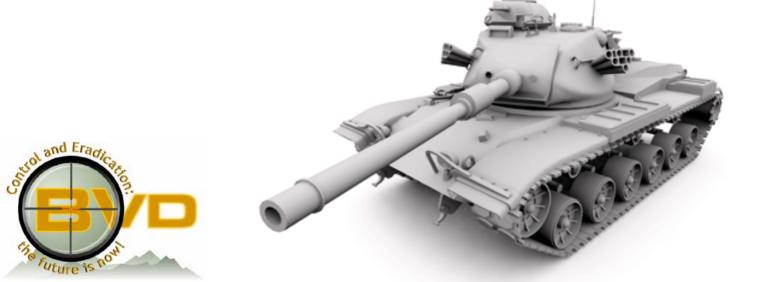
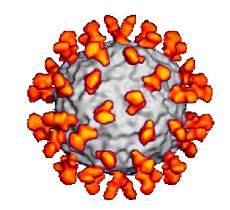
Controlling Bovine Viral Diarrhea Virus

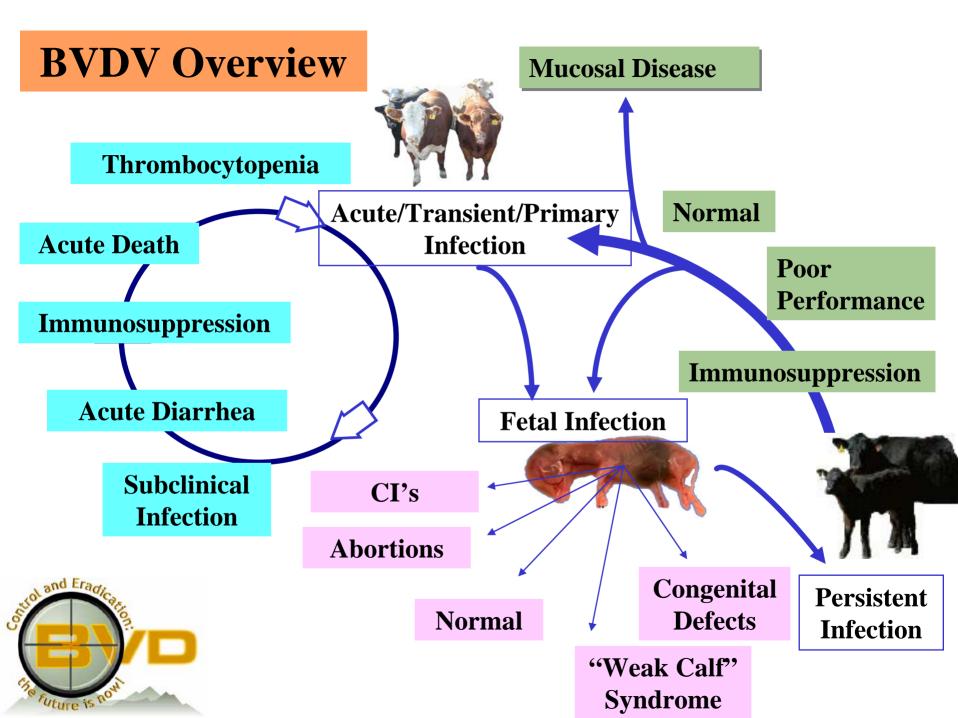
Diagnostic Tests and Strategies



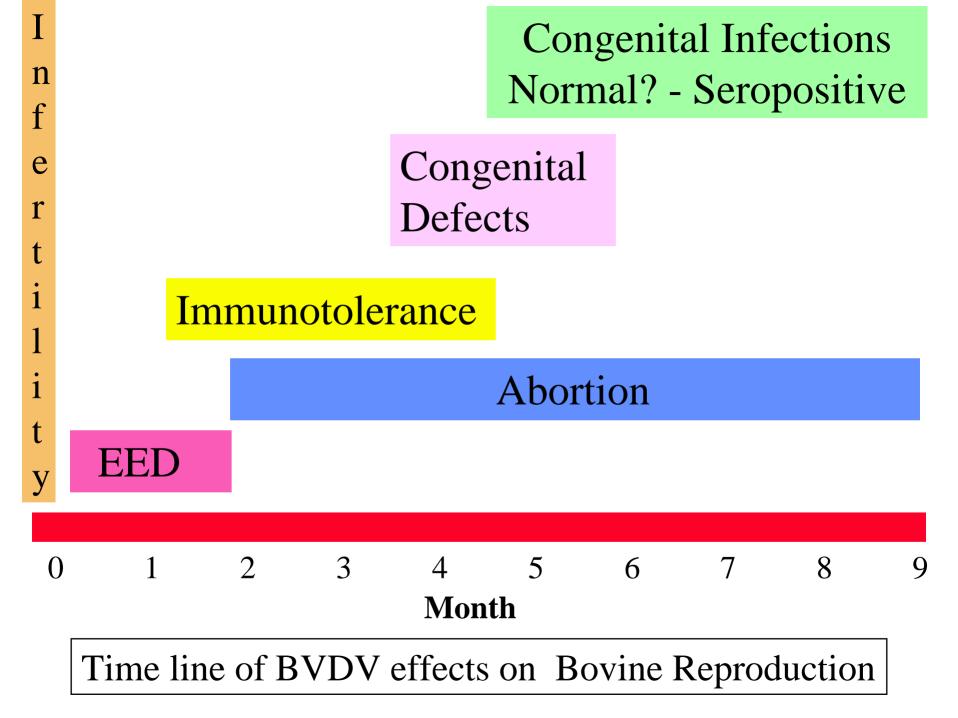
What is BVDV

- Viral infection of cattle
 - Sheep, pigs, camelids, cervidae
- RNA virus
 - Can rapidly mutate and change (Think "Flue virus")
- Diverse clinical presentation
- Diverse antigenic make-up
 - Vaccine failure



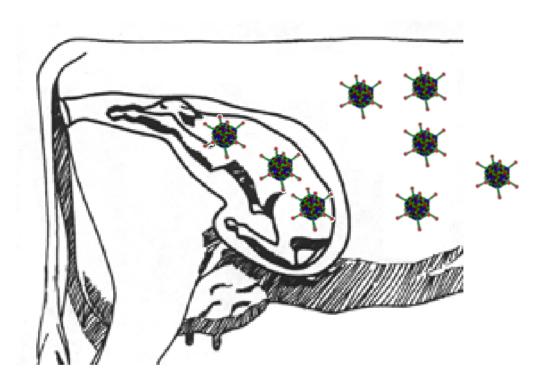




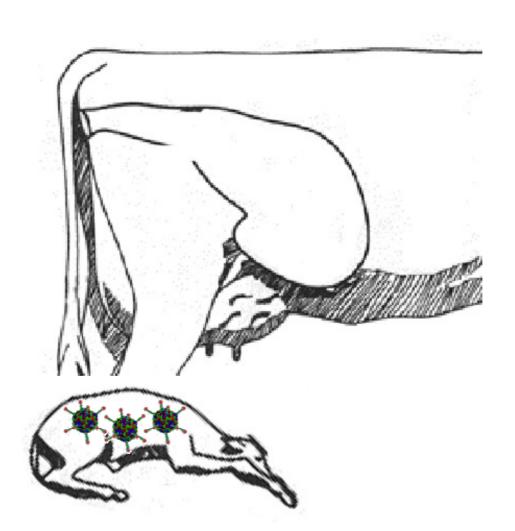


Immunotolerance $\rightarrow \rightarrow \rightarrow$ Persistent Infection with BVDV

- Occurs following fetal infection prior to day 125 of gestation
 - Acute or transient infection of dam or;
 - Persistently infected dam
- Virus recognized as "self" antigen
- Results in calf being born that is immunotolerant to BVDV which leads to persistent infection with BVDV
- May be normal looking, but more typically are poor performers and survivability is low











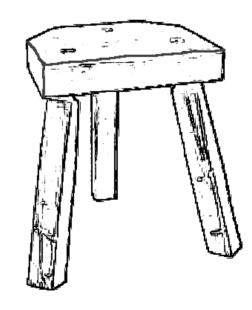






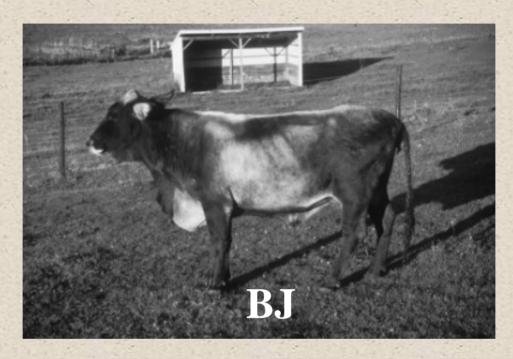
BVDV Control

- Biosecurity
 - Most BVDV problems are purchased
- Vaccination
 - Vaccines are not 100%
- Seek and destroy PI's





MOST WANTED



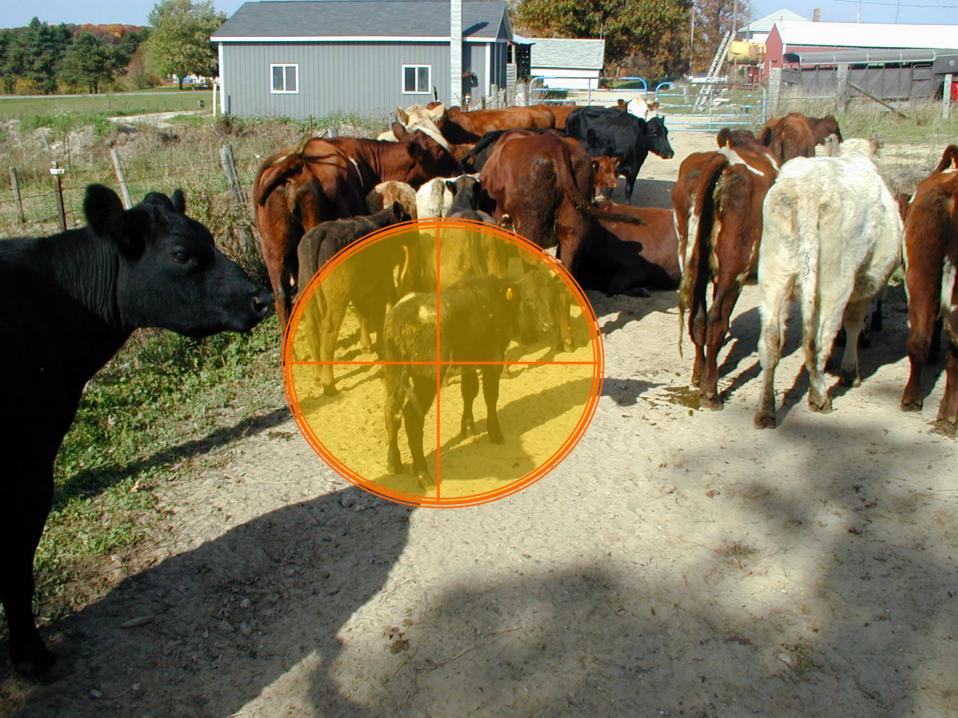
Known carrier of a virulent virus...Persistently infected with BVDV

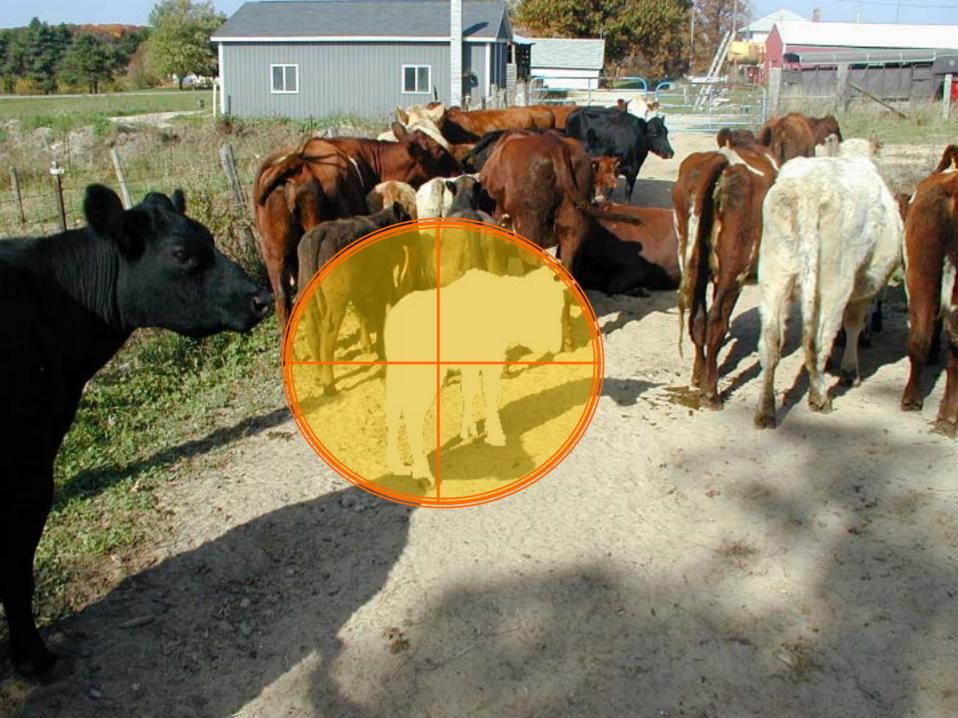
CONSIDERED ARMED AND EXTREMELY DANGEROUS

IF YOU HAVE ANY INFORMATION CONCERNING THIS CRITTER, PLEASE CONTACT YOUR VETERINARIAN

REWARD







Be a Winner at the Trinity Farms Royal Flush Sale

March 4, 2005 > 1:00 PM



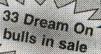
TFS Gold Star 1407 5055R Sire: Bon View New Design 1407 MGS: GW Lucky One 686K

224 Sale Lots.

53 Purebred Simmental Bulls 35 Purebred Angus Bulls 71 Hybrid Meatmaker SimAngus Bulls 53 Open Helfers

15 Bred Cows

33 1407 bulls in sale



TFS Dreamaker L186 5017R Sire: CNS Dream On L186 MGS: GW Lucky One 047G



TFS Black Star 1407 5055R Sire: Bon View New Design 1407 MGS: GW Lucky One 686K

deineserger serif

- Dream On
- > BFI Midland
- leeB benelerS v
- × 14107
- GW Lucky Dies
- → E101 → B100 1/2
- Bulldozer
- Gherokee Canyon

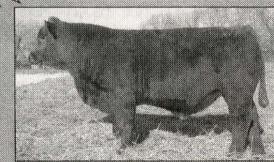


luctastas Aont odday

1023 Thorp Hwy S. Ellensburg, WA 98926 Mike's Cell: (509) 929-0312

Robb's Cell: (509) 929-6126

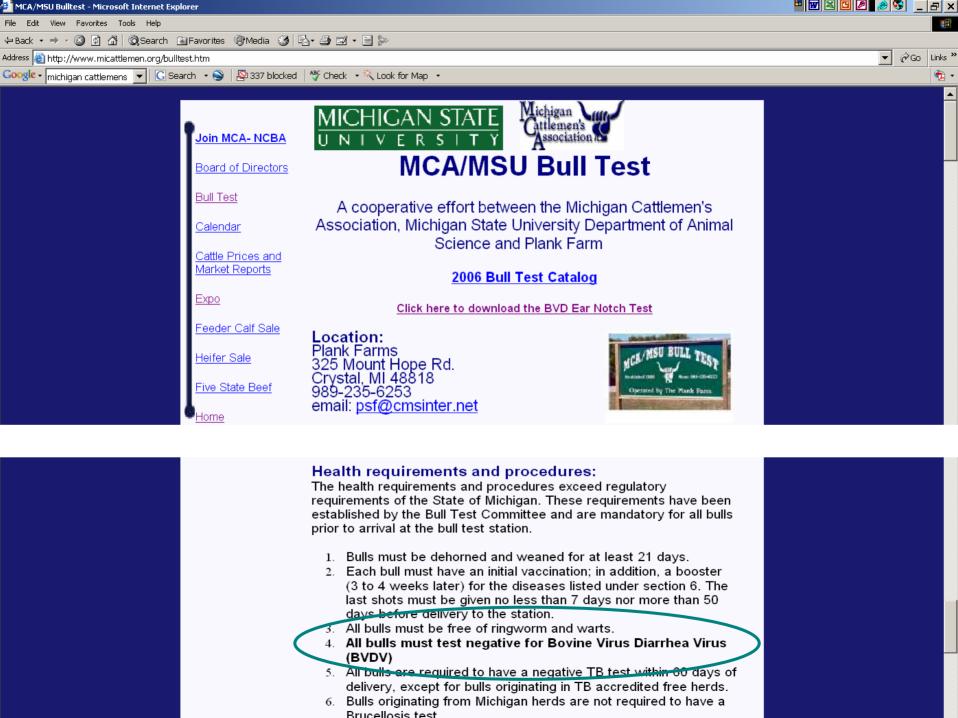
www.trinityfarms.info

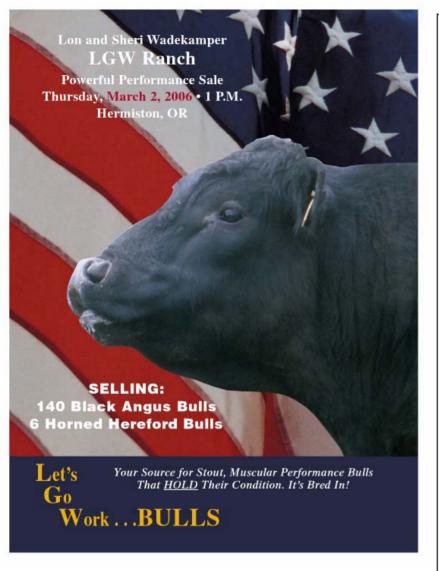


TF\$ Red Dream L186 5066R Sire: CNS Dream On L186 MGS: CGS Black Chicago

All BVD tested negative. Se nen tested, ultrasounded, gain tested, Signt unseen guarantee.

> Joint Producer: Bar CK Simmentals





Lon & Sheri Wadekamper's

LGW RANCH

POWERFUL PERFORMANCE SALE

140 Yearling Black Angus Bulls 6 Elite Horned Hereford Bulls Thursday, March 2, 2006 - 1 p.m. at LGW Ranch 29899 Country Lane • Hermiston, Oregon

Sale Information:

LGW Ranch, Day/Night Telephone(541) 567-3876 Cell Phones, Sale Day(541) 561-7482 or 7484

Auctioneer:

.....Cell (509) 989-2855

Sales Representatives:

Rod Wesselman, American Angus Ass'n....(509) 765-9219 Jerry York, Western Livestock Journal....(208) 863-1172 Willard Wolfe, Special Assignment(509) 994-8051 Gary Kendall, Western Livestock Reporter...(208) 858-2163 Buyers who wish to purchase cattle who cannot attend may send their bids to LGW Ranch, the auctioneer or sale representatives.

Motel Accommodations:

Oxford Suites, Hermiston(541) 564-	8000
or toll free(888) 545-	7848
Best Western, Hermiston(541) 564-	0202
Oak Tree Inn, Hermiston(541) 567-	2330

Food:

A complimentary lunch will be served, starting prior to noon, on sale day. Refreshments will be available sale morning and throughout the day.

Registration Certificates:

Supplied on eligible animals upon request.



Visit the Angus Journal Web site, www.angusjournal.com

Herd Health:

All cattle will be accompanied by proper health certificates for immediate shipment out of-state. Bulls are fertility and BVD-PI tested. Scrotal measurements will be provided on a separate, sale day supplement sheet. The calves have been vaccinated with 8-way and for Lepto-Vibrio, IBR, BVD I & II, Pl3, BRSV and given Dectomax wormer pour-on. Veterinary services provided by Hermiston Veterinary Clinic.

Sale Location:

Take Exit 5 off I-82, turn south, then left on Country Lane. Travel east 1 mile to the sale barn on the right. Watch for parking area signs.

Terms & Conditions:

All cattle sell under the terms and conditions as suggested by the American Angus Association. Terms of sale are cash, unless prior arrangements have been made. All supplements to the sale book or announcements made from the block take precedence over what is written in this book.

Liability:

All persons attending the sale and related functions do so at their own risk. LGW Ranch Inc., its staff and representatives, assume no liability, legal or otherwise, for any accidents or injuries that may occur.

Inspection of Cattle:

Angus cattle may be inspected at the ranch anytime prior to the sale.

Livestock Mortality Insurance:

A representative from American Live Stock Insurance Company will be available to assist you with mortality insurance for your purchases.

CUSTOMER SATISFACTION PROGRAM

Feed Arrangements: Bulls may be left at LGW Ranch feed pens, free of charge through the month of March, then arrangements can be made until mid-May.

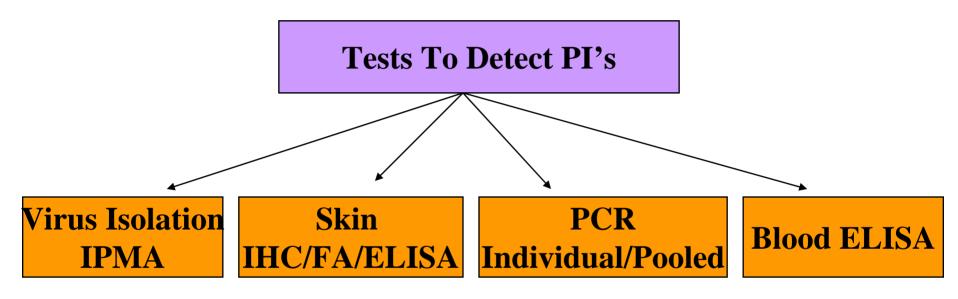
Free Delivery: Within Oregon, Washington and Idaho to buyer's farm or to a convenient location as close to buyer's request as possible. Cattle may be loaded following the sale, but can remain at the sale site through April 1, 2006 until trucking arrangements can be made.

Only Virgin Bulls Sell: Complete Breeding Soundness Exam performed, Scrotal-Measured, Semen-Tested. Guarantee: LGW Bulls are guaranteed for semen quality and structural soundness for their first breeding season.

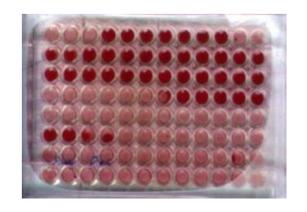
Characteristics of PI's

- Virus usually present at high titers in:
 - Serum
 - White cells
 - Nasal swabs
 - Tissues including skin
- May not be easily detected in serum of calves
 - Neutralized by colostral antibodies
 - <6 months of age</p>
- Typically have no antibody titers, BUT not always true

Detection of PI's









BVDV is **Suspected** = *High Risk Herd*

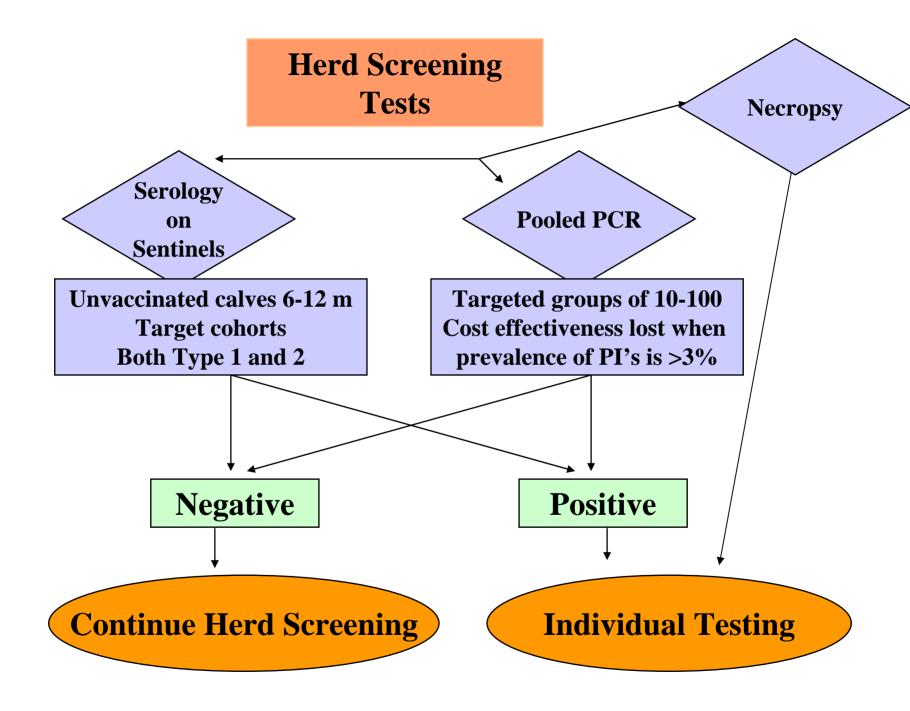
- ➤ Poor reproductive performance despite good nutrition and fertility
- ➤ High calf morbidity/mortality despite good sanitation and nutrition ➤ Open herd
 - ➤ Positive screening test
 - ► Laboratory confirmation of BVDV infection

Is BVDV a Problem?

BVDV is not Suspected = Low Risk Herd

- ➤ Good reproductive performance
 - ➤ Good calf health
 - >Closed herd
- ➤ Screening tests have been negative
- ➤ No laboratory evidence of BVDV infection







Strategy Selection Depends On:

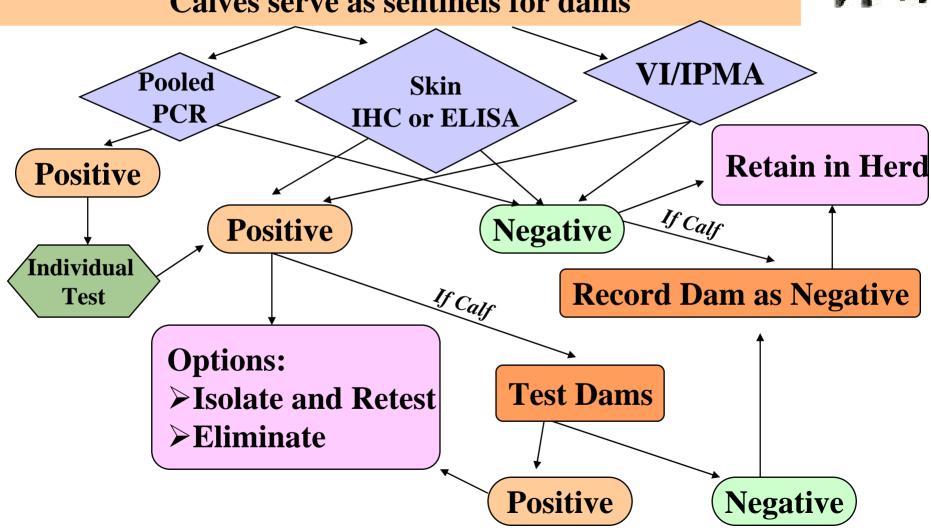
- Goals
- Ability to handle animals at different management times
- Records
- Test/assay availability
- Costs



Test all Calves and Adults/Replacements w/o offspring

Assumption: Calves most likely to be PI's

Calves serve as sentinels for dams





In Low Risk Herds

- Biosecurity!!!!!
 - Implement practices to keep PI's out
 - Test incoming cattle
 - Don't forget fetuses in pregnant cattle
 - Contact with outside cattle
- Vaccination
 - Broad protection...Type 1 and 2
 - Strategic timing
- Consider periodic screening
 - Necropsies..."True Knowledge Lies in Dead Pile"
 - Serology on sentinels



Take Home Points

- 1. Major source of BVDV transmission is cattle PI's with BVDV...**TYPHOID BUBBA**
- 2. Identifying and eliminating PI's is a key component to BVDV control...**SEEK and DESTROY**
- 3. Combine with strategic vaccination and biosecurity for complete BVDV control and prevention program...THREE LEG STOOL

When your carcass compost pile doubles as a sled riding hill for the kids!!





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- **9** When every animal is walking around with strange looking v-shaped notch in their ear.





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- When your calves start looking like Michael Jackson!!!!.
- When you think BVD stands for "Bad Veterinary Disease"

 Dr. Grooms D. M. BVD

6 When your pregnancy rate is approaching the batting average of most major league pitchers.





- **6** When your pregnancy rate is approaching the batting average of most major league pitchers.
- **4** When your nutritionist blames poor health on your previous nutritionist who blamed it on his/her predecessor who blamed it on......



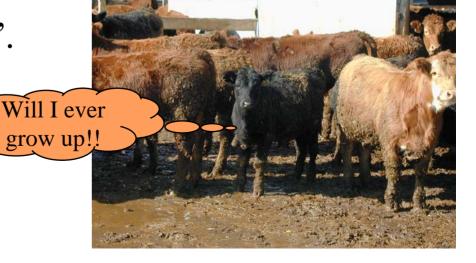


- **6** When your pregnancy rate is approaching the batting average of most major league pitchers.
- When you have cattle on your farm named "Runt", "Pipsqueak", "Shorty",

"Wobbles", "Tiny",

"Clutzo" and "Nubby".





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 - You've lost everything but your



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