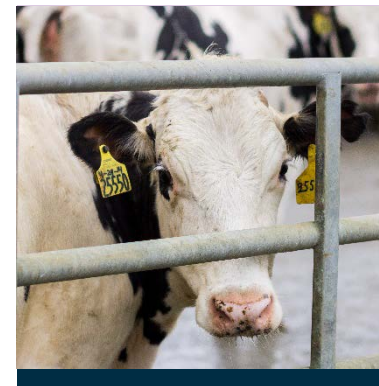
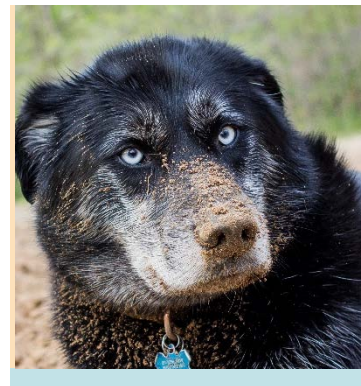


# Bovine Tuberculosis Update



**James Averill, DVM, PhD**

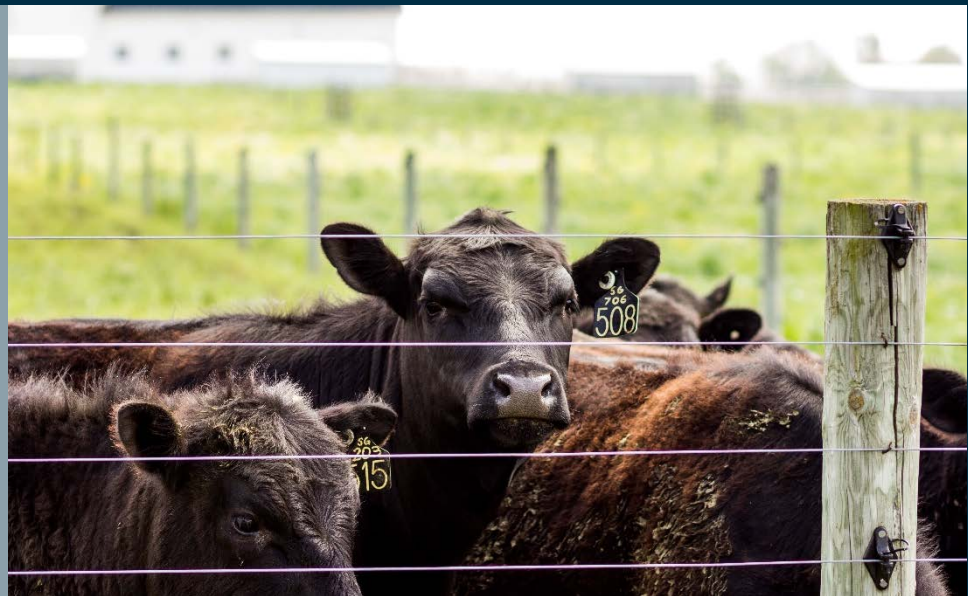
State Veterinarian

MICHIGAN DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT

# Outline

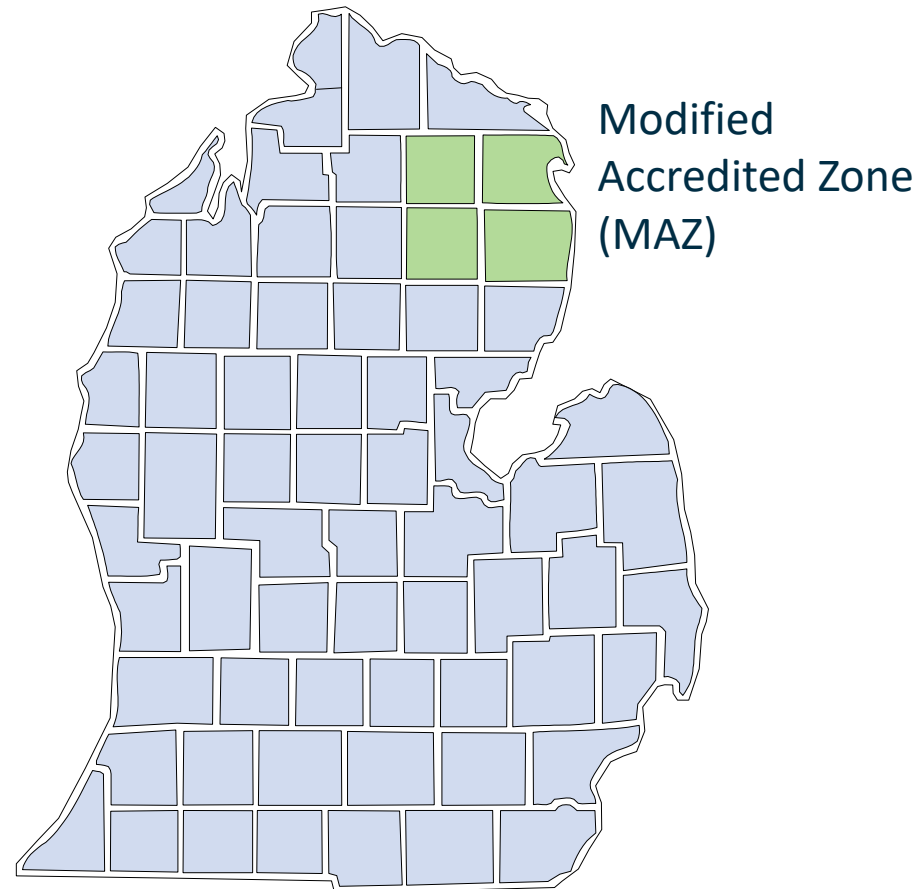
- USDA concerns
- TB 2017
- Moving forward
- Summary

# USDA Concerns



# MOU Violation

- The current MOU with USDA permits Michigan to have up to three bovine TB infected herds in the MAZ in a 12 month period
- In 2016, Michigan had five infected herds

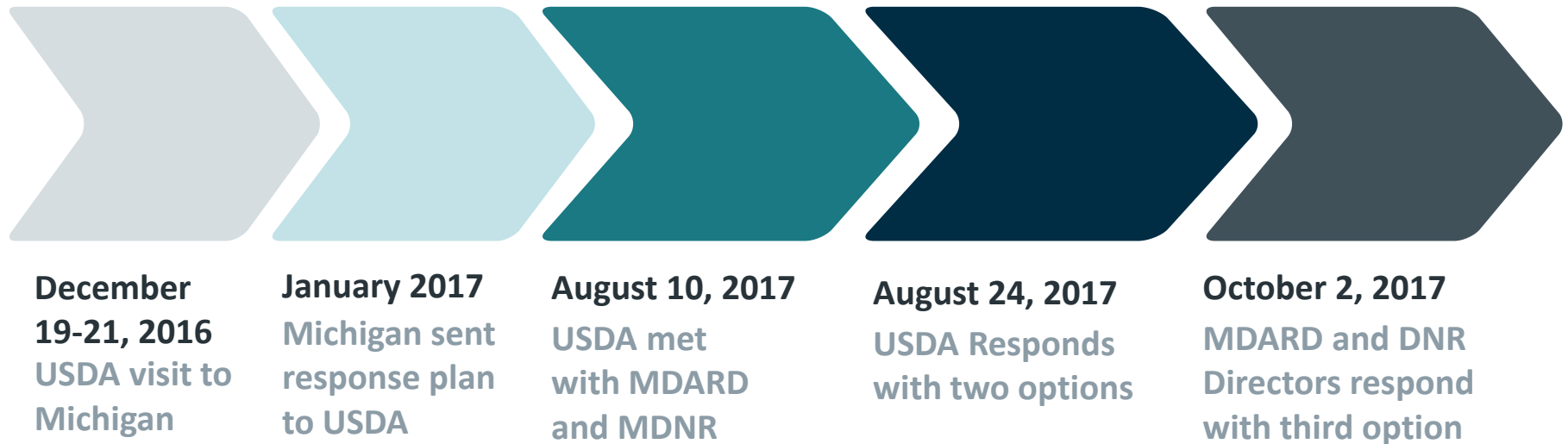


# Five Level of Status in National TB Program

- TB Free
- Modified Accredited Advanced (MAA)
- Modified Accredited (MA)
- Accredited Preparatory (AP)
- Non-accredited



# USDA Response



**October 16, 2017**

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USDA has agreed to meet with MDARD and MDNR to discuss situation

# USDA's Two Proposals

## **Option One:**

**Down grade status of four county Modified Accredited to Accredited Preparatory**

## **Option Two:**

**Down grade status of entire state to Modified Accredited**



# Third Option

- No reduction of program status for any portion of Michigan
- Upgrade biosecurity program in four county MAZ, and Presque Isle
  - Twice year inspection
  - Enhanced Biosecurity within DMU 452
- Targeted deer removal
- Increase grant programs
- Additional special hunts



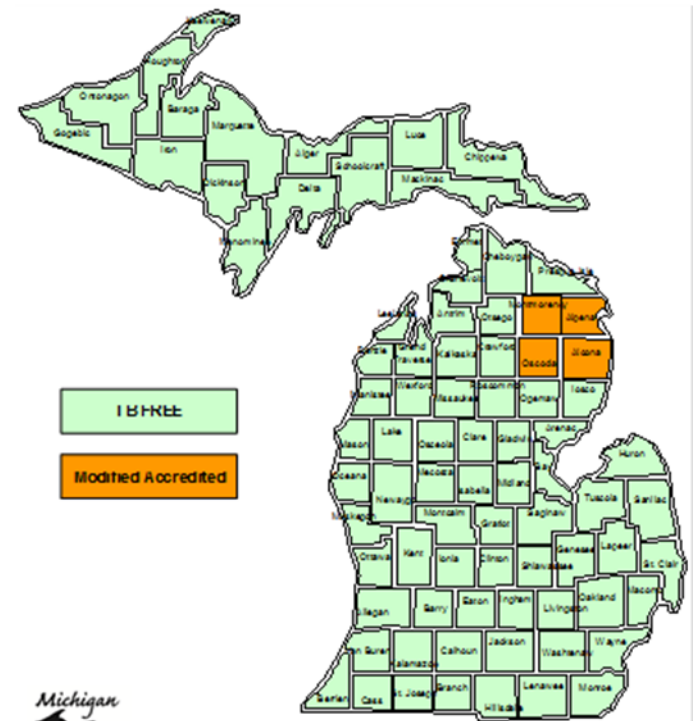
# TB in 2017



# Modified Accredited Zone

- Modified Accredited Zone: Alcona, Alpena, Montmorency and Oscoda counties
- 344 commercial herds + 90 freezer beef herds

Michigan Bovine Tuberculosis Zones  
October 13, 2014

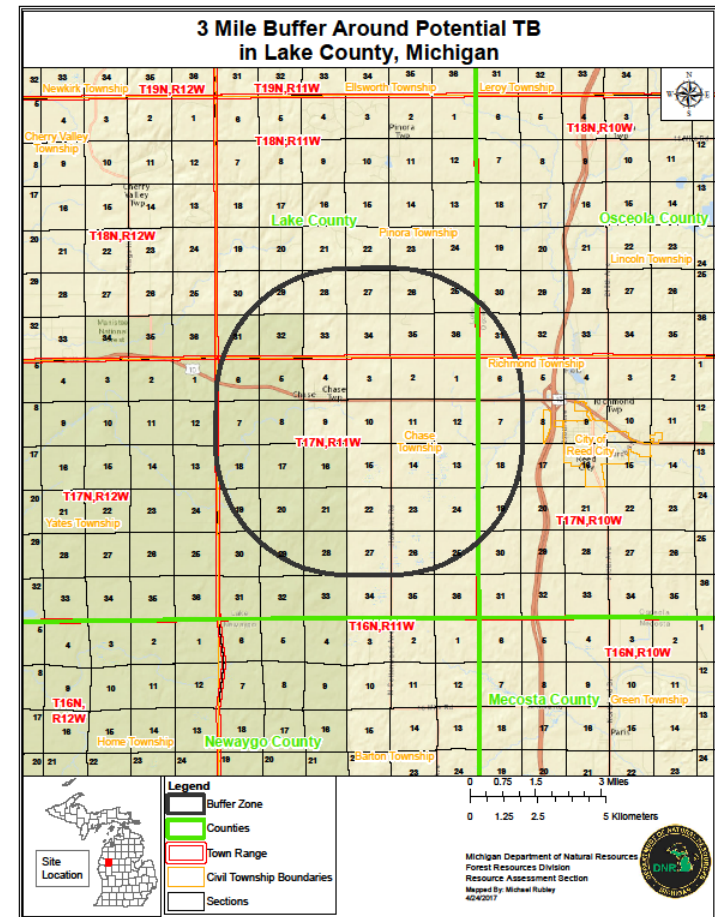


# Bovine TB in 2017

- 1 infected herd in MAZ (Alcona County)
- 1 infected herd in Newaygo County with trace back to MAZ
- 1 infected herd in Lake County with trace back to Indiana

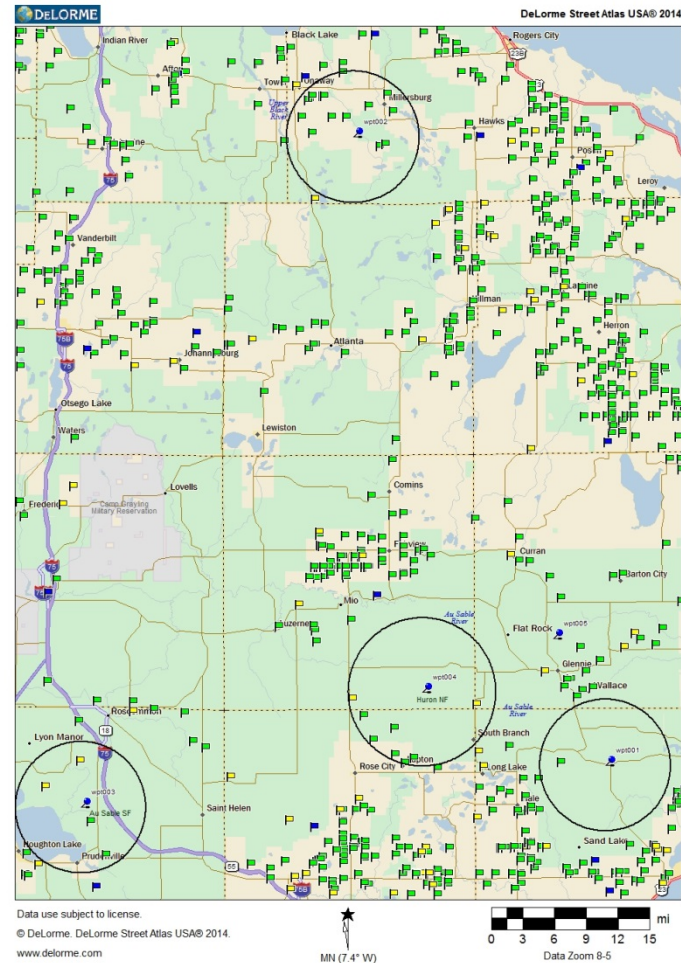
# Circle Testing In 2017 Relating to Affected Cattle

- 3 mile circles in:
  - Newaygo County
    - 28 herds/4,779 head
  - Lake county
    - 39 herds/965 head
- No disease discovered





# Circle Tests in 2017 Relating to White-Tailed Deer

- 6.2 mile circles in:
  - Presque Isle County
    - 15 herds/ 392 head
  - Iosco County
    - 1 herds/33 head
  - Ogemaw
    - 5 herds/336 head
  - Roscommon County
    - 2 herds/84 head
- No disease discovered









# 2017 BOVINE TUBERCULOSIS SURVEILLANCE IN MICHIGAN'S FREE-RANGING WHITE-TAILED DEER

## Legend

-  Deer Management Unit 452
-  County Lines

## I. ACTIVE SURVEILLANCE

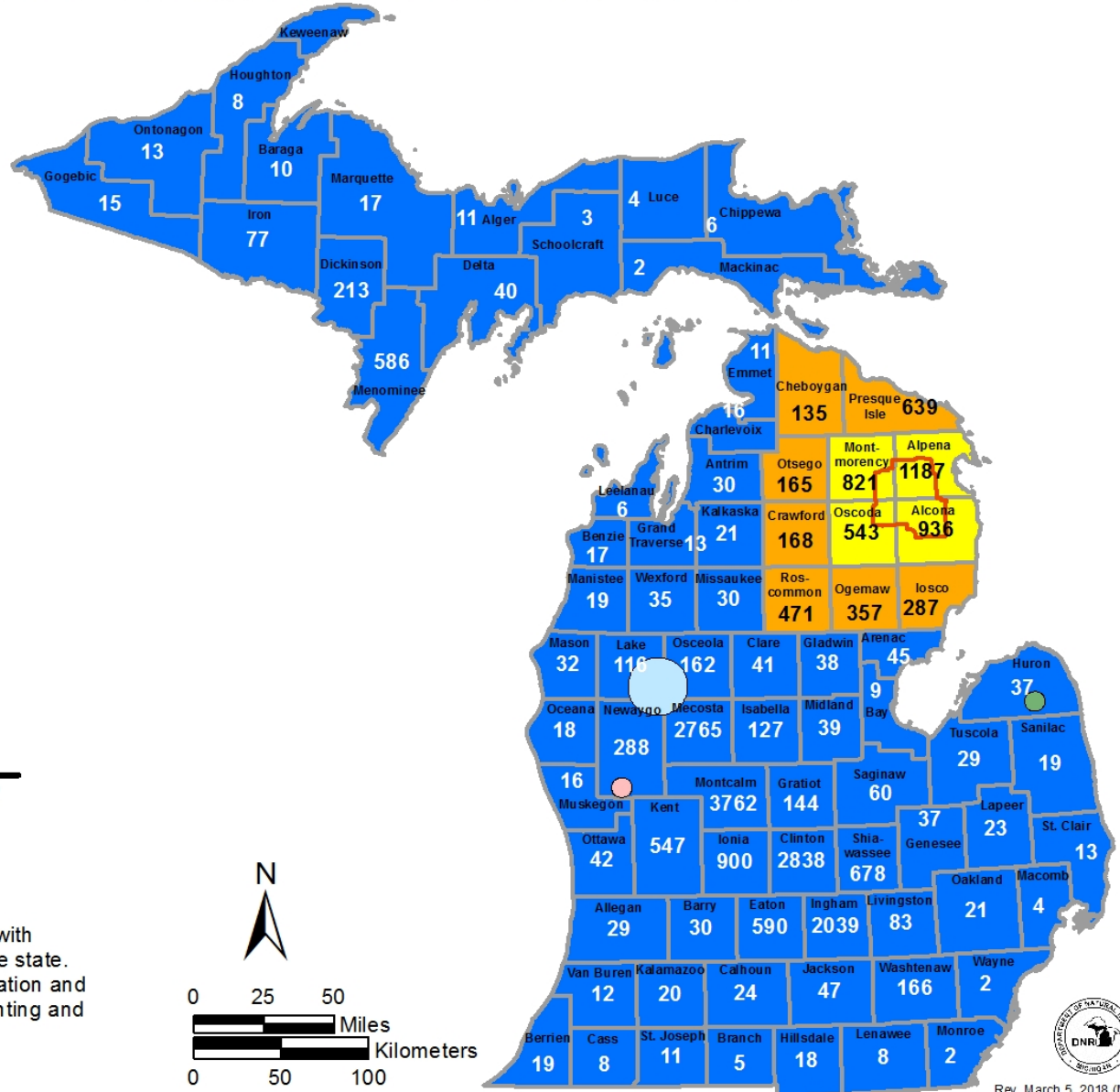
(Hunters voluntarily submit heads for examination)

ZONE	Sample Goal	Samples Tested
	2,800	3,485
	1,500	2,222
	0	17,086
3-mile radius circles		
	300	199
	30	37
	30	18

**TOTAL**      4,660      23,047

## II. PASSIVE SURVEILLANCE

(Hunters may submit deer carcasses with TB chest lesions from anywhere in the state. Hunters are educated through information and color pictures of TB lesions in the Hunting and Trapping Guide and TB brochure.)



# Michigan White-tailed Deer TB Surveillance



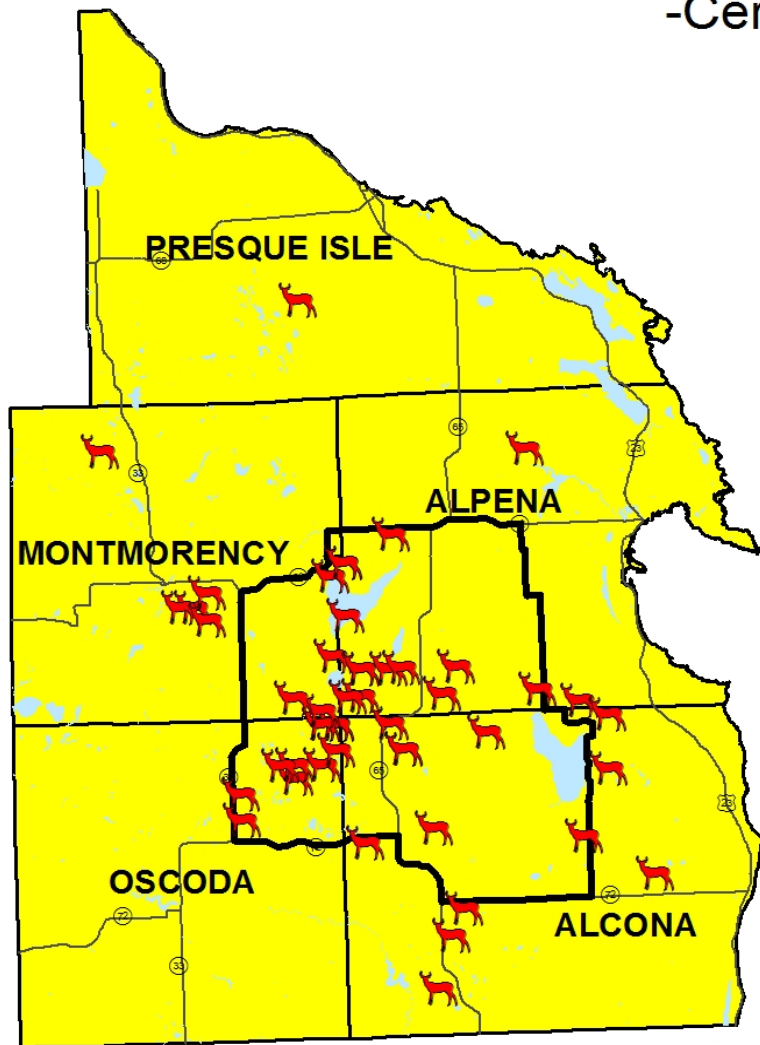
As of March 8, 2018

Year	Positive	Total Deer Tested
1975 & 1994	2	2
1995	18	403
1996	56	4,966
1997	73	3,720
1998	78	9,058
1999	58	19,497
2000	53	25,855
2001	61	24,278
2002	51	18,101
2003	32	17,306
2004	29	15,134
2005	16	7,365
2006	41	7,918
2007	27	8,316
2008	37	16,312
2009	31	5,723
2010	24	4,974
2011	17	6,026
2012	23	4,725
2013	21	5,903
2014	12	4,266
2015	34	8,461
2016	29	12,029
2017	49	23,048
2018*	3	1,562
<b>Grand Total</b>	<b>872</b>	<b>254,912</b>







\*testing for current year on-going

# 2017 Bovine Tuberculosis Survey Results

## -Cervids-

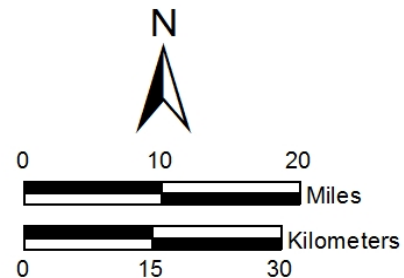
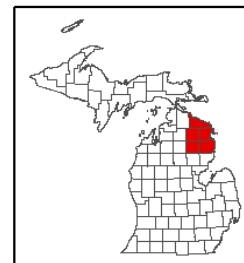


**Legend**

-  Location of TB Positive Deer
-  DMU 452
-  County with Positive Deer 1975-2017
-  County Line
-  Water
-  Highway

**Total Positive Deer**

**49**





# Apparent TB Prevalence in White-tailed Deer



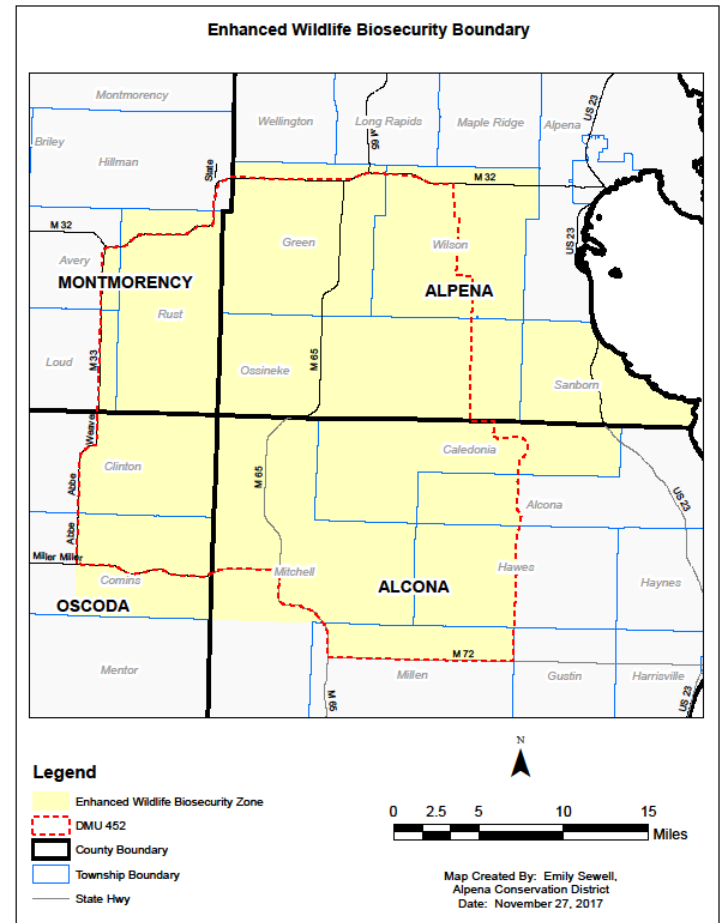
Year	DMU452	5-Co.Outside DMU452
1995	4.9%	(no testing)
1996	2.5%	0.2%
1997	4.7%	0.4%
1998	2.7%	0.3%
1999	2.4%	0.2%
2000	2.5%	0.4%
2001	2.3%*	0.5%
2002	2.6%	0.5%
2003	1.7%	0.2%
2004	1.7%	0.2%
2005	1.2%	0.1%
2006	2.3%	0.3%
2007	1.4%	0.2%
2008	1.9%	0.3%
2009	1.9%	0.4%
2010	1.8%	0.2%
2011	1.2%	0.1%
2012	1.7%	0.3%
2013	1.7%	0.2%
2014	1.0%	0.2%
2015	2.7%	0.3%
2016	2.0%	0.3%
<b>2017</b>	<b>2.3%</b>	<b>0.6%</b>

# Moving Forward



# New Zoning Order

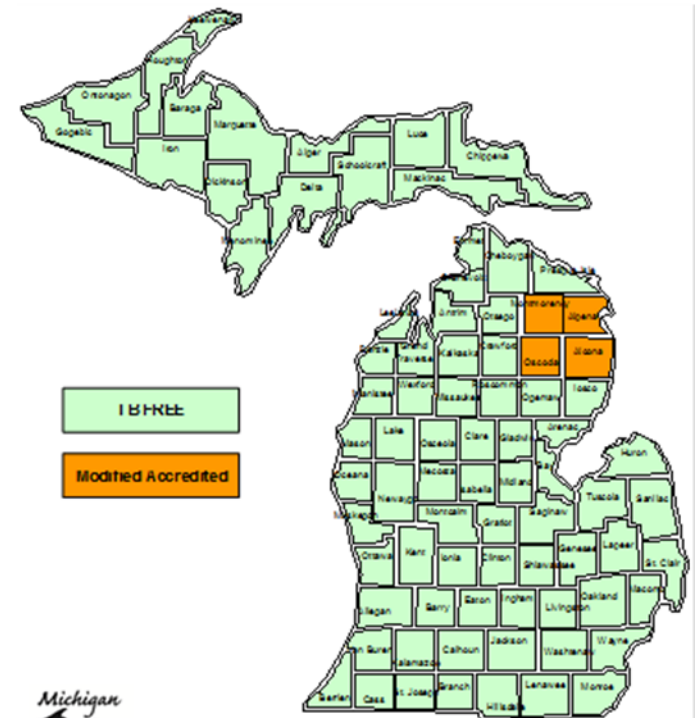
- New Zoning Order signed March 21, 2018
- Recognizes Enhanced Wildlife Biosecurity Area
  - Signed agreement with Wildlife Services by July 15, 2018
  - Mitigate all high risk areas by Dec. 31, 2019



# New MOU in 2018

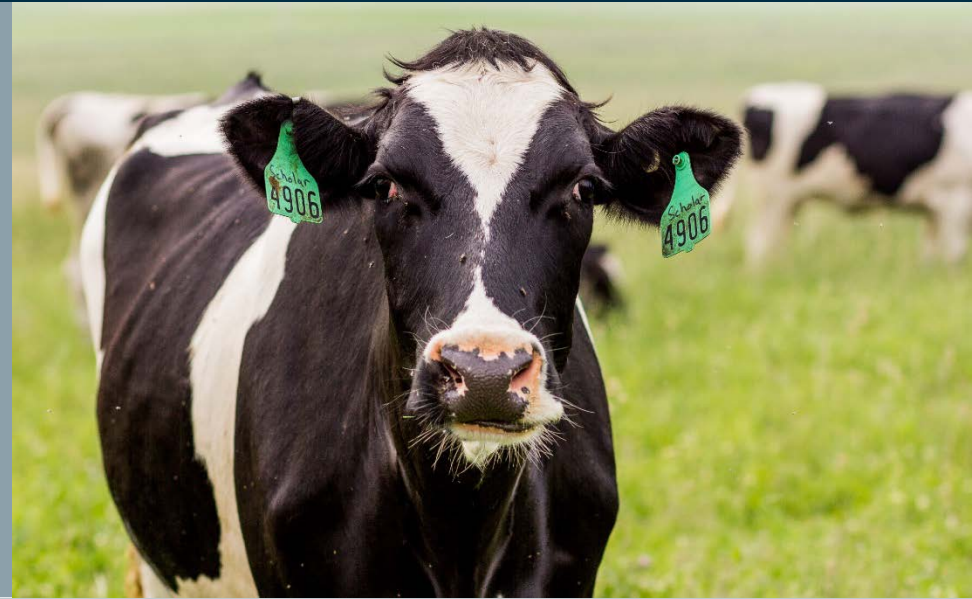
- Michigan exceeded the allowed 3 TB infected cattle herds in MAZ in 2016
- In negotiations with USDA for a new MOU

Michigan Bovine Tuberculosis Zones  
October 13, 2014





# Summary



# Why We Do What We Do



# Summary

- Protect, Regulate, and Promote Animal Health
- Michigan violated MOU in 2016 and 2017
- Deer prevalence is increasing
- Need to take a new approach
- In discussion with USDA

# Questions?

**James Averill, DVM, PhD**

State Veterinarian

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Stay connected with MDARD.



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