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Photo: M. Cosgrove, MDNR

# 2019 BOVINE TUBERCULOSIS SURVEILLANCE



Natural Resources  
Commission Update  
April 16, 2020

# 2019 Bovine Tuberculosis (TB) Surveillance in Free-Ranging White-tailed Deer, Michigan

## Legend



**Deer Management  
Unit 452**



**County Lines**

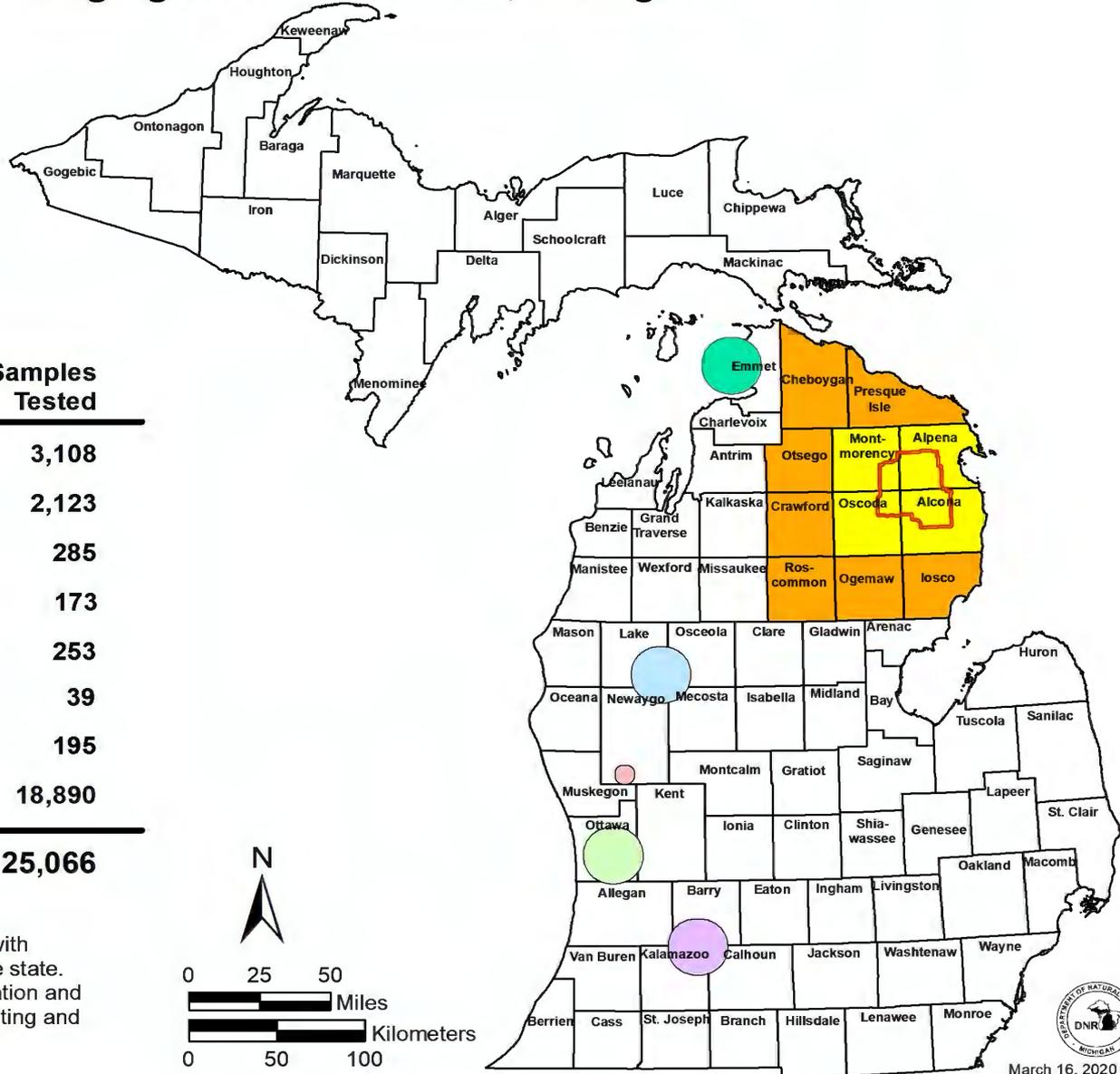
## I. ACTIVE SURVEILLANCE

(Hunters voluntarily submit  
heads for examination)

Testing Zone	Sample Goals	Samples Tested
	2,800	3,108
	2,100	2,123
	300	285
	300	173
	300	253
	100	39
	30	195
	0	18,890
<b>Total</b>	<b>5,930</b>	<b>25,066</b>

## 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.)



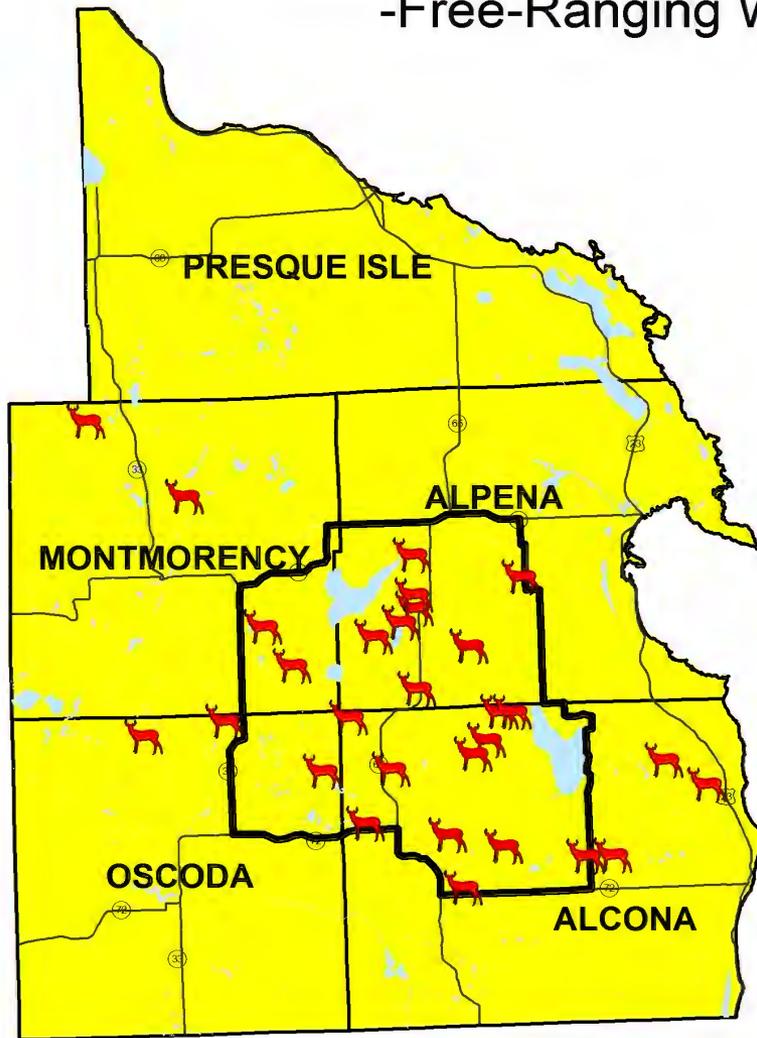
# Michigan White-tailed Deer TB Surveillance



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	12,030
2017	49	23,071
2018	26	35,618
<b>2019</b>	<b>31</b>	<b>25,066</b>
2020*	2 susp.	655
<b>Grand Total</b>	<b>931</b>	<b>314,749</b>

\*As of March 30, 2020, testing for current year ongoing

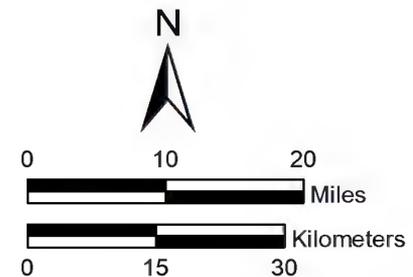
# 2019 Bovine Tuberculosis Survey Results -Free-Ranging White-tailed Deer-



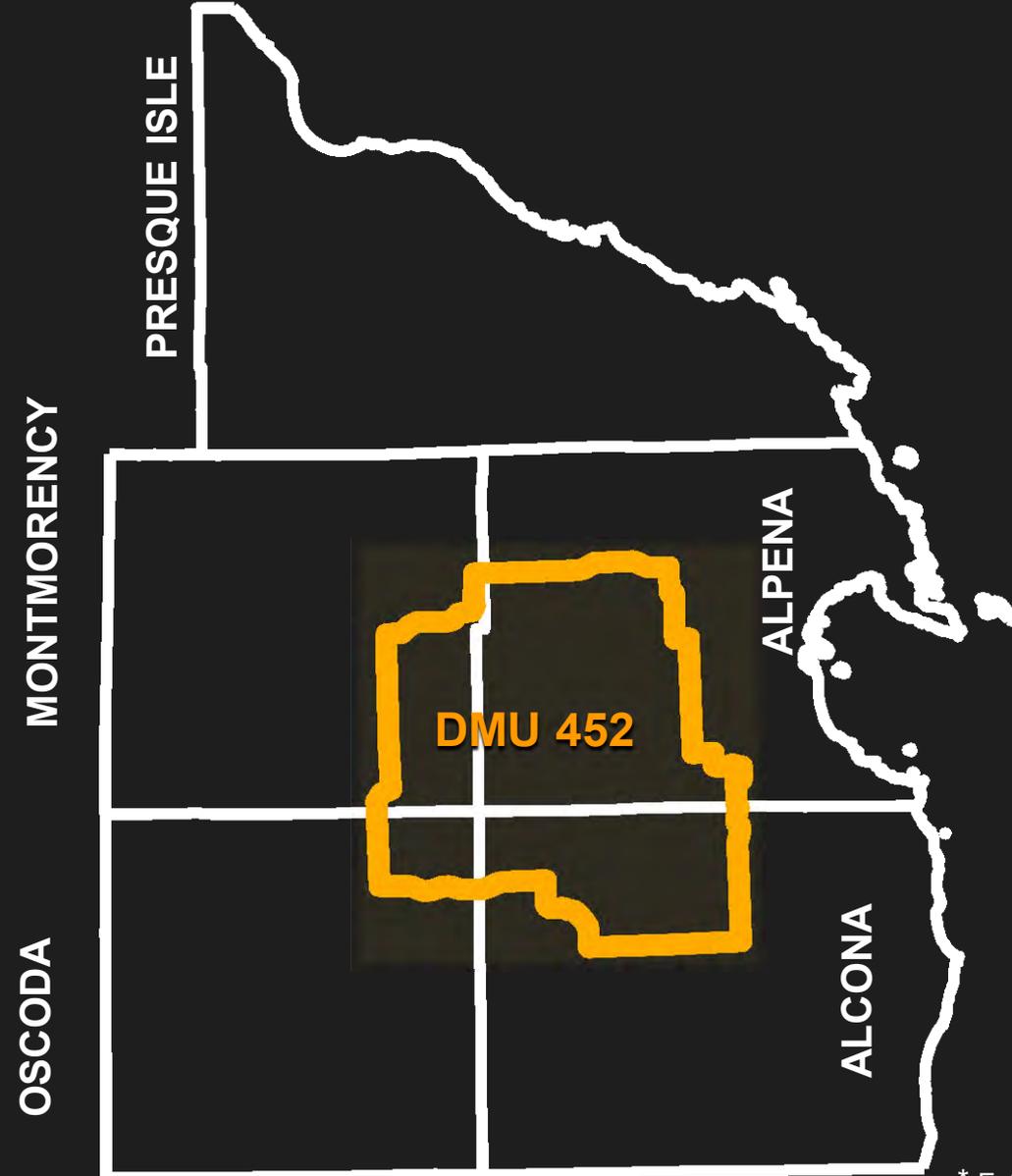
## Legend

-  Location of TB Positive Deer
-  DMU 452
-  County with Positive Deer 1975-2019
-  County Line
-  Water
-  Highway

**Positive Deer 2019 = 31**  
**Positive Deer 1975-2019 = 929**



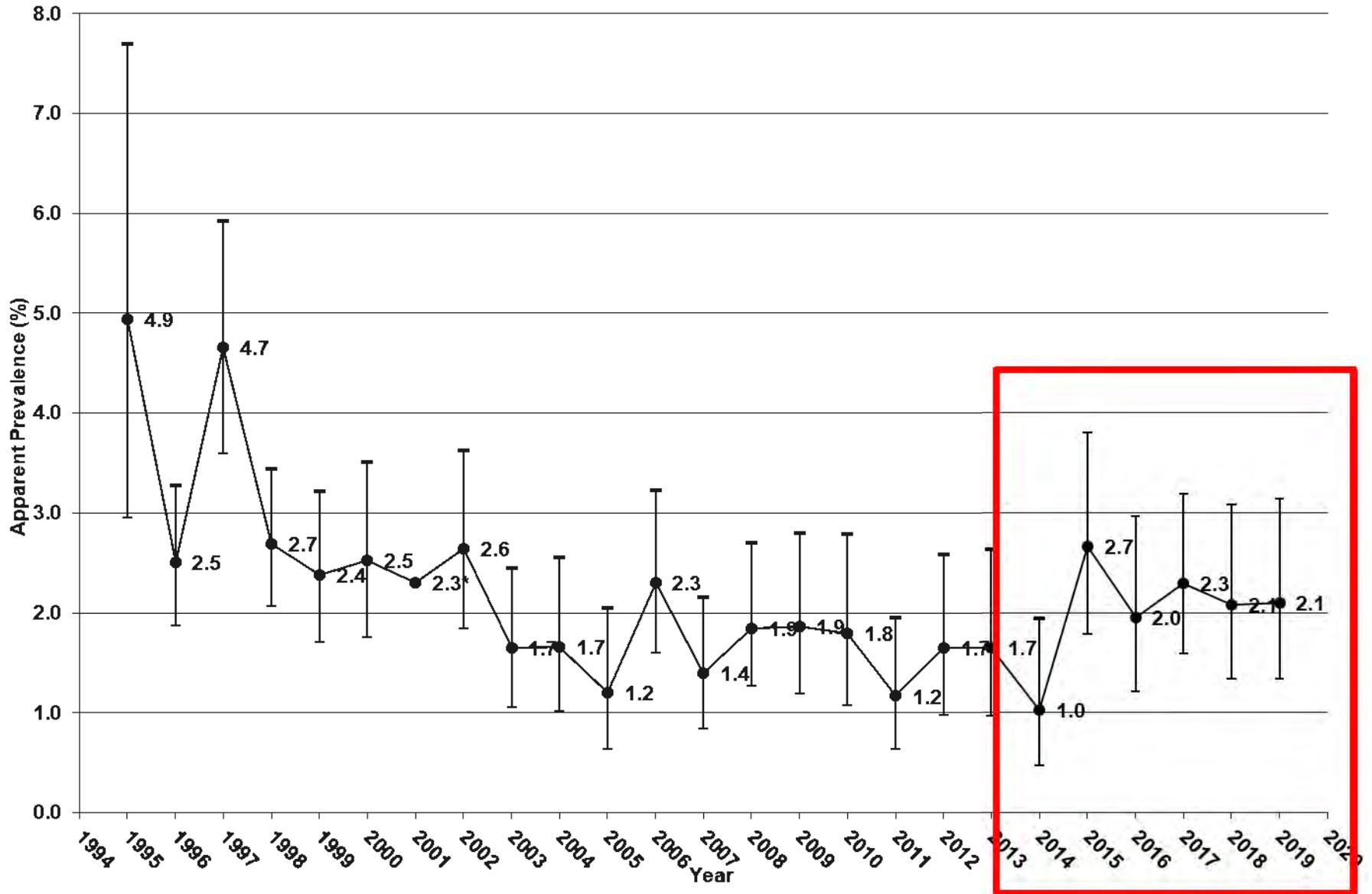
# Apparent TB Prevalence in White-tailed Deer



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%
2017	2.3%	0.6%
2018	2.1%	0.1%
<b>2019</b>	<b>2.1%</b>	<b>0.4%</b>

\* Extrapolated from head only apparent prevalence; Mandatory head testing.

# Apparent Prevalence of Bovine Tuberculosis (w/95% Confid. Limits), Adult White-tailed Deer, DMU 452, 1995-2019



THANK YOU. QUESTIONS?

[www.michigan.gov/emergingdiseases](http://www.michigan.gov/emergingdiseases)



# MDARD TB UPDATE

## Natural Resources Commission



**Nancy Barr, DVM**  
Assistant State Veterinarian  
TB Program Coordinator

**2000-2003:**  
Statewide cattle surveillance testing



**2004:**  
First split-state status granted



**2005:**  
Upper Peninsula regains TB Free status



## *Bovine Tuberculosis Status Milestones*

**2010:**  
Presque Isle becomes MA with Alcona, Alpena, Oscoda, and Montmorency & six counties go MAA



**2011:**  
Presque Isle moves to MAA & the rest of Michigan moves to TB free status



**2014:**  
79 of 83 counties (95%) regain TB Free status

*Current MA counties represent 1.7 percent of Michigan cattle herds*



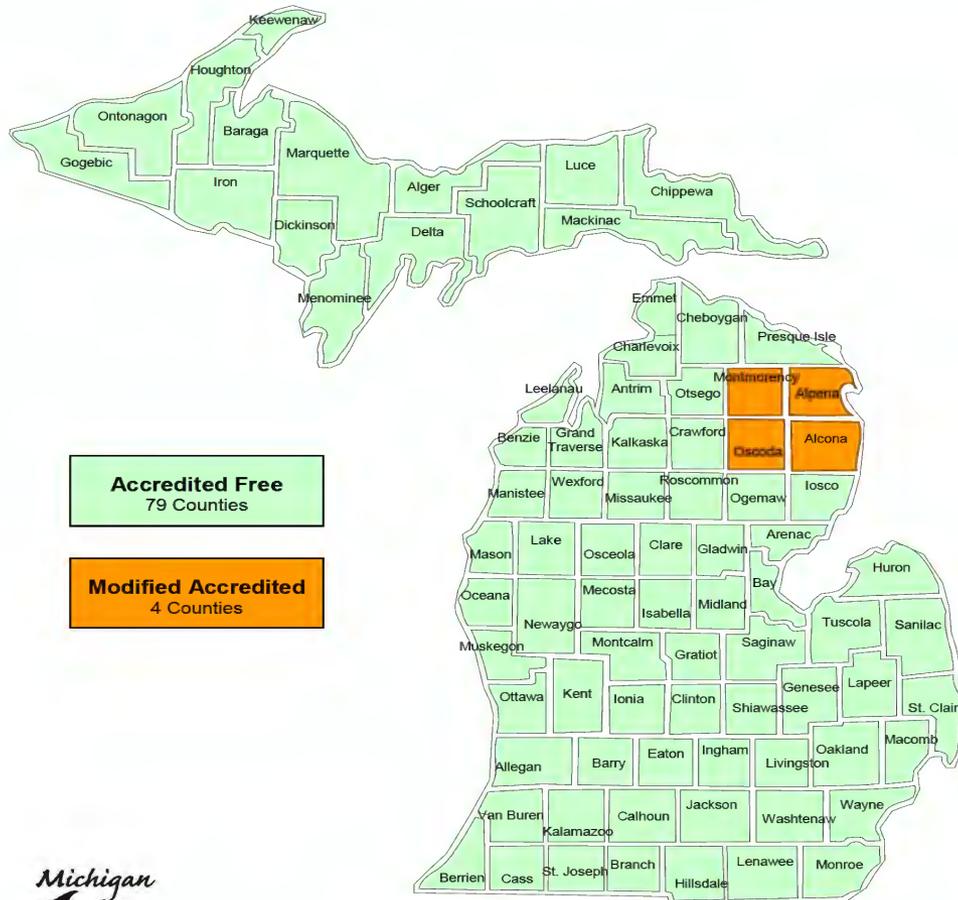
 **Modified Accredited (MA)**

 **Modified Accredited Advanced (MAA)**

 **TB Free**

# Current Split-State Status

**Michigan Bovine Tuberculosis Zones**  
Effective October 13, 2014



**Accredited Free**  
79 Counties

**Modified Accredited**  
4 Counties



# 2019 Cattle Cases

- TB infected cattle herd was found in Presque Isle County – Herd #75 (AFZ)
- genotype of TB matching those found in the deer in that county, indicating that the TB in the deer had spilled over into cattle
- Presque Isle had not had a positive herd in nearly 20 years.
- An animal sold from the PI herd to an Emmet County herd prior to being identified as infected
- Herd #76 in Emmet County (AFZ)

# 2019 MOU Negotiations

- April 2019 MOU required negotiations if M1 strain TB found in the AFZ
- These discussions led to a new MOU, signed in December 2019
- USDA agreed to maintain the current split-state status at this time, but requires further TB control and surveillance activities surrounding the MAZ

# December 2019 MOU

- The requirements for Presque Isle County will now be the same as those in the MAZ
- Increased surveillance in buffer counties surrounding the MAZ is also required
- Deer surveillance in all counties surrounding the MAZ must be increased
  - If 300 deer per county are not tested in 2020, cattle producers in that county will have tri-annual testing requirements
  - This is in addition to 150 herds/year requirement

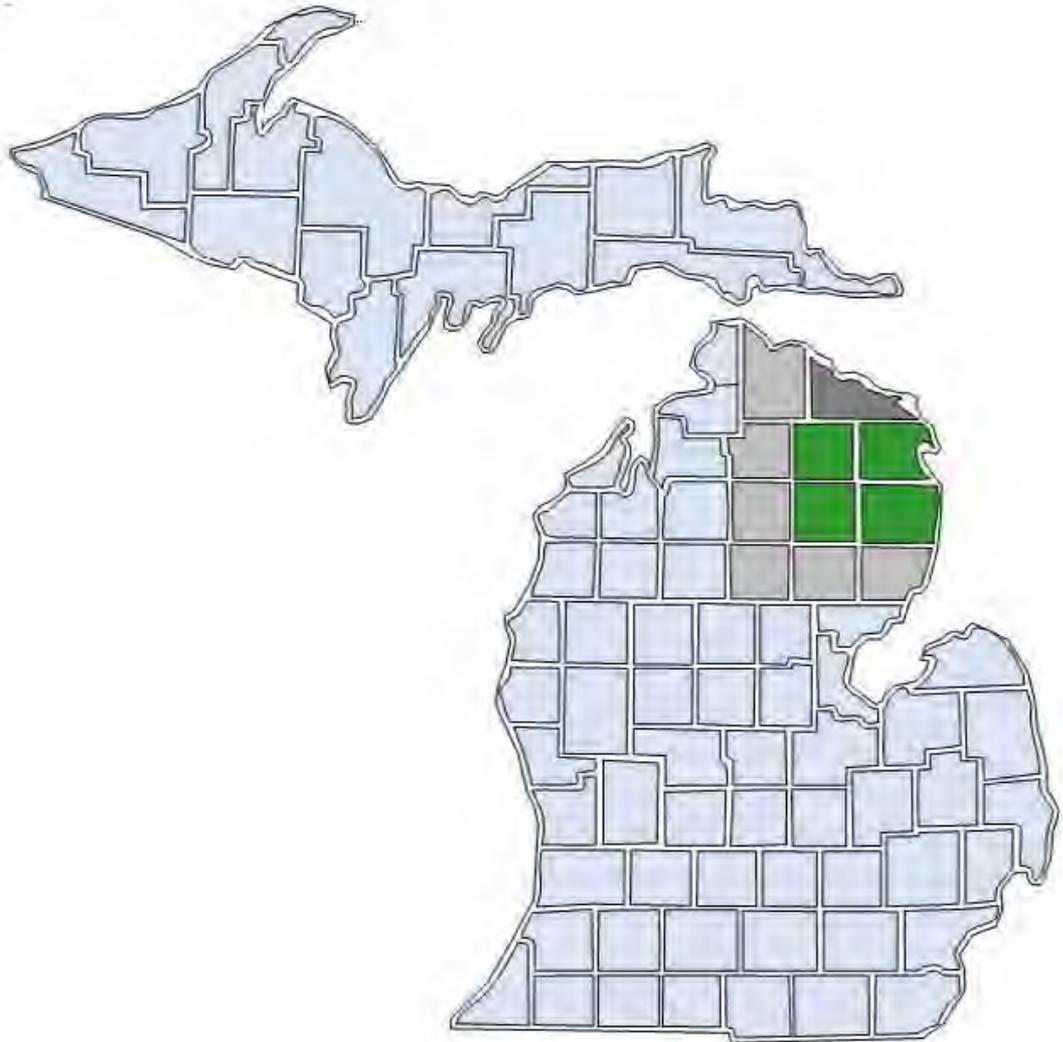
# Deer surveillance – buffer counties 2019 – Jan 2020

County Name	Total Tested 2019-2020
Cheboygan	151
Crawford	202
Iosco	307
Ogemaw	364
Otsego	167
Presque Isle	522
Roscommon	391

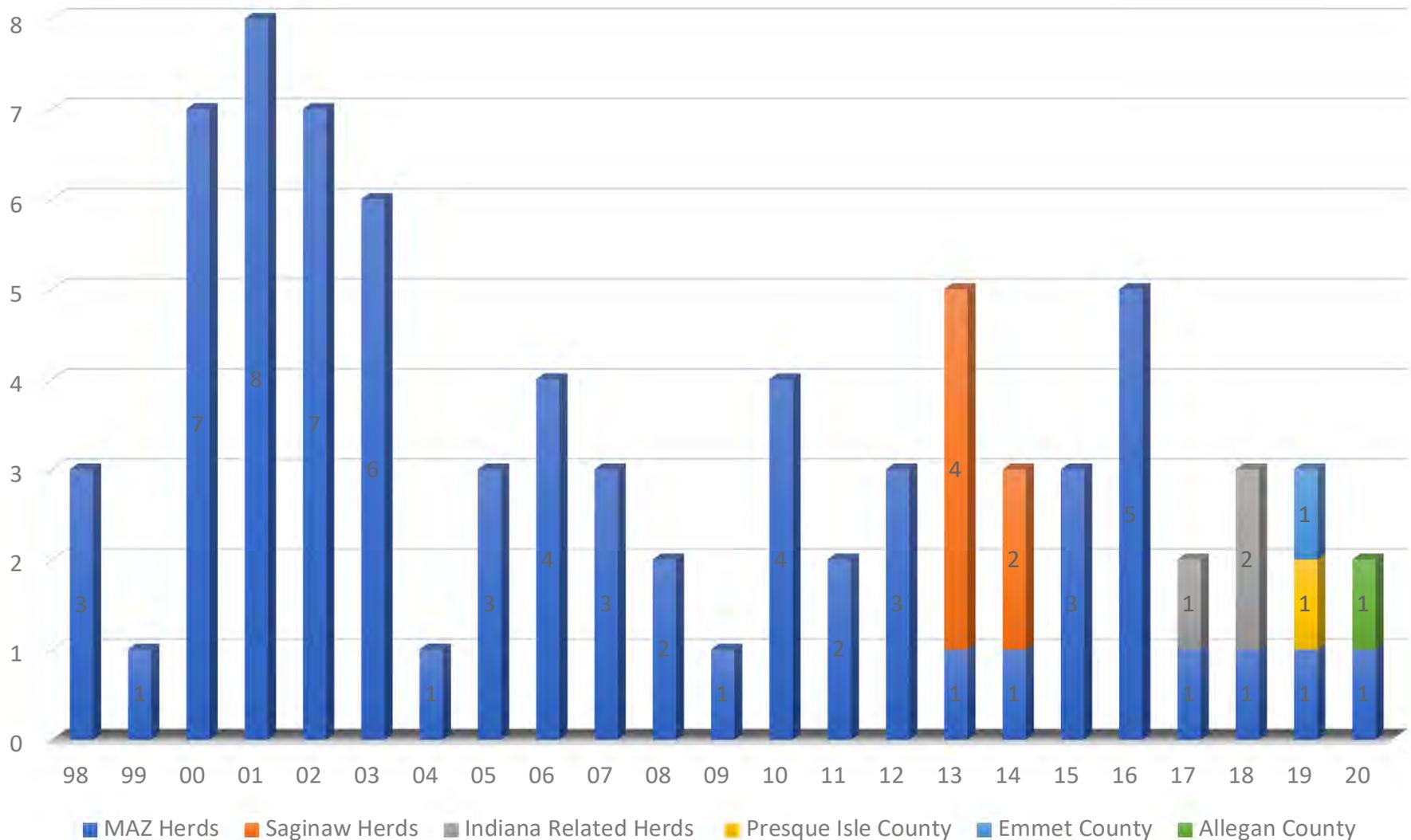
Data from MDNR January 31, 2020

# 2020 Zoning Order Counties with New Requirements

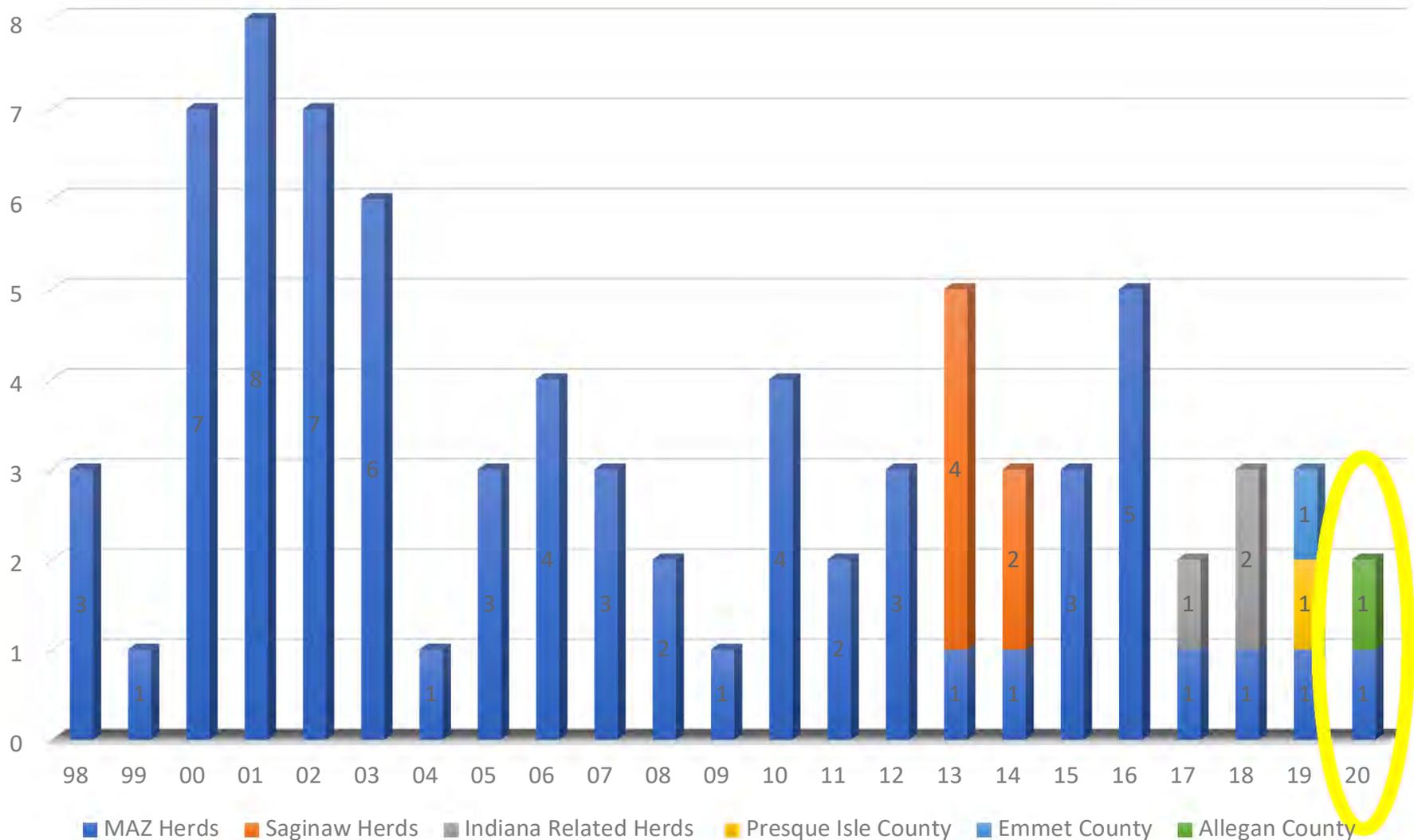
-  Modified Accredited Zone:  
Alcona, Alpena, Montmorency, Oscoda
-  Accredited Free Zone:  
Presque Isle
-  Accredited Free Zone:  
Cheboygan, Crawford, Iosco, Ogemaw,  
Otsego, Roscommon



# TB Affected Cattle Herds



# TB Affected Cattle Herds



# MOU Negotiations - 2020

- Two premises found positive in Accredited Free Zone in 2020
- Both were traces from the 2020 Alcona herd
  - One infected herd in Allegan County (#78 – AFZ)
  - One infected feedlot in Saginaw County (Feedlot #6 - AFZ)

Finding these herds with MI strain bovine TB in the Accredited Free Zone will lead to renewed negotiations with USDA and potentially another MOU.

Questions?



@MIDeptofAgriculture



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of Agriculture & Rural  
Development



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