

Elimination of PRRSV from Minnesota:

It's the right time to move forward.

Scott Dee



Acknowledgement of funding and in-kind resources

- USDA NRI PRRS CAP 1 and 2
- National Pork Board
- MN Pork Board
- MN Rapid Agricultural Response Fund
- MN Veterinary Diagnostic Laboratory
Genetiporc
- Preserve International
- Midwest Microtek

SDEC partners

- **Corporate members**

- PIC
- Genetiporc
- Boehringer-Ingelheim
- Pfizer
- Novartis
- Noveko
- Camfil Farr/Filtration Systems, Inc
- Bayer
- Japanese Association of Swine Veterinarians

- **Practice members**

- Pipestone Vet Clinic
- Fairmont Vet Clinic
- Swine Vet Center
- Clinique Demeter
- Cannon Valley Vets
- Carthage Vet Service

Disclosure

- I do not
 - Receive royalties or commissions on the sales of filters or filtration equipment.
 - Hold any patents on filtration inventions.
 - Have research contracts or consulting agreements/retainers with filtration/equipment companies.
 - Use monetary contributions from filtration companies to conduct filtration-based research

Elimination of PRRSV from MN: It's the right time to move forward

- Unprecedented economic circumstances
- Advancements in knowledge and technology
- Strong support at the AASV and MN PETF level

Veterinary perspective

- AASV position statement on PRRS eradication
 - *“Eradication of PRRS from the North American pig population is the long-term goal”.*



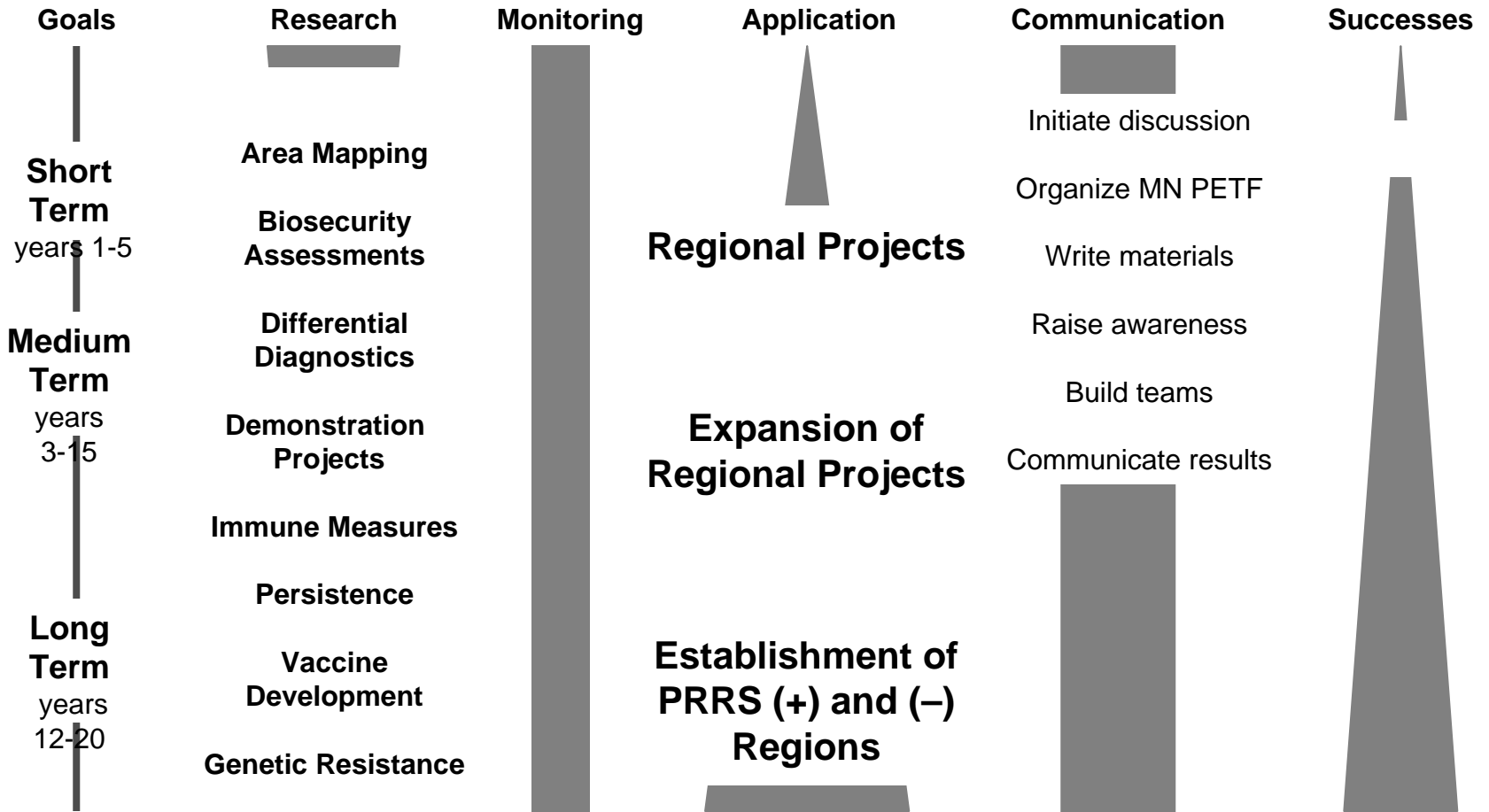
The Minnesota PRRS Eradication Task Force (MN PETF)

- Organized in 2005
- Mission: To develop and oversee the plan for PRRSV elimination in Minnesota
- Proactive: To be ready to act when the time is right.

Participants

- Producers
 - Langhorst (Southern MN), Starner (Northern MN)
 - Leiopold (MPPA), Crawford (MPB), Preisler
 - Graff (MPB research)
- Practitioners
 - Pipestone (Nerem), Swine Vet Center (Reicks, Loula),
 - Fairmont (Ruen), Cannon Valley Vets (Strobel)
- UMN swine group and VDL
 - Davies, Dee, Morrison, Murtaugh, Rossow, Torremorell
- MBAH
 - Thompson
- NPB
 - Becton

MN PETF: Road Map to Success



It's the right time to move forward.

- PRRS is costly
 - \$5-\$15.00/pig
 - Competitive advantage globally
- Humans and animals suffer
 - Emotional trauma
 - Mortality
- Market-driven opportunities
 - Empty facilities
 - Need to reduce inventory

It's the right time to move forward.

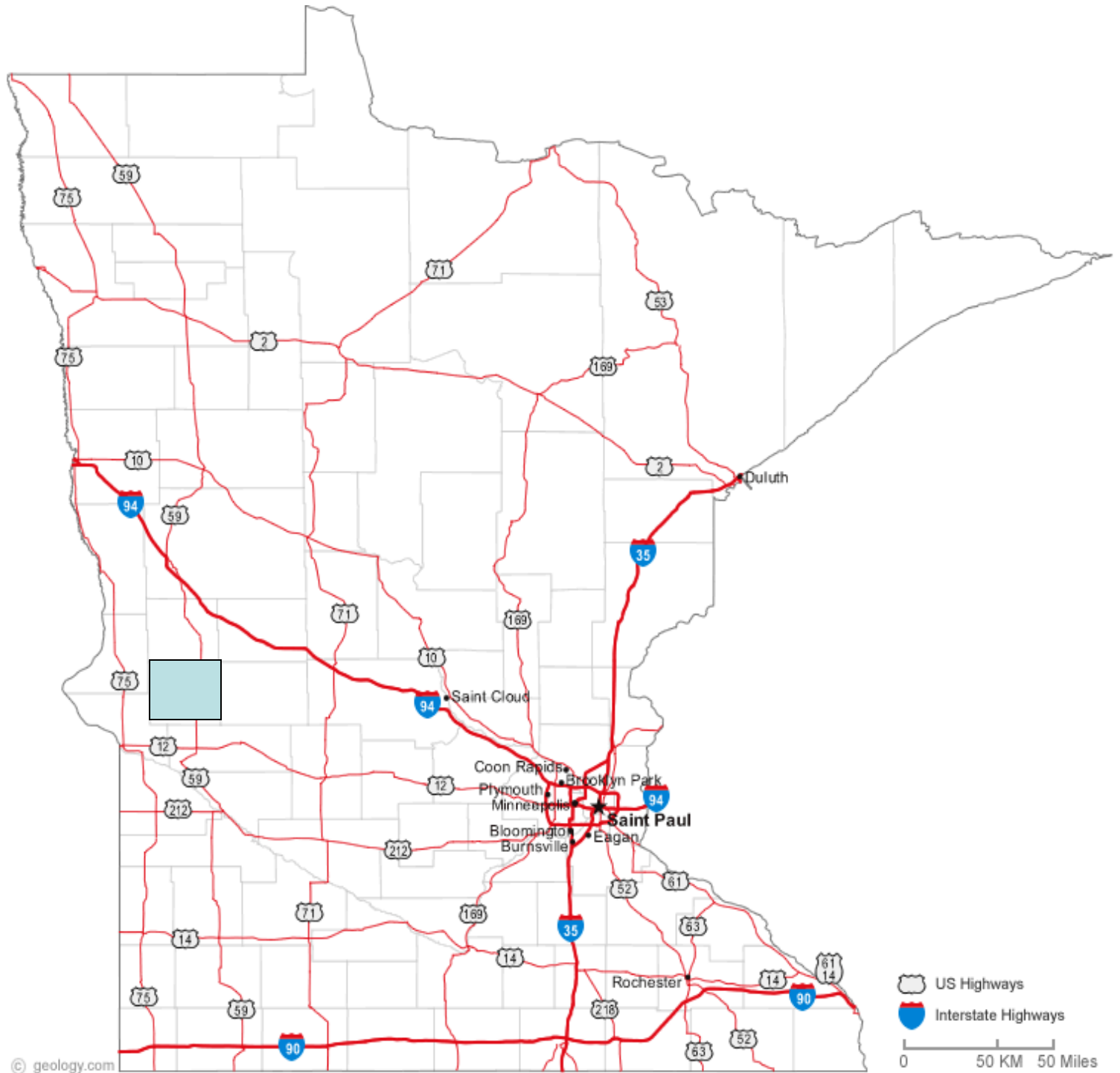
- We know and understand a great deal more now than we did 3 years ago:
 - We know how to eliminate PRRSV from farms.
 - Herd closure, Depop-Repop
 - The mystery of area spread has been solved
 - We now understand the routes of PRRSV spread between farms
 - The virus can spread up to 6 miles in the air.
 - We now know how to reduce re-infection risk in swine-dense regions
 - Air filtration

Air filtration

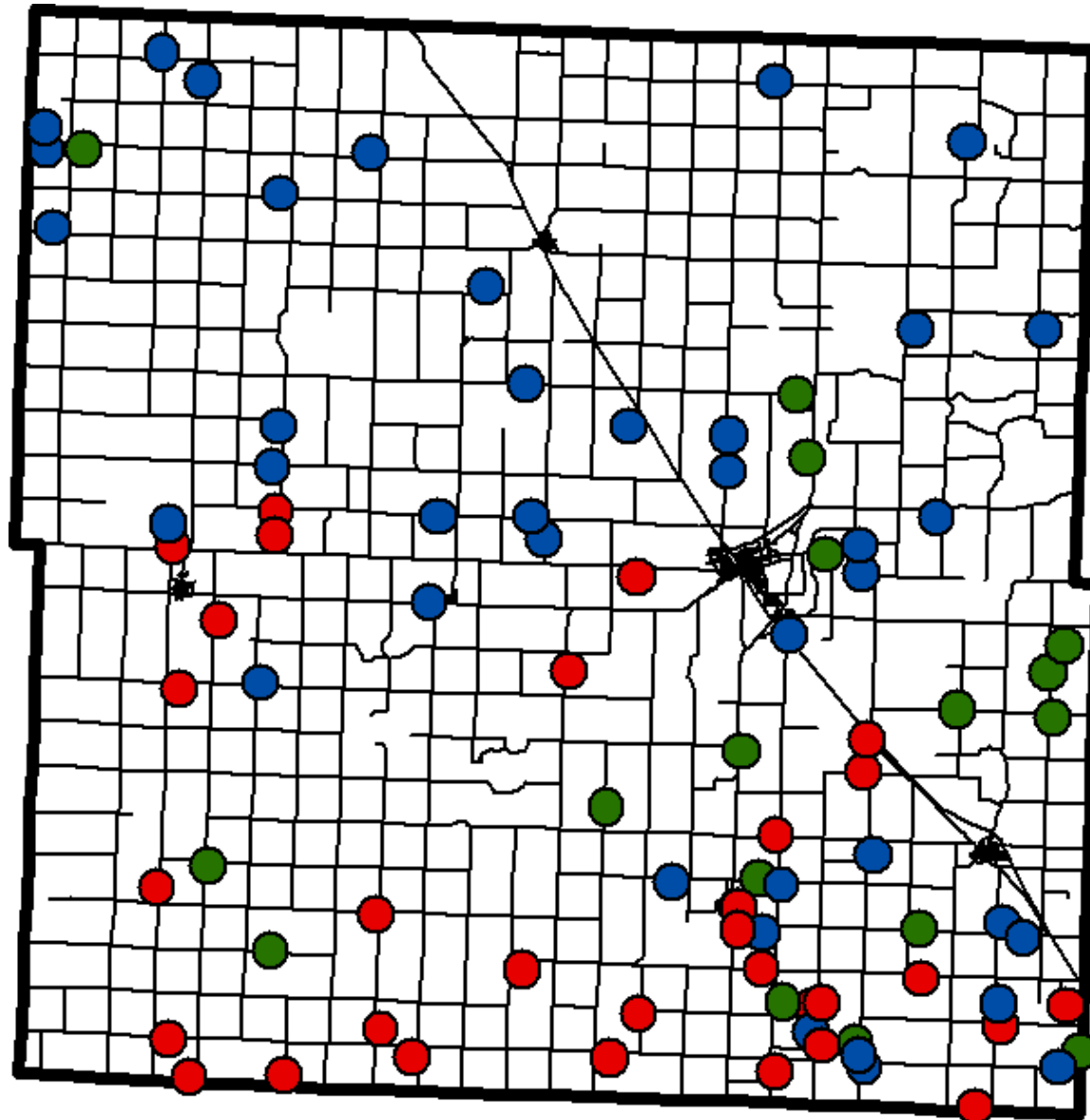
- Experimental setting (SDEC facility)
 - 3 years:
 - no infection of filtered facilities
 - 42% infection rate in non-filtered facilities
- Field setting
 - AI centers (SW MN/N IA)
 - 3+ years: no infection of filtered studs
 - Sow herds (S MN/ N IA)
 - 16 months:
 - 2/10 filtered farms infected
 - » Personnel and transport breaches documented
 - » No evidence of filter failure
 - **17/21 non-filtered farms infected**

Other Breakthroughs

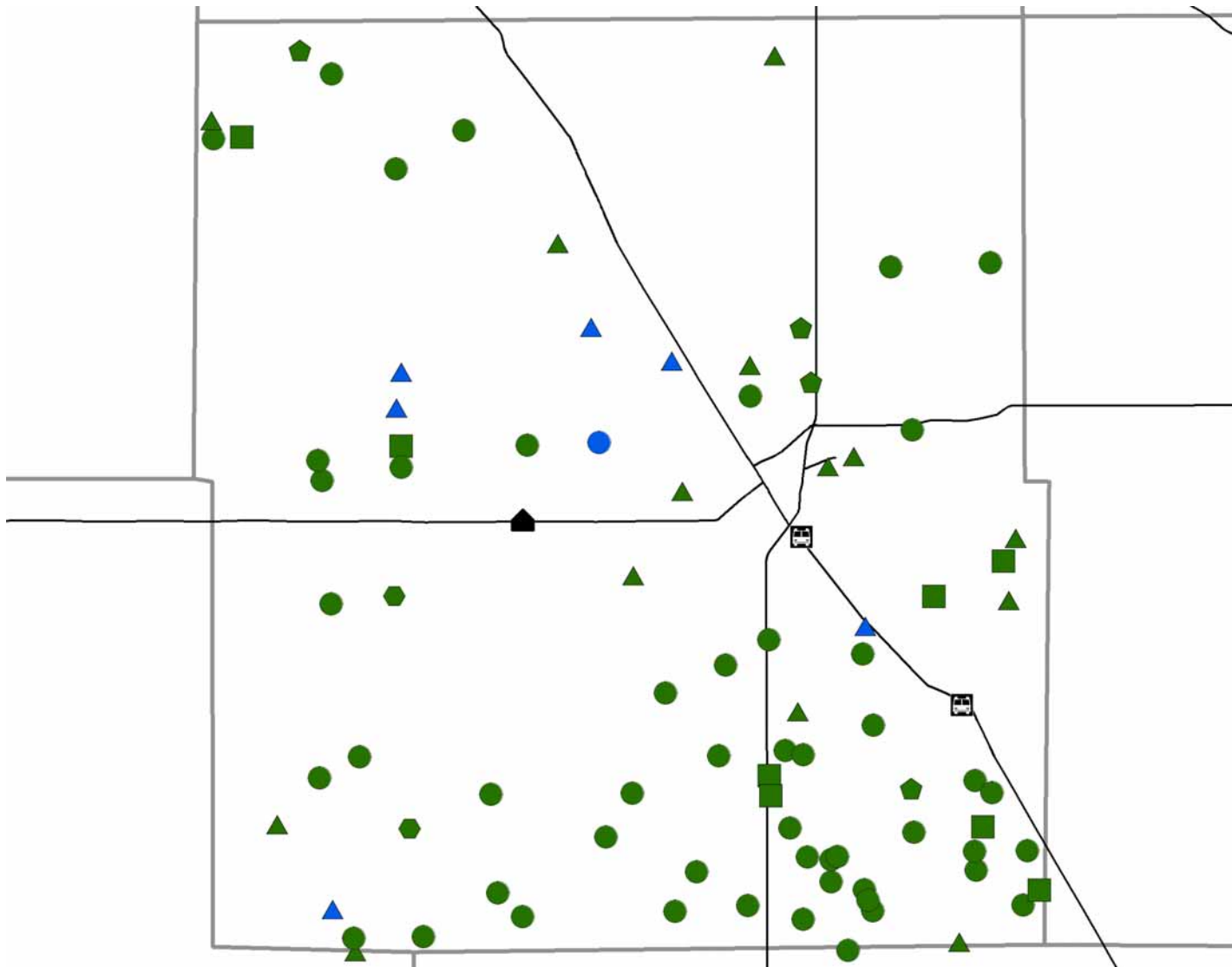
- Oral fluid (rope) sampling
 - We may not have to bleed pigs anymore
 - Jeff Zimmerman
- Mapping tools
 - “A picture is worth a 1000 words!”
 - Essential for regional projects
 - Peter Davies
- PRRSV can be eliminated at the farm, regional and national levels
 - Stevens county
 - Bob Morrison



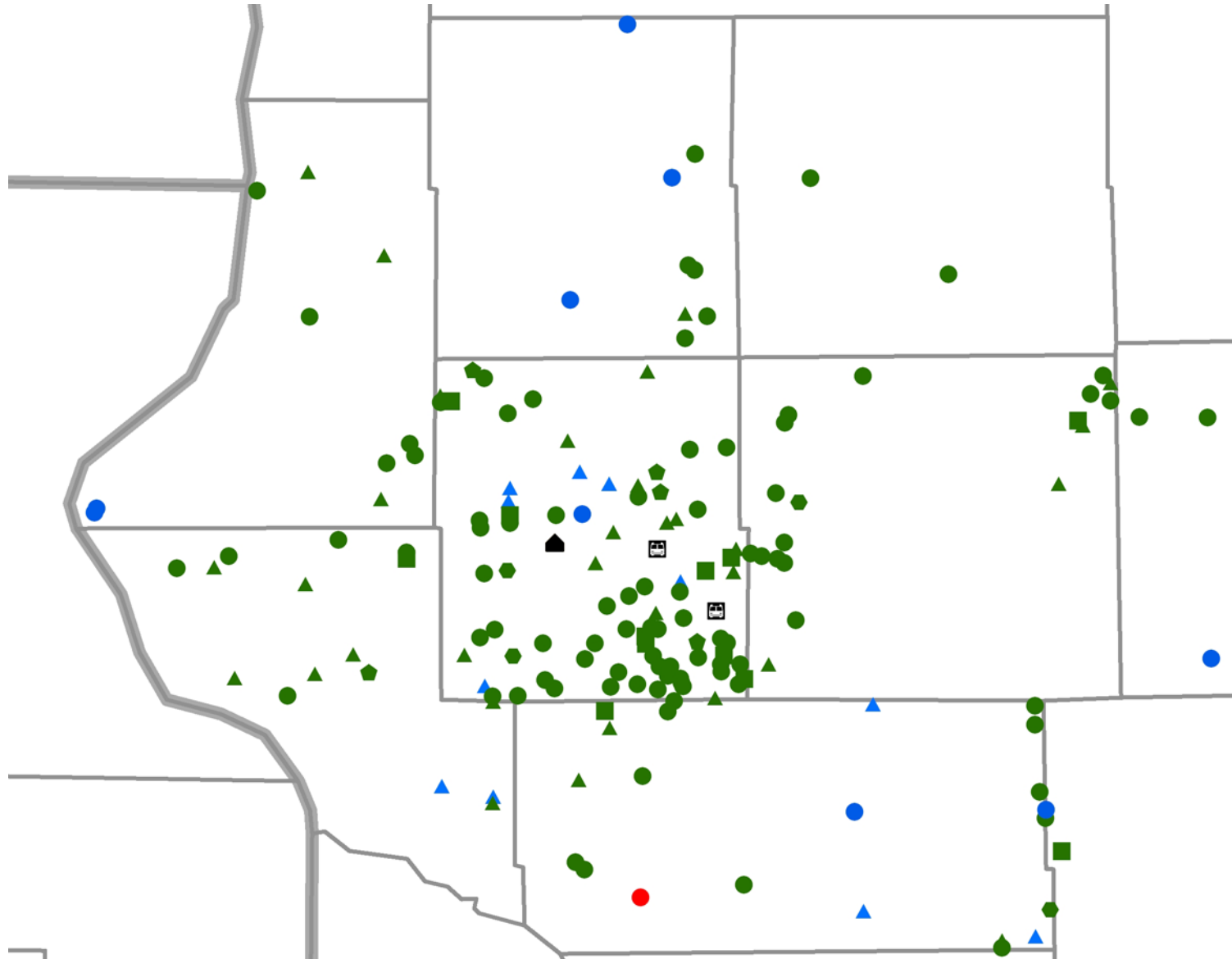
Stevens County 2004



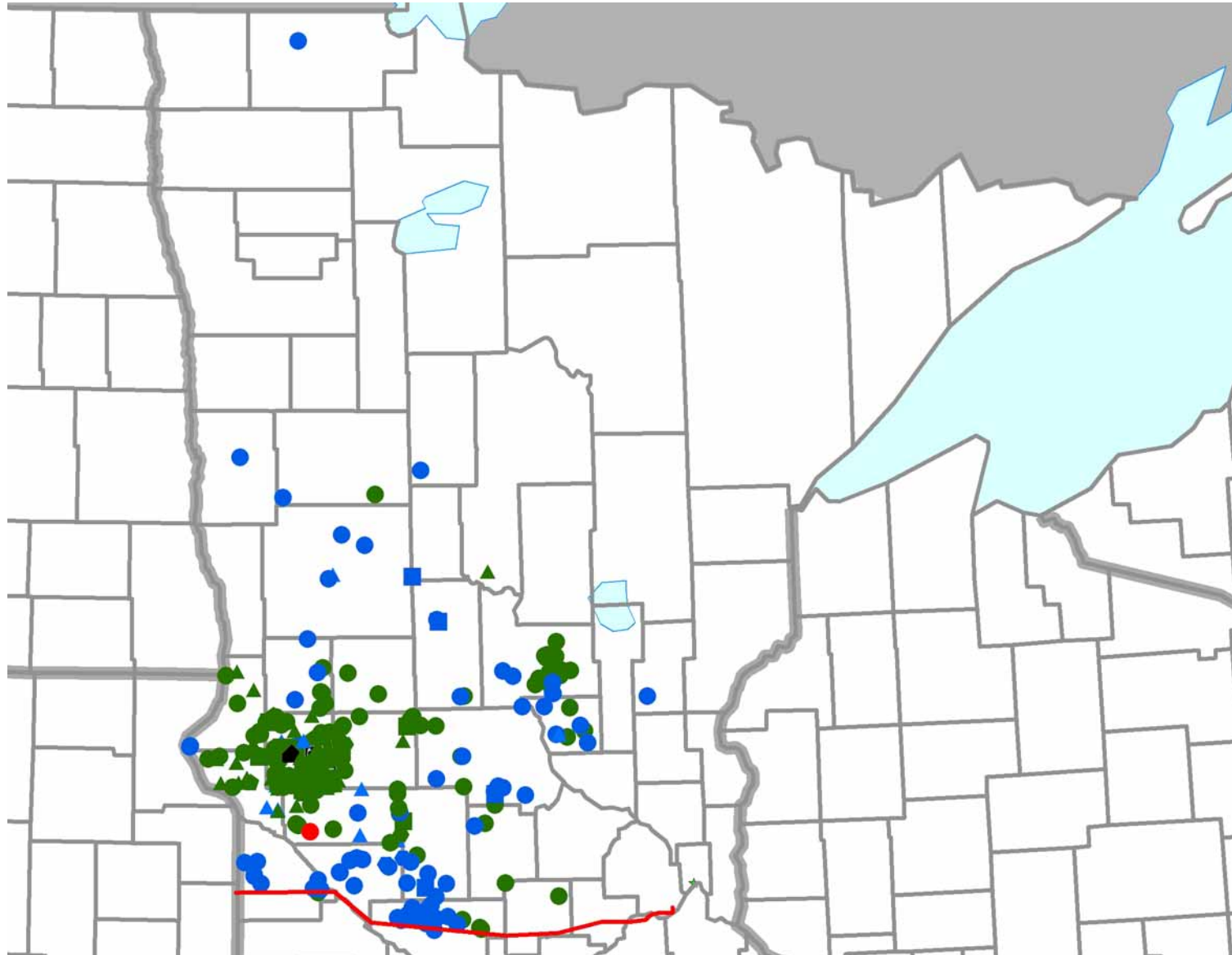
Stevens County – Dec '09



7 counties; Dec '09



N – 212; Dec '09

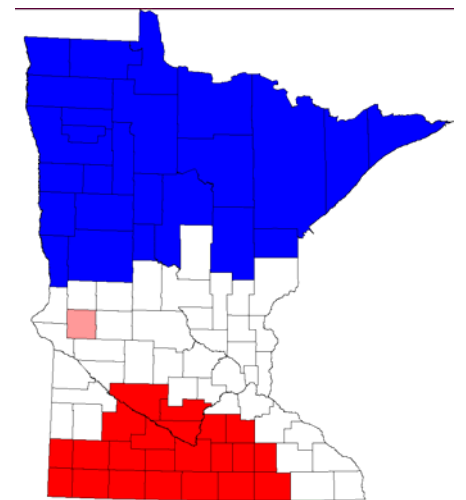


It's the right time to move forward.

- The industry is starting to agree that we need to do something!
 - People are tired of PRRS!
 - Too much has been lost.
 - No “PRV-like” vaccine technology on the horizon.
 - People need a mission.
- It has to be a national program..
 - Other states are starting regional projects.
 - Strong agreement at the NPB swine health committee level.
 - Veterinary support is building across the US.
- Funding for regional projects is available (CAP 2).

Why Minnesota?

- We are in an ideal position to lead
 - Progressive producers and vets
 - Great relationship with UMN swine group
 - Best VDL in the world
- Yes, there will be challenges and questions.
 - Animal movement?
 - Role of government?
 - Producer buy-in?



I Believe We Can:

- Work together to develop a producer-driven, voluntary plan for eliminating PRRSV from Minnesota.
- Provide an example for the nation to follow.
- Turn a negative into a positive.

An Example of MN Leadership

- Resolution 10-01: PRRSV eradication
 - The MPPA recommends that policy be adopted by the NPPC with the end goal of eradicating PRRSV from the US swine herd.
 - The policy should include and identify appropriate government resources and investments for accomplishing this goal but the policy should not make eradicating PRRSV a government mandate.

MN Leadership.

- Resolution 10-01: PRRSV eradication
 - The MPB recommends that the focus of addressing PRRS in MN and the US be eradication of the virus.
 - The MPB urges the NPB to prioritize research and education towards tools and techniques that can eradicate PRRS.

Next steps

- 1. Voluntary program
 - Continue the research
 - Communicate findings and experiences
- 2. Expansion of area control and eradication projects.
 - Northern zone
 - Southern zone
- 3. Building of teams.
 - Collaboration with other states
- 4. Development of plan.
 - MN PETF

~~PPRS~~