

# Experiences with BVD in Beef and Dairy Herds in Georgia

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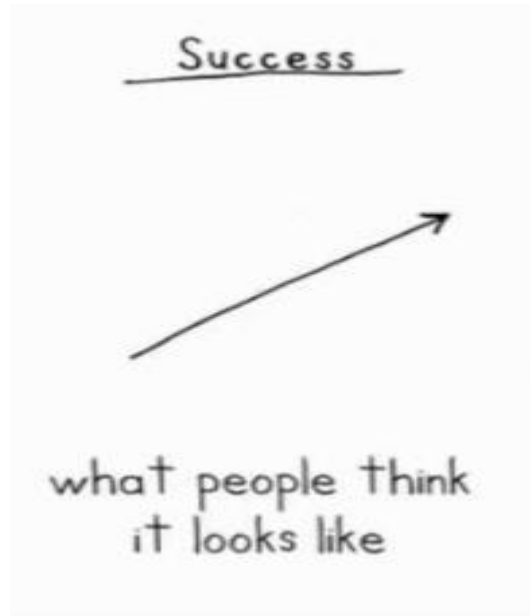
UGA COLLEGE OF VETERINARY MEDICINE

TIFTON VETERINARY DIAGNOSTIC LABORATORY

TIFTON, GA



# Where are we?



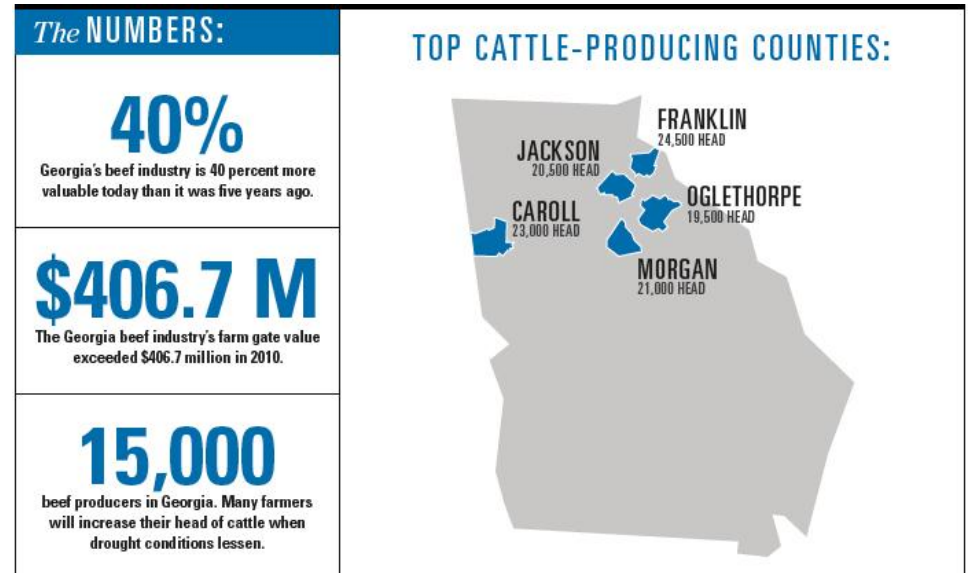
# Justification for BVD Eradication

- ▶ Decrease morbidity in stocker and feedlot cattle
  - ▶ Decreased mortality – Current herd inventory – every calf matters
  - ▶ Increase production, decreased treatment costs, improved efficiency
- ▶ Antimicrobial use – presence of PI's increases need to treat cattle
  - ▶ Reduce and refine antimicrobial use – pathogen reduction will be key
- ▶ Improved herd performance – farm level
  - ▶ BVD reduces reproductive efficiency – decreased weaning weights and rates



# Beef Production in Georgia

- ▶ Cow – calf operations
  - ▶ 15,000 farms with beef cattle
  - ▶ 400,000 beef cows – avg herd less than 30 hd
  - ▶ 245,000 calves sold through Georgia sale barns
- ▶ Stocker operations
  - ▶ Upgraders and backgrounders – order buyers
- ▶ Purebred or seedstock operations
- ▶ Dairy - 15% of beef source



# Challenges

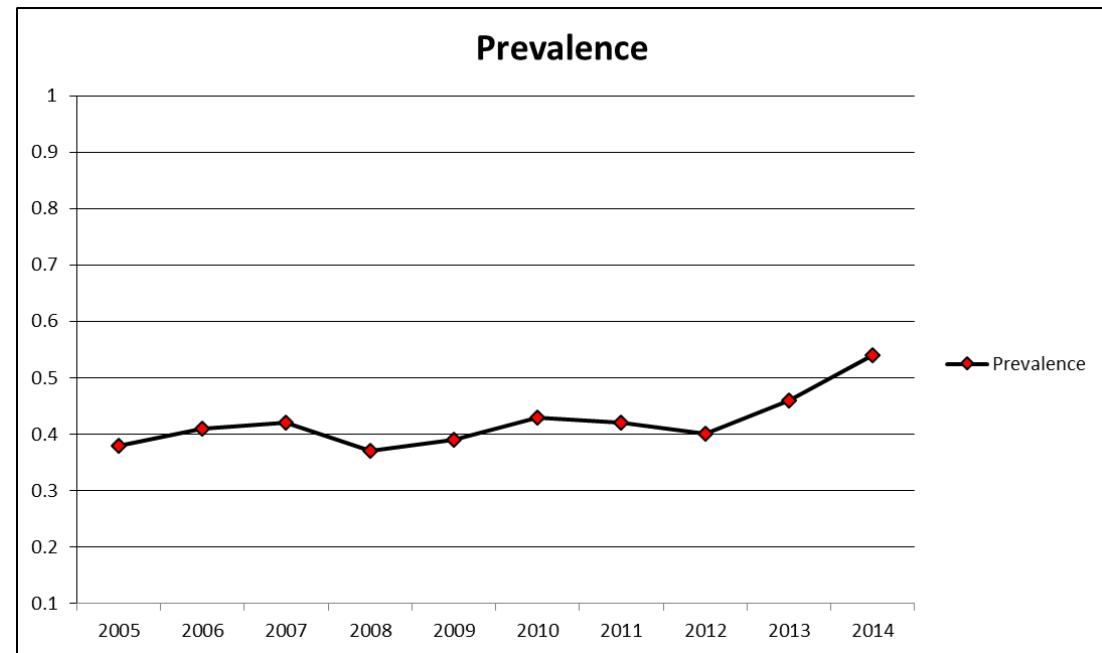
- ▶ Different owner motivations
  - ▶ Active cattle owners – approach their herd in a business like manner
  - ▶ Passive owners – savings account approach with low inputs and low expectations
- ▶ Lack of local data
  - ▶ Prevalence in GA? (0.14%?; Lawrence, et al, AAVLD, 2007)
  - ▶ Producer knowledge
  - ▶ **Producer concern**
- ▶ Education objectives
  - ▶ Increase awareness
  - ▶ Increase activity
- ▶ Veterinary Client Patient Relationship



## Sorting Out the Data

**Lack of regional prevalence data and producer awareness hinder developing strategies to effectively deal with BVD**

**Producers may be more motivated by loss of market or market discounts than market premiums**



# Recent South Georgia Cases

- ▶ Adel, GA – new cattle owner – 2013
- ▶ Claxton, GA – referral veterinarian – 3/16 calves positive; 45 cows
- ▶ Dairy calf raiser – PI's; 40-50 calves per week
  - ▶ Increase in pinkeye and recurrent pneumonia
- ▶ Bison herd with calf loss, low calf production, blind calves



## Incidence of BVD Positive Cases Since 2010

Does not include SN, FA, VI

Year	# Tests	Incidence %
2010	2400	0.79%
2011	941	0.96%
2012	1177	1.36%
2013	1031	0.78%
2014	1654	1.33%



# Owner education

- ▶ Past articles and programs present the worst case scenario of BVD
- ▶ BVD doesn't always present with severe symptoms
- ▶ Lack of records and controlled breeding seasons
- ▶ Owners are somewhat more motivated in this current cattle market
- ▶ Effects of BVD are not the same for each production phase

The image shows a screenshot of a 'Feedlot Enterprise Budget Worksheet' from the University of Missouri Extension. The worksheet is a complex spreadsheet with multiple sections and columns. Key sections include:

- Inputs:** Lists various inputs like 'Cattle cost', 'Feed cost', and 'Transportation' with associated values.
- Outputs:** Lists outputs like 'Cattle sold' and 'Feed sold' with associated values.
- Summary:** A section at the bottom that summarizes the overall budget, including 'Total cost of BVD', 'Total revenue', and 'Net profit'.

The worksheet is titled 'Feedlot Enterprise Budget Worksheet' and includes the University of Missouri Extension logo. It contains numerous numerical values and formulas, providing a detailed financial overview of a feedlot operation.

# Owner Education

- ▶ Cow-calf farmer
  - ▶ Typically BVD causes an absence of pregnancies and calves
- ▶ Without records and pregnancy diagnosis data the effect of BVD is non-specific
- ▶ Importance of BVD surveillance is lost amongst other important issues



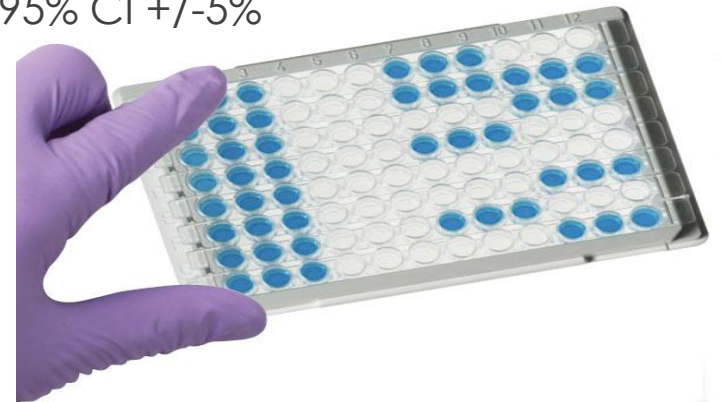
# Solutions

- ▶ Education programs
  - ▶ Local producer meetings – 80 local GCA chapters
- ▶ Collecting local data
  - ▶ Use on farm data in VCPR to improve animal health and welfare
  - ▶ Post-market data isn't helpful to eradicate BVD from farms
- ▶ Valid testing
  - ▶ Adopting quality control standards (Edmondson, et al , 2007)
  - ▶ Reliable test kits
- ▶ Data sharing and /or traceability



# Proposed studies

- ▶ Proposal to provide cattle owner education programs in counties with the highest concentration of beef and dairy cattle
- ▶ Proposal to test bulk milk tank samples in southeast
  - ▶ Limitations of this approach
- ▶ Proposal being developed to sample sale barn source beef calves either at the order buying facility or livestock auction market
  - ▶ We would need to randomly sample 750 calves; 95% probability; 95% CI +/-5%
  - ▶ Assuming 350,000 calves and 0.4% prevalence



# Summary

- ▶ *“Don’t know what we don’t know”*
- ▶ Nor do we have any stats to know if we are making progress
- ▶ According to the national data we may be heading in the wrong direction
- ▶ Some owners do not appear to be motivated by premiums
  - ▶ More producers are paying attention to unproductive cows during high markets

