

Bovine TB: Living in the Zone

By Laura Moser



After ten years and tens of millions of dollars, Michigan cattle owners and sportsmen are still battling the issue of Bovine Tuberculosis infecting the state's deer and cattle herds. The economic impact of this disease has been devastating. The government has spent millions in personnel, testing, research and indemnity payments to combat the disease. Cattle owners have paid an enormous cost in lost market opportunities, time and resources. The entire state has lost in terms of recreation and tourism dollars; and yet we see no clear end in sight. The impact of this disease is felt the hardest by those living in the midst of it all in the Modified Accredited Zone (MAZ) which includes northern Ogemaw and Iosco Counties and all of Crawford, Oscoda, Alcona, Alpena, Montmorency, Otsego, Antrim, Charlevoix, Emmet, Cheboygan and Presque Isle Counties.

"It has been an emotional roller coaster, with a lot of highs and lows," says Galen Schalk, MMPA Member from Hillman, Mich. "But, after 10 years, the bottoms come more often, are deeper and last longer than they did before. We have seen a lot of people go through state government in the last 10 years, but we are still here. They can move on, but we can't."

Galen, like many other dairy and beef producers, has become a self-educated expert on the subject of Bovine TB. He has attended several state and national conferences addressing this issue and currently serves on a Bovine TB subcommittee for the United States Animal Health Association. His determination to get the right policies and legislation in place to combat this devastating problem has taken countless days and years of his time.

"There is not a day that goes by that I don't think about it," Galen says. "There has been some good done, but it feels like we take one step forward and then two steps back."

Galen and others realize that there is no quick fix to a problem like Bovine TB. To effectively combat the problem all parties involved—the agriculture community, the sportsmen and consumers—need to come to a consensus as to how we are to fix the problem.

"We can't even get everyone in agriculture to agree there is a problem and the best way to fix it," Galen says. "So that makes it even more difficult to get everyone else in agreement. But the bottom line is: we have to have a healthy deer herd to protect our dairy herd."

Dr. John Tilden, Bovine TB Program Director for the Michigan Department of Agriculture, agrees that we all have to work together to reduce the risk of Bovine TB in the woods and on the farm.

"There has been too much finger-pointing with this issue," Tilden says. "We need to stay focused on

putting into practice the measures needed to protect our herds and maintain our markets."

Tilden suggests three things producers can do during the hunting season:

1. making your land available to hunters;
2. increasing the harvest of antlerless deer on your land and
3. not baiting or supplemental feeding deer.

He adds, "wildlife experts are telling us that the way things are currently working it may be another 10 to 20 years before we see this disease reach a level of non-detection. So the question becomes: what do we have to do to sustain for another 10 to 20 years. It is important now, more than ever, for producers to stay engaged and help reshape Michigan's bovine TB eradication efforts."

The research done through vigorous testing of wildlife and cattle has led to some fairly concrete answers. One is that the disease is being spread to the livestock from the wildlife. This is an important determination as officials look to control and eliminate the disease.

Conversely, the most recent findings of Bovine TB in Minnesota determined that it spread from the livestock to the wildlife.

"Knowing that the disease is coming from the wildlife reservoir, we know we have to keep the cows away from the wildlife," Galen says.

The Michigan Department of Agriculture recently launched the Wildlife Risk *A*Syst for Bovine TB program as a way to help producers determine where the risk areas for wildlife contact are on their farms. Tailored after the USDA Environmental Quality Incentives Program (EQIP) and State MAEAP Programs, the Wildlife Risk *A*Syst Program gives cattle owners a tool to eliminate risk of infection on their farm. The finding of a Bovine TB positive deer in Shiawassee County and the recent discovery of

Chronic Wasting Disease in Kent County is a reminder to all producers that preventing the spread of disease includes more than Bovine TB and is not limited to the shaded area on the map.

"Researchers tell us that the most likely way the disease is spread from the wildlife to livestock is through indirect contact through food and water," Tilden says. "So we have to protect our stored feeds and eliminate common feeding and watering areas. This is best done by moving round bales inside or behind fencing and separating livestock from wild deer found near woods and swamps."

Along with technical advice and consultation from wildlife biologists and local conservation technicians, the Wildlife Risk *A*Syst Program offers limited cost-share funding for eligible producers.

"The Wildlife Risk program also seeks to maximize the use of existing funding for farm risk reduction programs like EQIP," Tilden says. "In these economic times, we have to do more with less."

Tilden adds that the government can only do so much to control the problem. "We have to promote individual responsibility. Producers have to own this issue in order to maintain their markets. We have to strike a balance between what government should do and what producers have a personal responsibility to do."

Keeping the cattle and the deer separate has made the difference between Galen and some of his neighbors. Three farms within a five-mile radius of his dairy farm have been infected with Bovine TB and he has removed three infected deer and one infected coyote from his property. The difference is—Galen's cows are confined to the barns and his feed is stored in lighted bunkers close to the facilities.

"We have eliminated the opportunity for the deer and the cattle to co-mingle," Galen says. "We used



MMPA Member Galen Schalk has become a self-educated expert on Bovine TB in the last 10 years.

to put them on pasture and do some intensive grazing, but we now keep them confined to the barn.”

The use of total confinement puts some limitations on his ability to expand, but Galen feels it is worthwhile to keep his herd protected. He also maintains a closed herd, using his own replacements to grow the herd. In the past 10 years he has doubled his milking herd to 200 cows. However, Galen remains realistic that even with these precautions he is not immune from the problem.

“The next logical step for our farm is a fairly decent seven-figure investment. But we have to ask ourselves, ‘do we invest that type of money in an area with the kind of risk we have?’ Because the day after we sign the papers, we could find a positive animal and it would all be over.”

Galen’s discouragement with the TB issues stems from the public attitude and current policies in effect. “Every gas station in this area has large bags of apples, carrots, beets, etc., for sale and we are in a no-baiting zone! Unfortunately, last year we began to see the large bulk loads in the back of pick-up trucks again heading to the hunting camps. Changing these behaviors and mindsets will take a generational change.”

Galen stresses that there are groups and individual sportsmen who take the issue seriously and are working from their vantage point to help control the spread of the disease. But for others, who haven’t felt the impact on their livelihood, they continue with the same practices they have had for 30 or 40 years.

“There has been some good done on the sportsmen’s behalf,” Galen says. “They now include information on the importance of a healthy deer herd in the hunter safety courses and we have been able to obtain disease control permits. But there is still more to do.”

Michigan’s more passive approach to controlling the disease is in stark contrast to the current efforts underway in Minnesota to eliminate Bovine TB in that state. The Minnesota officials are taking an aggressive stand bringing in sharpshooters and helicopters to take out the deer in the infected area.

“They are getting a lot of public pressure but they are not backing down in Minnesota,” Galen says. “One official told us they were ‘supplying everything but the six-pack’ for the hunters to go out and shoot the deer. This is a far cry from what we have done here in Michigan where we have had to beg to get five disease permits. I realize it is

not an apples-to-apples comparison between Minnesota and Michigan, because Minnesota is dealing with a lower prevalence level, but I question if and when we get to a lower prevalence level, will Michigan get that aggressive.”

Before aggressive measures can be taken, Galen believes the public needs to be better informed of the toll this disease has taken on the state. He believes everyone needs to know the importance of having a healthy deer herd in this state.

While Galen feels frustration in the lack of overall progress made, he is grateful to his fellow MMPA and Michigan Farm Bureau members who have passed policies and resolutions supporting the efforts of livestock owners in northeast Michigan.

Tilden also commends the farm organizations like MMPA and MFB for working together to combat this problem. “A lot of individuals, like Galen, have put in a significant amount of time to find solutions to this problem.”

Tilden encourages producers to work with hunters to help manage the deer herd. “The challenge is that as the deer population is growing, the number of hunters is declining. Without enough hunters harvesting deer, the deer population will spiral out of control.”

“This issue affects major economic engines in the state — agriculture, recreational hunting and tourism. It is vital that we walk together down this path to find the solutions that sportsmen and livestock producers can make work in their local communities.”

Wildlife Risk *A* Syst for Bovine TB Project

The Wildlife Risk *A* Syst for Bovine TB Project was launched in Alpena County this past summer to provide resources to producers living in DMU 452. Producers have indicated that the high cost of implementing certain risk reduction practices is a significant barrier. To help reduce this barrier, the Wildlife *A* Syst program was developed in partnership between producers and the USDA, MDA and MDNR, to provide technical advice and consultation from wildlife biologists and conservation technicians to provide limited cost-share funding for eligible livestock producers.

Currently, there are two of the various practices that might be considered for limited State cost share funding: fencing for feed and hoop barn. The State is prepared to provide cost share funding for approved wildlife risk mitigation plans for these two practices

with the following cost share ratios:

- Fencing of feed storage areas: 90 percent MDA; 10 percent producer funded
- Hoop barns: 75 percent MDA; 25 percent producer funded

Tailored after the MAEAP Program and EQIP, the Wildlife Risk *A* Syst Program outlines critical areas necessary to protect herds from disease spread by wildlife.

After 10 years of research, scientists have identified key areas for management. They are:

- Separating their livestock from wild deer to the greatest extent practical by limiting access to areas providing daytime cover to deer
- Protecting stored feeds from wildlife access—storage in closed building or fenced enclosures.

Providing artificial or restricted access water sources.

- Feeding in areas where wildlife cannot access excess feeds (example: fenced in feeding enclosures).

- Allowing hunter access to farmland and using available Department of Natural Resources permits (examples include: Disease Control, Deer Management Assistance and Crop Damage Permits) to control on-farm deer numbers.

Experts and producers agree that a “one size fits all” approach to risk reduction will not work. Plans need to be tailored to each farm’s unique conditions or disease will continue to spread.

Several MMPA Member Representatives have been trained to help members write wildlife mitigation plans. Contact your member representative or the Novi Office if you need help in preparing a wildlife mitigation plan.

Wildlife Risk *A* Syst Project Risk Reduction Practices

Practice	Purpose	Conservation Practice Code	Potential Cost Share Program
Comprehensive nutrient management plan	Prevent environmental degradation due to livestock concentration	100	USDA-NRCS EQIP
Fencing - deer-proof (> 8 ft)	Exclude wild deer/elk from stored feed and cattle feeding areas	382	State of MI
Fencing - livestock	Exclude livestock from natural water sources and prime deer habitat (examples: swamps and woodlands)	382	USDA-NRCS EQIP
Hay feeders	Reduce wild deer/elk access to livestock feed	NA	State of MI
Heavy Use Area Protection	Establishment of solid surface to feed livestock on near buildings during winter – prevent erosion	561	USDA-NRCS EQIP
Hoop houses	Exclude wild deer/elk from stored feed	NA	State of MI
Livestock handling equipment (chutes & gates)	Facilitate TB testing	NA	State of MI
Prescribed grazing plan & brush management	Improve pasture productivity and decrease livestock exposure to deer cover	528, 314	USDA-NRCS EQIP
Shelter - artificial windbreak and shade	Provide alternative shelter for livestock previously wintered in wooded areas.	NA, 380	State of MI USDA-NRCS EQIP
Waste Storage Facility	Storage of animal wastes as a result of feeding livestock near buildings during winter	313	USDA-NRCS EQIP
Watering systems - artificial (examples: tanks, pipelines, wells, spring development)	Provide alternatives to natural water sources used by wild deer/elk	516, 614	USDA-NRCS EQIP
Watering systems – upgrade/restrict access to natural sources	Reduce potential for waterborne spread of bovine TB between wildlife and cattle	516 614	USDA-NRCS EQIP