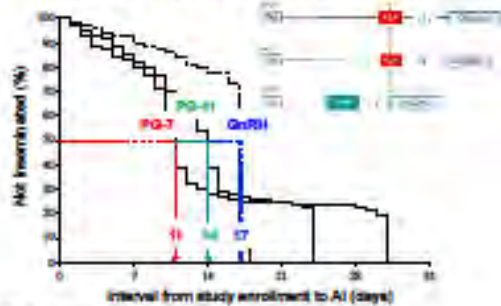


No difference in fertility whether GnRH or PGF was used as Presynch

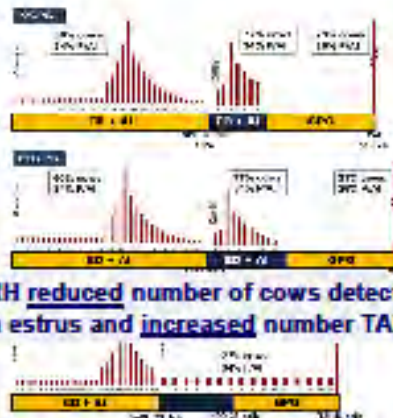


Chen et al. (2012)

PGF as Presynch tool reduced interval between breedings



Resynchronization



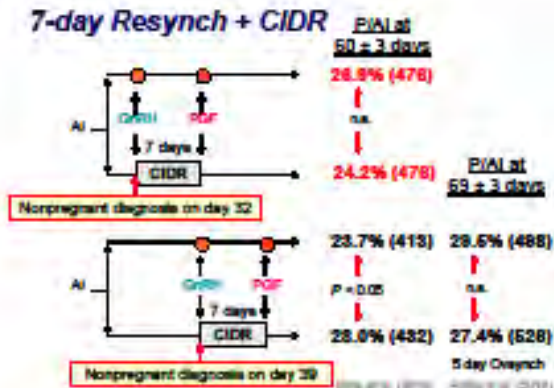
GnRH reduced number of cows detected in estrus and increased number TAI

Take Home Summary #8

Use of CIDR insert in Resynch programs may improve fertility, especially in cows without a corpus luteum (CL)



7-day Resynch + CIDR



Resynch + CIDR Improves P/AI in Cows without a Corpus Luteum

Study	Days after AI	No CIDR		CIDR	
		CL	No CL	CL	No CL
Bitby et al. 2013 (7-day)	Proportion	73.1	26.8	74.1	25.9
	P/AI, 60 ± 3 days	28.2	19.2	27.0	26.5
Pulley et al. 2013 (5-day)	Proportion	78.1	21.9	73.7	26.3
	P/AI, 69 ± 3 days	30.1	27.5	25.6	32.6



Summary

Timed AI at Repeat Services

- Presynchronization before Resynch protocols improves conception rates, but increases intervals between inseminations when heat detection is not applied.
- GnRH/hCG reduces heat expression and PGF promotes heat detection.
- Use of CIDR insert in Resynch programs may improve conception rate, especially in cows without a corpus luteum (CL).
- Economic value of resynchronization depends on the balance between reducing the inter-insemination interval and increasing conception of cows receiving timed AI.

15th Annual Northeast Ohio Regional Dairy Conference

Removing Bottlenecks that Limit Pregnancy Rates

Jeffrey S. Stenerson, Ph.D.
Dept of Animal Sciences and Industry



Dairy Management Team

- Dairy owner-manager
- Herdsman
- Milkers, feeders
- Veterinary practitioner
- Consultants



Team goal is to increase profitability by:

- Reducing losses
- Maximizing efficiency

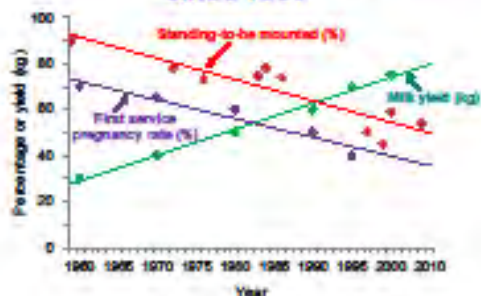
Is high milk yield related to increased stress,
poor cow health, and poor pregnancy rates?

"In recent years the opinion
has been held by a large
number of dairymen that
difficulties with breeding
[cows] is associated with
high milk production."

Minnesota Dairy Bulletin, 1929



Changing Trends in Dairy Cows since 1960



Holmes et al. 2008

Potential Losses in Reproduction

People	Cow	Herd
<ul style="list-style-type: none"> Heat detection efficiency Heat detection errors Inseminator skill AI bull fertility Semen storage/handling Heat cows Feeding Vaccination program Transition cow nutrition 	<ul style="list-style-type: none"> Difficult birth Retained placenta Uterine infection Cystic ovaries Embryonic death Twining 	<ul style="list-style-type: none"> Breed Age Production
Management Control		
Large	Moderate	LRM

Senger 2009

Large Management Control

Factor	Variation
Heat detection efficiency	40 to 80%
Heat detection errors	5 to 30%
Inseminator skill	40 to 60% conception at 1 st AI
AI bull fertility	40 to 63%
Semen storage/handling	Established standards
Environment – heat stress	Decreased fertility by 50%
Environment – feeding	Poor feeding = poor heat detection
Vaccination program	Established standards
Transition cow nutrition	Established standards

Senger 2009

Moderate Management Control

Factor	Variation
Difficult birth	2 to 10%
Retained placenta	4 to 12%
Uterine infection	15 to 30%
Cystic ovaries	6 to 20%
Embryonic death	30 to 40%
Twinning	0 to 10%

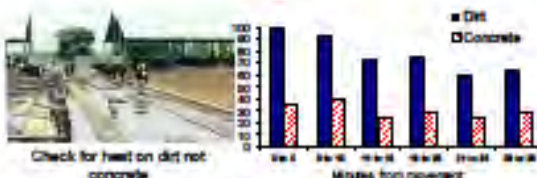
Dejager, 2014

Little Management Control

Factor	Variation
Breed	Management preference
Age	Fertility naturally declines
Production	Negative association

Dejager, 2014

Poor Footing Conditions



- Cows prefer dirt (73%) to concrete during estrus.
- Mounting activity increases 3- to 15-fold when cows are on dirt.
- Duration of heat, mounting and standing activity are greater for cows on dirt.
- Maximize the number of open cows housed together.

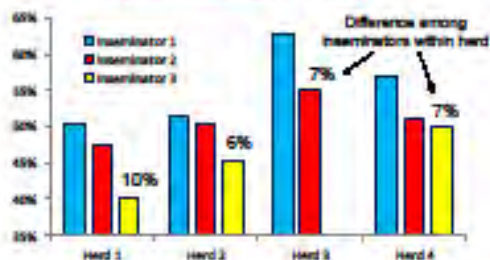
Heat Detection Chalk, Paint, and Patches



Heat Detection Monitors



Inseminator Skill



Semen Placement

Site of semen placement	Technician ability	
	Below average	Above average
Vagina-cervix	23.5	0.0
Body of uterus	28.7	85.7
Right horn	42.4	14.3
Left horn	4.4	0.0





Inseminator Skill

Recommendations

- Monitor success (compared on similar cows)
- Avoid fatigue with timed AI
- Require regular retraining
- Semen handling (gun warmers)
- Clean AI guns and thaw box



ai-gun-warmer.com

Inseminator Skill

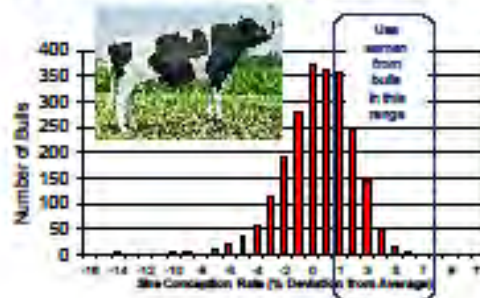
AI Sheath Protectors

Treatment	CR at repeat services
Protective sheath ¹	43.8%
No sheath (control)	32.3%

¹100-cm plastic sheath protectors
Sica et al. 2011, Ohio State University



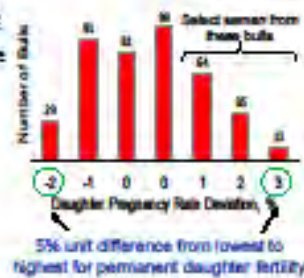
USDA Sire Conception Rate



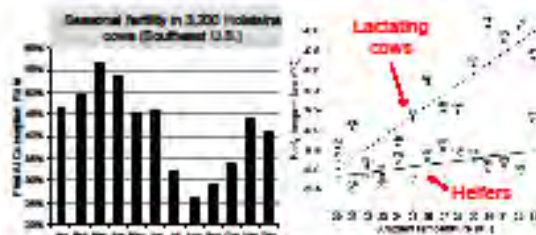
Sire Effects on Daughter Fertility

Daughter Pregnancy Rate

- Increases fertility in future generations.
- Genetic estimate of fertility of daughters.
- Value of 1 = 1% greater pregnancy rate in 21 days.



Environment • Heat Stress



Heat stress affects cows more than heifers

Managing Heat Stress

Monitor feed intake



Clean water in exit alleys



Shade over cows and feed



Fans over free stalls



Managing Heat Stress



Cow Comfort



Well ventilated holding pens and water in exit alleys

Grooved concrete alleys fitted with rubber floor strips



Free stalls bedded with sand



Crossbreeding and Fertility

Item	First-lactation cows (F1 daughters)			
	Holstein	N × H	M × H	SR × H
No. of cows	536	379	375	261
Days to 1 st AI	69	82	86	66
1 st AI conception rate, %	22	36	31	30
No. of cows	520	375	371	257
Days open	150	123	131	128
Survival to 305 days, %	86	83	82	83

N = Normande, M = Montbéliarde, SR = Scandinavian Red

Frederick et al. 2008

Crossbreeding and Milk Yield

Item	First-lactation cows (F1 daughters)			
	Holstein	N × H	M × H	SR × H
No. of cows	380	245	494	328
Actual milk, 305-day	21,511	19,806	20,187	20,481
Milk fat, 305-day	763	783	738	750
Milk protein, 305 day	672	811	848	866

N = Normande, M = Montbéliarde, SR = Scandinavian Red

Frederick et al. 2008

Crossbreeding and Lifetime Production and Profitability

Item	First-lactation (F1) cows			
	Holstein	N × H	M × H	SR × H
No. of cows	380	245	494	328
Death loss, %	5.3	1.2	2.0	1.8
Survival to 4 th calf, %	29.1	+23.8	+26.8	+21.4
Lifetime milk, kg	28,086	+1,680	+4,806	+3,180
Days of herd life	946	+317	+412	+380
Lifetime profit, \$	4,347	+1,120	+2,168	+1,926

N = Normande, M = Montbéliarde, SR = Scandinavian Red

Frederick et al. 2008

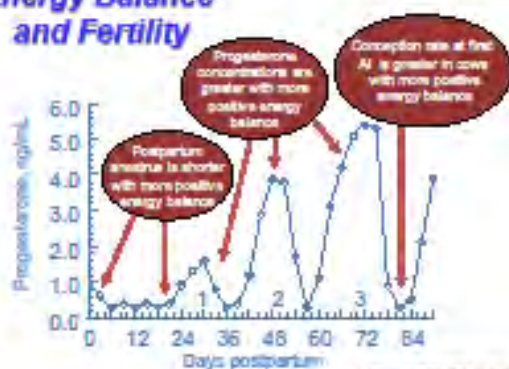
Postpartum Health

Trait	Cervix diameter group		
	Smallest 1/3	Middle 1/3	Largest 1/3
Percentage of cows*	40%	34%	26%
First-service conception	67%	52%	47%
Days open	85	96	108

*492 cows in 8 commercial herds in Michigan assessed between 12 and 28 DIM.

(Diffring et al., 1992)

Energy Balance and Fertility



Parkinson and Britt, 1992

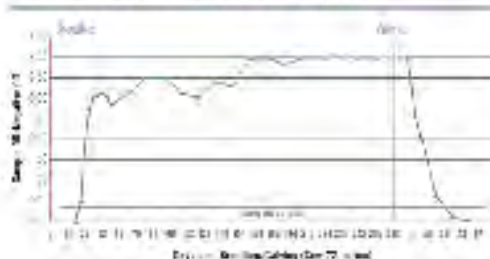
Mastitis and Fertility

Item	None	Occurrence of mastitis		
		Before 1 st AI	Soon after 1 st AI	After pregnancy diagnosis
No. of cows	501	250	147	103
Conception at 1 st AI	29%	22%	10%	38%
Pregnant by 320 DIM	85%	72%	59%	93%
Abortion	6%	12%	12%	10%

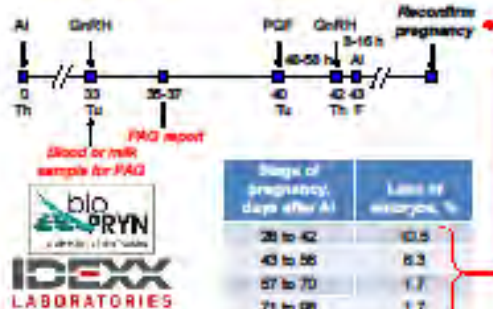
Samra et al., 2004

Reduce Inter-insemination Intervals by Early Nonpregnancy Detection

Detection of Early Bovine PAG Levels by IDEXX ELISA



Applying PAG in a Timed AI Program



Large or Moderate Management Factors Affecting Fertility

Source of fertility	Low	Average	High
Bull	40.0%	50.0%	75.0%
Inseminator	19.0%	35.0%	46.0%
Breed (Holstein vs. Cross)	28.0%	35.0%	44.0%
Cow health	24.0%	35.0%	47.0%
Mastitis	31.6%	35.0%	45.1%
Energy balance	14.0%	35.0%	40.0%
Ambient temperature	26.3%	35.0%	43.8%
Average	23.8%	35.0%	44.3%

Adapted from BMS, 2000

Conclusions

Focus management team on factors for which you have a large to moderate degree of control to prevent losses and increase efficiency:

- Heat detection and resynch of open cows
- Inseminator-insemination skills
- Sire selection
- Reduction of heat stress (add sprinklers and fans)
- Cleanliness of dry cow facilities (can affect mastitis)
- Proper assistance of cows at calving
- Monitoring feed intake of close-up cows

15th Annual Northeast Ohio Regional Dairy Conference



15th Annual Northeast Ohio Regional Dairy Conference

EVALUATION

What specifically do you either like or dislike about the Buckeye Event Center?

What comments do you have about the catering (food) service?

Do you have any comments about the trade show part of the conference?

What comments do you have to make about our featured speaker, Dr. Jeffrey Stevenson?

Was Dr. Stevenson's presentation practical? _____

Did he provide you with information you can readily use on your farm? _____

Would you like for the conference to allow: More time listening to speakers and less time to visit exhibits? ____
More time to visit the exhibits and less time with the speaker? ____
I wouldn't change the schedule from what it currently is. ____

This is the first year we have had a panel discussion with your peers. Is this something you would like to see done regularly? Yes ____

No ____

Don't care ____

Please make any comments you may have about the panel discussion.

Please list speakers you would like the KVVMA to consider as speakers for future meetings.

Please list topics you would like the KVVMA to consider for future meetings.

Do you have suggestions for improvements or changes to this meeting?

Please place a checkmark here if you are a sponsor of this meeting. _____

The members of the Killbuck Valley Veterinary Medical Association thank you for your participation.

