# 2024 Menominee White Tailed Deer Survey Menominee Indian Tribe of WI.

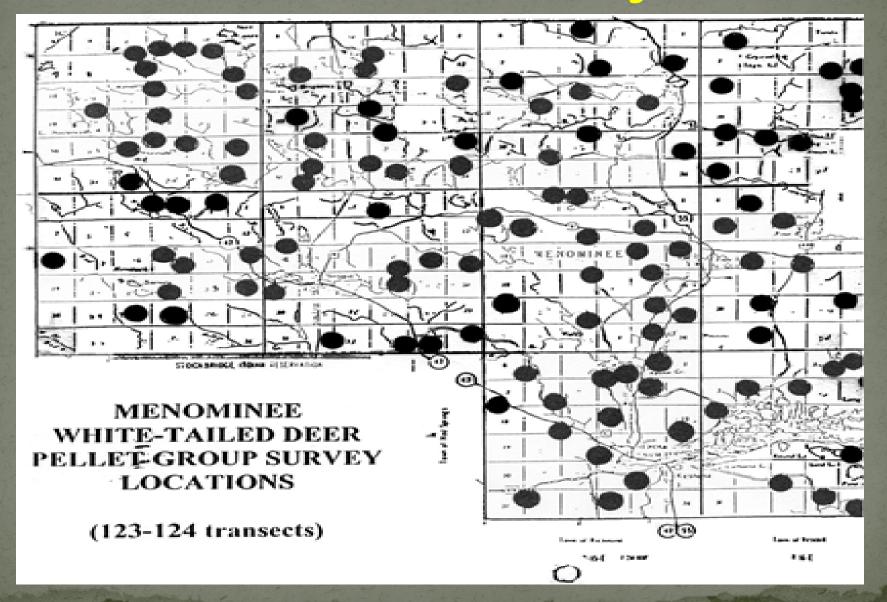




Environmental Services Department (ESD) wish to thank all individuals that have assisted in gathering deer data:

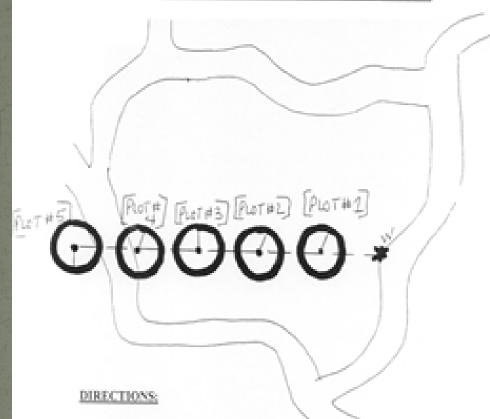
Joe Lyons, ESD
Kyle Lyons, ESD
Cierra Dickenson, ESD
Reynold Waukau, MTE
Tom Notinokey, MTE
Ron Waukau, Jr., MTE
Kenew LaTender, MTE

### White Tailed Deer Survey Routes



### White Tailed Deer Route Example

MENOMINEE INDIAN RESERVATION DEER PELLET GROUP SURVEY EXAMPLE



- 1.) Find and Mark Plot Center.
- 2.) 16.5 Degree Radius Circle.
- 3.) Count All Deer Pellet Groups.
- 4.) Paint Transect Route For Future Runs.
- 5.) Transect Survey Location (N,E,S,W) Will Be Supplied.
- 6.) 4 Chains X 66 Feet = 264 Feet Between Plots.
- 7.) Total Transect Length = 1320 Feet.

**Find and Mark Plot Center** 

16.5 Radius (33 Feet Total)

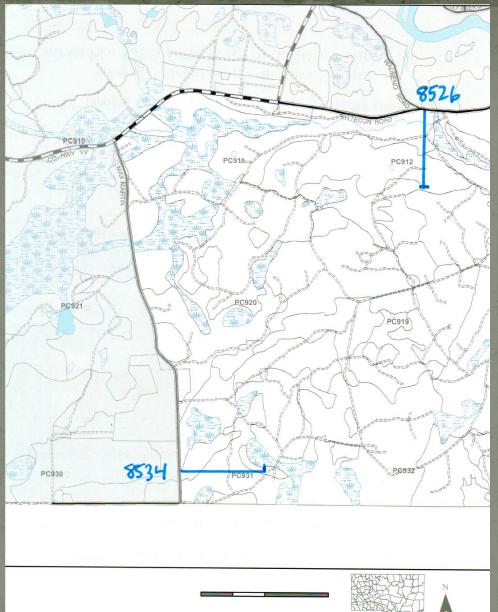
**Count All Deer Pellet Group Counts** 

**Paint in Transect Line** 

Survey can go East, West North or South

**4 Chains between Plots** 

4 Chains X 66 Feet = 264 Feet Total Length = 1320 feet

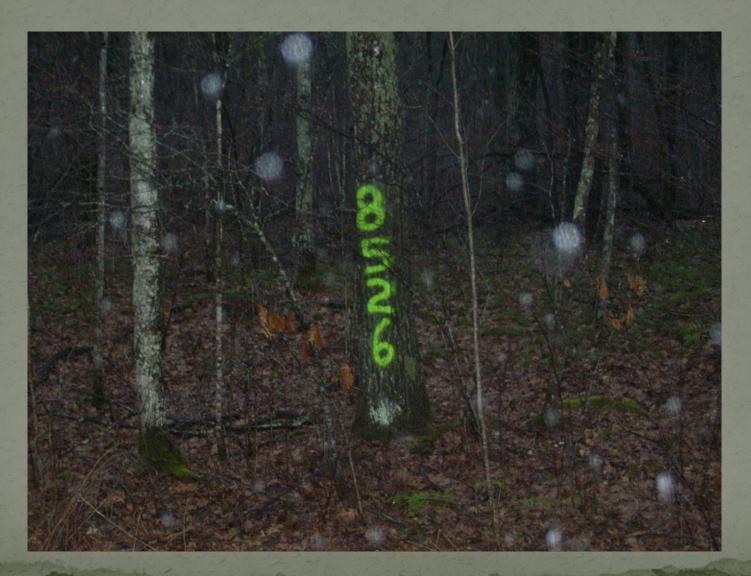




#### 2016 WHITE-TAILED DEER PELLET GROUP SURVEY Menominee Indian Reservation, Wisconsin

GPS Start Location: N44.94707; W88.57485								
PLOT #	COVER TYPE	# DEER PELLET GROUP COUNT	#RUFFED GROUSE ROOST	SNOWSHOE HARE PELLETS				
				PRESENT	ABSENT			
1	OR							
2	OR				-			
3	PW							
4	Aspen							
5	OR							
то	TALS							

# White-Tailed Deer Route Example

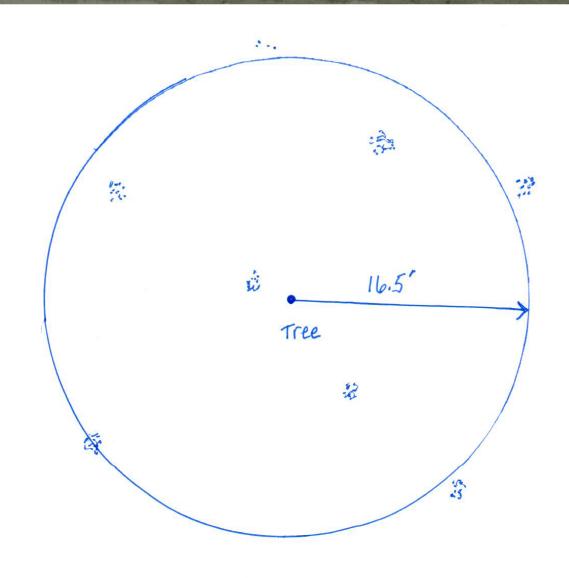


## White-Tailed Deer Route Example



# White-Tailed Deer Route Example





What is total deer pellet group count?









### **Ruffed Grouse Droppings**



### **Ruffed Grouse Droppings**



# 2024 MENOMINEE RESERVATION WHITE-TAILED DEER PELLET GROUP SURVEY RESULTS

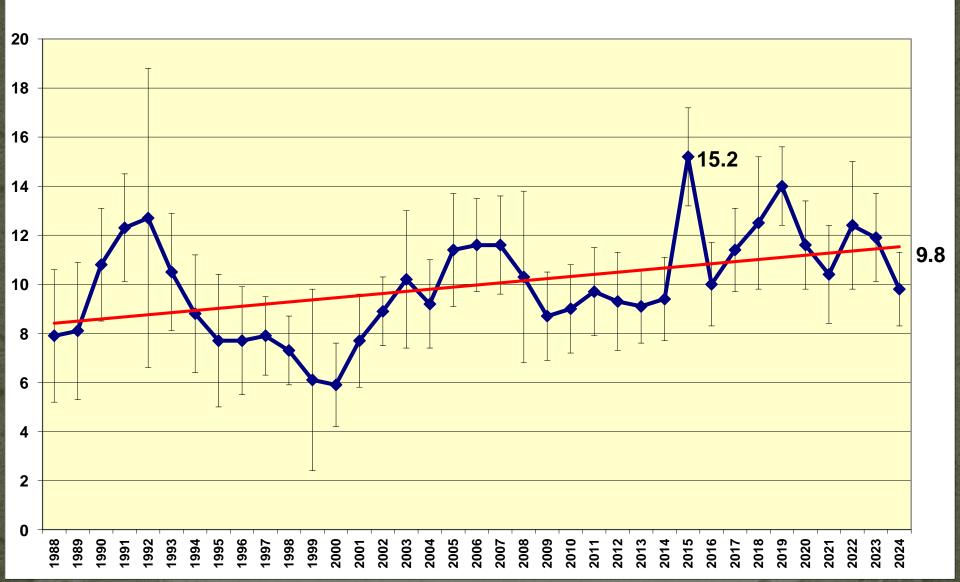
TOWNSHIPS	TRANSECTS	TOTAL DEE	ER	BY TOWNSHIP
	COMPLETED	PELLET #'S		DEER/MI2
T30N,R13E	15	82	12.9	15.0
T30N,R14E	14	23	8.4	4.5
T30N,R15E	10	40	10.4	11.0
T30N,R16E	10	12	6.3	3.3
T29N,R13E	11	23	12.4	5.7
T29N,R14E	11	47	16.1	11.7
T29N,R15E	15	58	10.9	10.6
T29N,R16E	10	32	14.7	8.8
T28N,R15E	13	62	11.7	13.1
T28N,R16E	11	53	<u>15.8</u>	<u>13.2</u> .
TOTA	ALS: 120	432	11.9	9.8

Deer/Mi2 = (Mean X Pellet) (1/0.1) (640 ac/mi) (Deposition Period) (12.7 Groups/day)

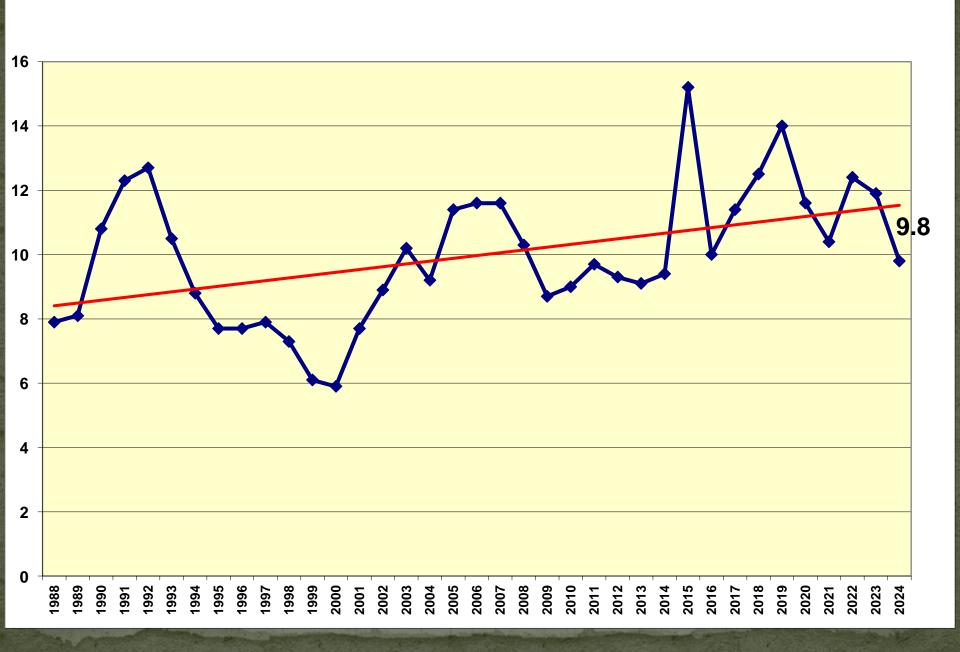
Deer/Mi2 = (3.60) (10) (640) = 9.8 (185 Days) (12.7)

Deer/Square Mile = 9.8 +/- 1.8 (Range: 9.0 to 11.6)

### Menominee Indian Tribe of Wisconsin Deer/Mi2 with 95% Confidence Interval



#### MITW Deer/Mi2



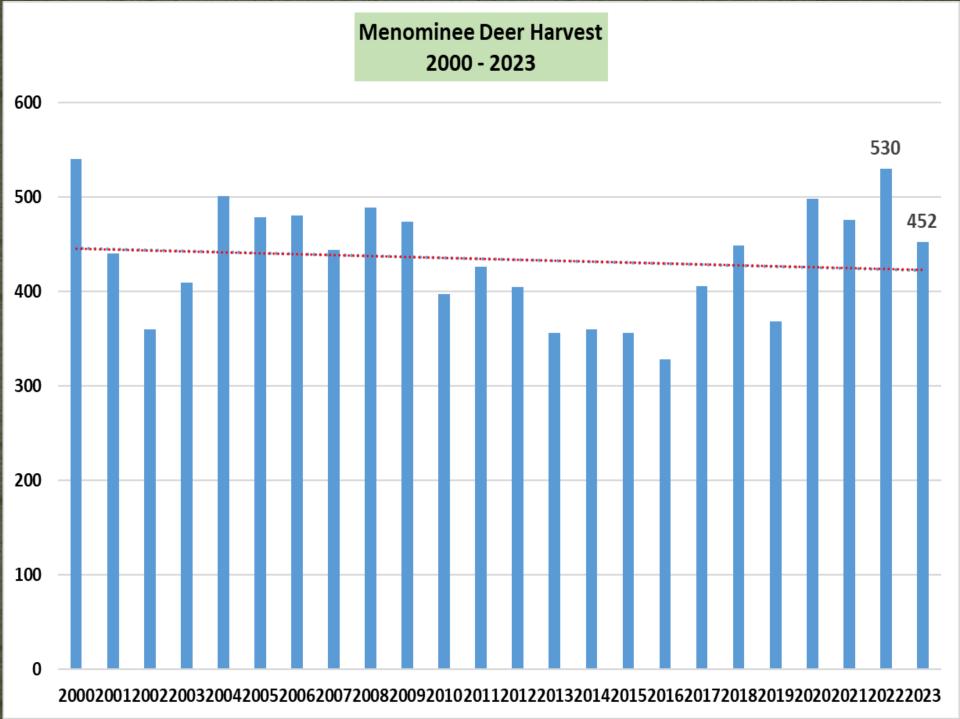
# MENOMINEE WHITE-TAILED DEER MANAGEMENT GOAL:

The white-tailed deer management goal for the Menominee Indian Tribe of Wisconsin is 12.0-13.0 deer per square mile. This figure was based upon identifying the different forest habitat types available for the Reservation and examining the different deer carrying capacity for each of the habitats involved. Deer carrying capacity numbers were taken from a White-tailed Deer Study conducted in northern Wisconsin.

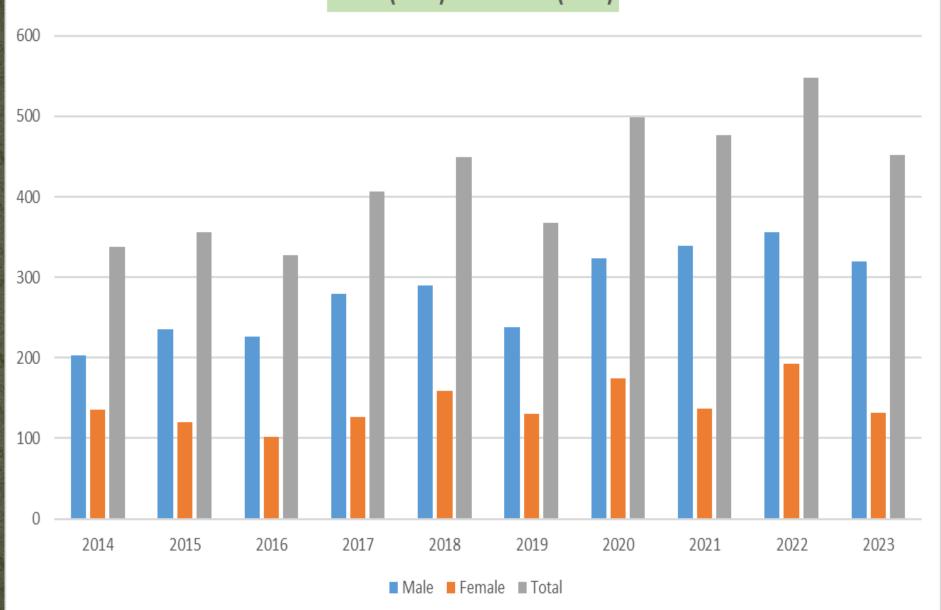
CARRYING CAPACITY is defined as the maximum number of animals that can live within a specific habitat and survive without causing damage to the habitat.

### THE MENOMINEE FOREST HAS FOUR DISTINCT FOREST HABITAT TYPES:

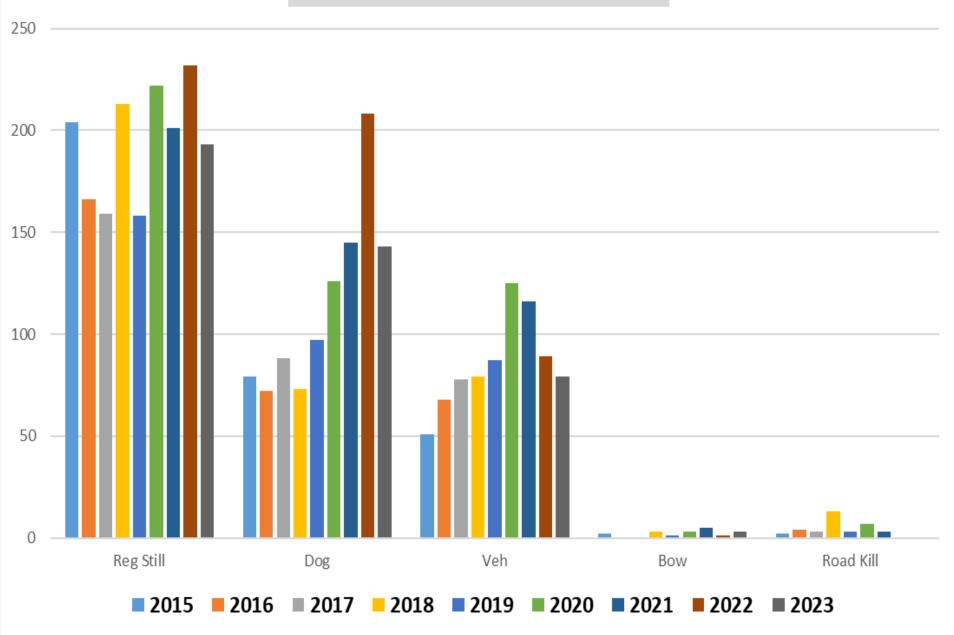
- 1.) The Northern Hardwood Forest
  - Potential 8 deer per square mile
- 2.) The Hemlock Hardwood Forest
  - Potential 9 deer per square mile
- 3.) The White Pine Forest
  - Potential 18.5 deer per square mile
- 4.) The Aspen-Pulpwood Forest
  - Potential 17.5 44.0 deer per square mile



Menominee Deer Harvest Male (66%) vs Female (34%)



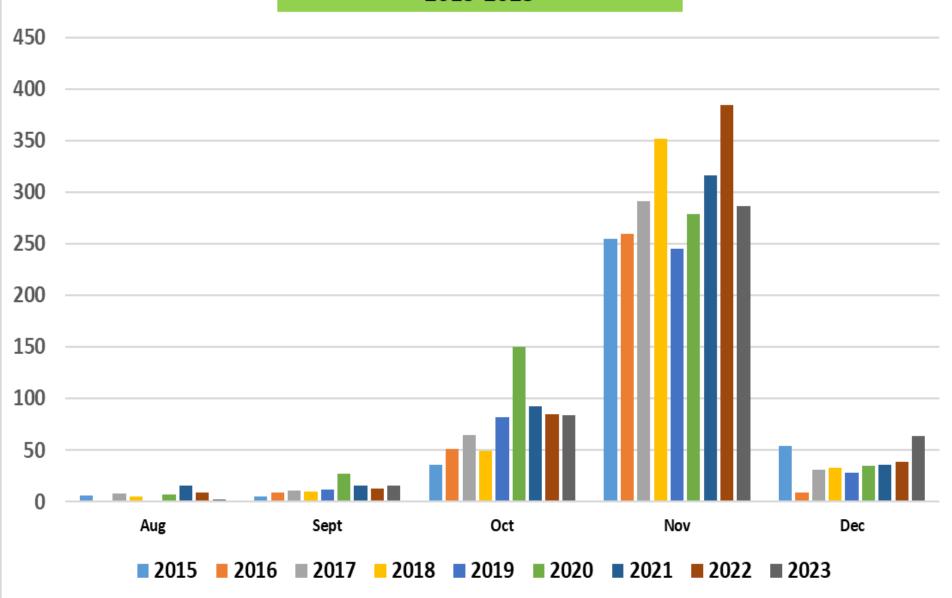
# Menominee Deer Harvest Methods 2015-2023







Menominee Indian Tribe of Wisconsin White-tailed Deer Harvest by Month 2015-2023



# THE WINTER SEVERITY INDEX FACTOR

The Winter Severity Index or "WSI" is a measurement that many managers and researchers throughout the north use to determine how nasty Old Man Winter is during a given year. From the beginning of December through the end of April it's used to track temperature and snowfall. It gives each a numeric value and this is used to quantify the impact on deer.

Any day the temperature dives to zero or below gets counted as a 1. Any day where the snow depth is 18 inches or more also gets scored as a 1. As an example, if during March there were 7 days with temperatures that were zero or below and 12 days when the snow depth was deeper than 18 inches, March would have a score of 19. Any "seasonal score" of 50 or under and it's considered a mild winter, 51 to 80 is measured as moderate, and 80 or above is severe. If during the period of December through April it collectively goes over 100 it's considered very severe.

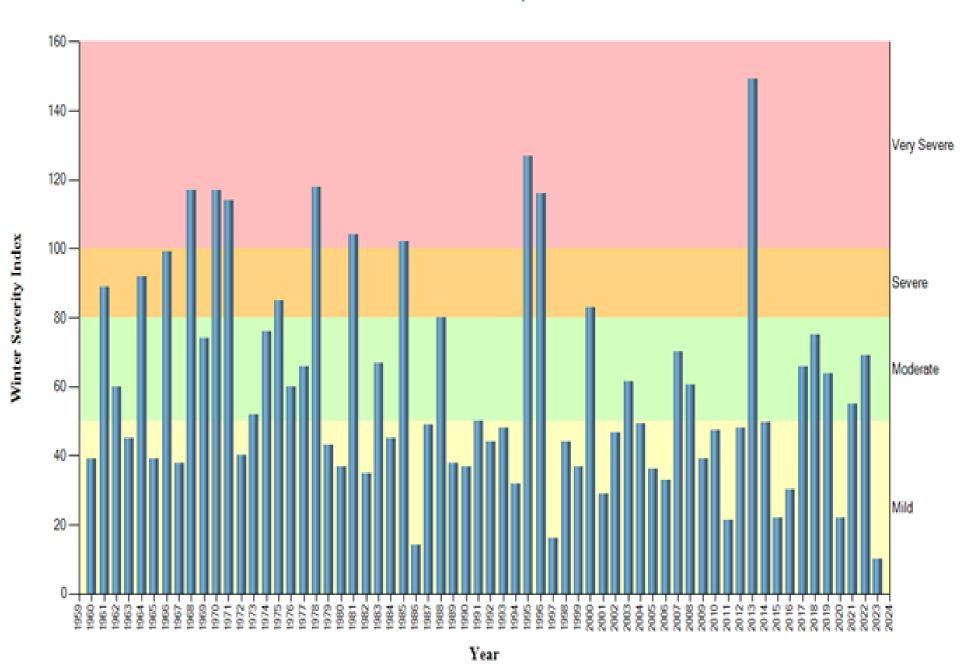
### 2023-2024 Winter Severity Index

Location 1	<u>emperature</u>	Snow Depth	WSI Index
Langlade Fores	t 16	13	29 (Mild)
Menominee For	est 14	11	25 (Mild)
Oconto Forest	14	08	22 (Mild)
Shawano	13	06	19 (Mild)

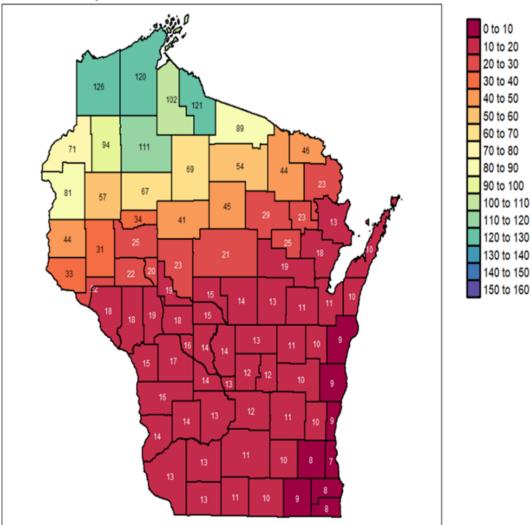


2023-2024 WI. Winter Severity Index was 69 "Moderate Winter" "50 or less is Mild"

#### Winter Severity Index







This map depicts the Winter Severity Index (WSI) across Wisconsin. WSI is calculated by adding the number of days with a snow depth of at least 18 inches (snow points) to the number of days when the minimum temperatures were 0°F or below (temperature points). These points accumulate throughout the winter from December 1 – April 30. A WSI of 49 or less is considered mild, 50-79 is moderate, 80-99 is severe, and 100 or greater is very severe. Many WSI snow depth readings are taken by WDNR staff biologists and additional snow depth and temperature readings come from National Weather Service stations across the state. The WSI points displayed in each Deer Management Unit represent the mean of WSI values for that DMU. Questions can be directed to DanielJ.Storm@wisconsin.gov.

# CHRONIC WASTING DISEASE FACTORS





ORGANS AFFECTED BY CHRONIC WASTING DISORDER (CWD)

EYES

BRAIN.

SPINAL CORD

SPLEEN

Prion accumulation occurs here.

LYMPH NODES

Accumulation here can crode the immune system and the ability to fight against CWD.



#### **CHRONIC WASTING DISEASE**

A summary of Center of Disease Control (CDC) Recommendations: To date, there have been no reported cases of CWD infection in humans. However, some animal studies suggest CWD poses a risk to certain types of non-human primates. To be as safe as possible and decrease the potential risk of exposure to CWD, hunters should take the following steps when hunting in areas with CWD:

Have your deer tested for CWD before eating it. If it tests positive, do not eat the deer.

When field-dressing or processing a deer:

Wear latex or rubber gloves

Minimize how much you handle the organs, particularly the brain or spinal cord tissues.

Do not use household knives or other kitchen utensils

If you have your deer or elk commercially processed, consider asking that your animal be processed individually to avoid mixing meat from multiple animals.

### **What is Chronic Wasting Disease?**

Chronic Wasting Disease (CWD) is a contagious neurological disease affecting deer, elk and moose. It causes a characteristic spongy degeneration of the brains of infected animals resulting in emaciation, abnormal behavior, loss of bodily functions and death.

#### **HOW IS CWD SPREAD?**

CWD can be spread by close contact with infected animals by:

Soil (other surfaces)

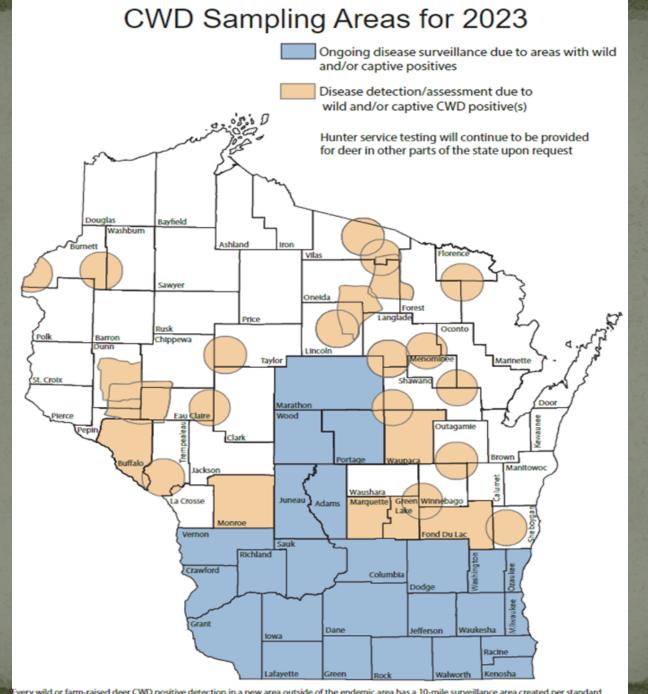
Saliva

Feces

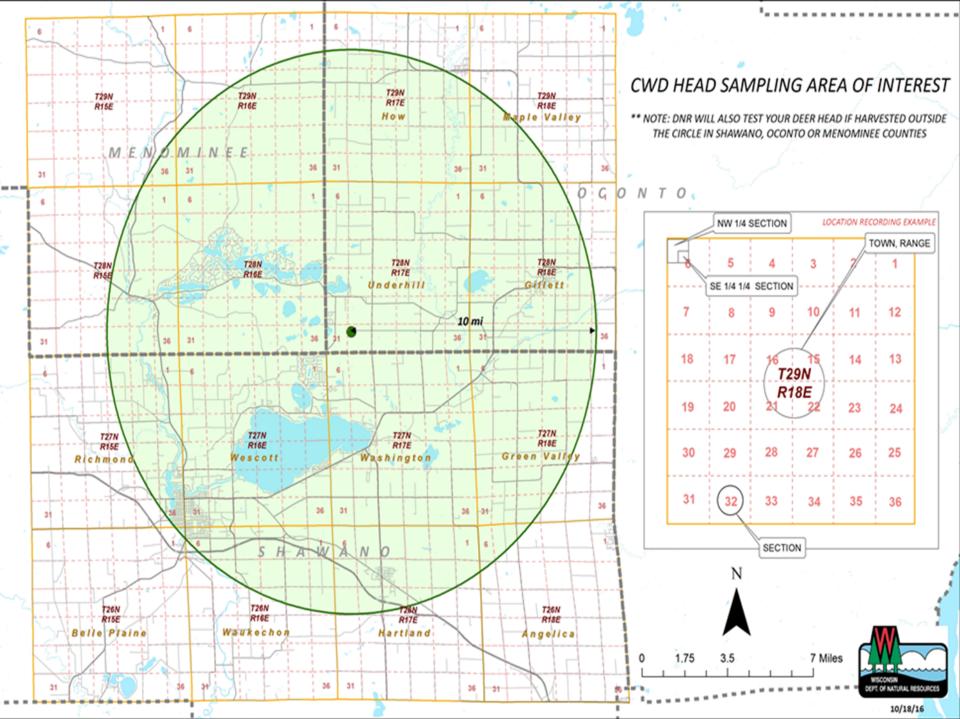
**Decomposing Infected Carcasses** 

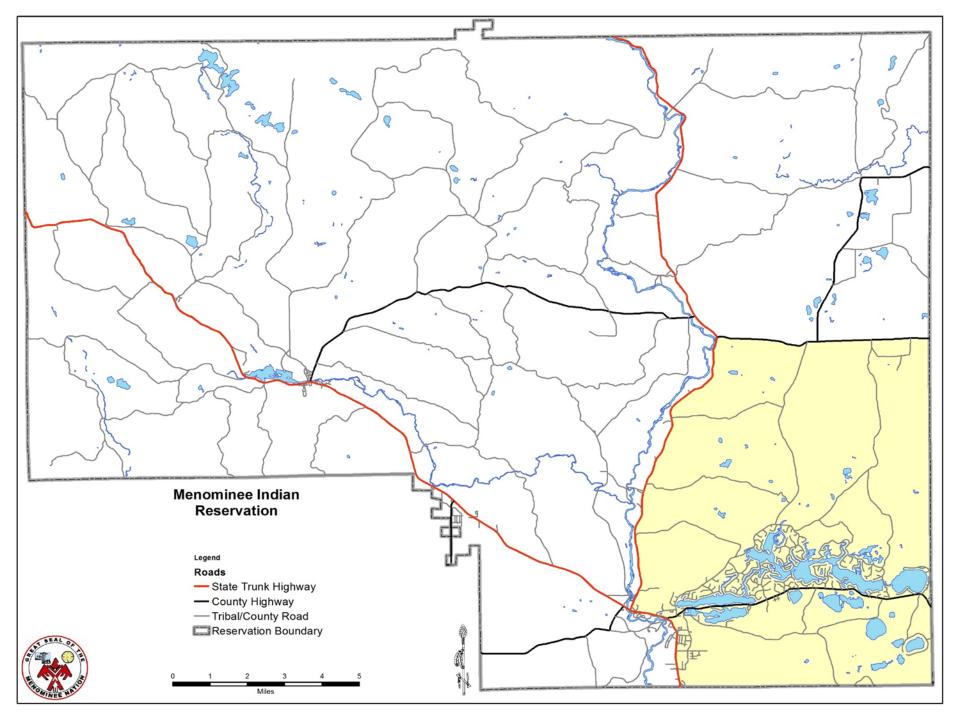
### Why should this be important for Menominee?

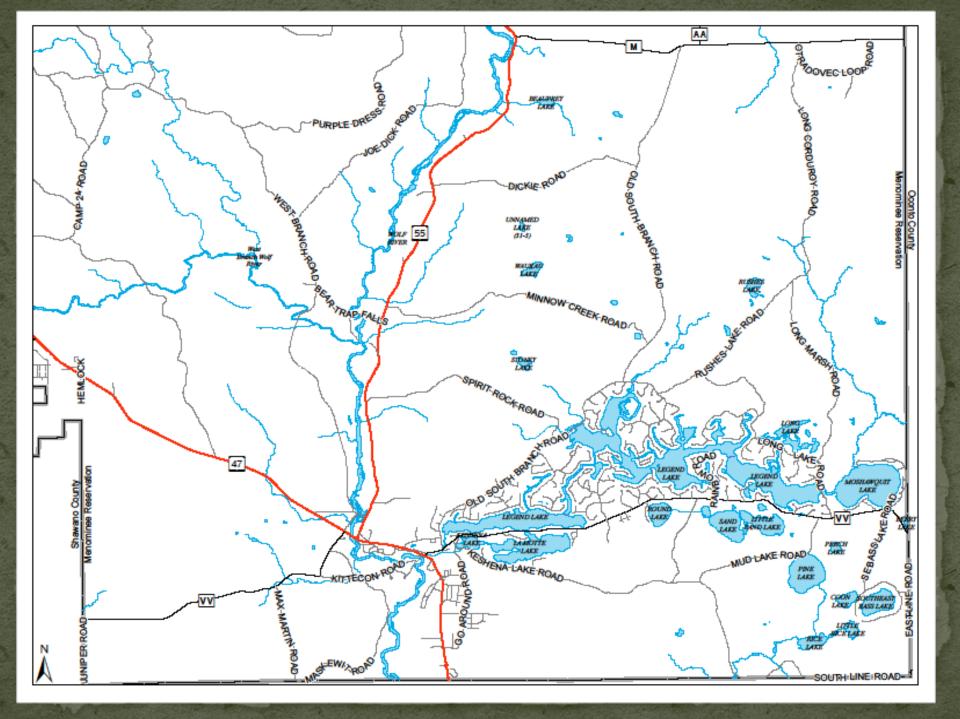




Every wild or farm-raised deer CWD positive detection in a new area outside of the endemic area has a 10-mile surveillance area created per standard operating procedures. While the inital 10-mile radius is maintained, the outline may be adapted to road or county boundaries for planning purposes.





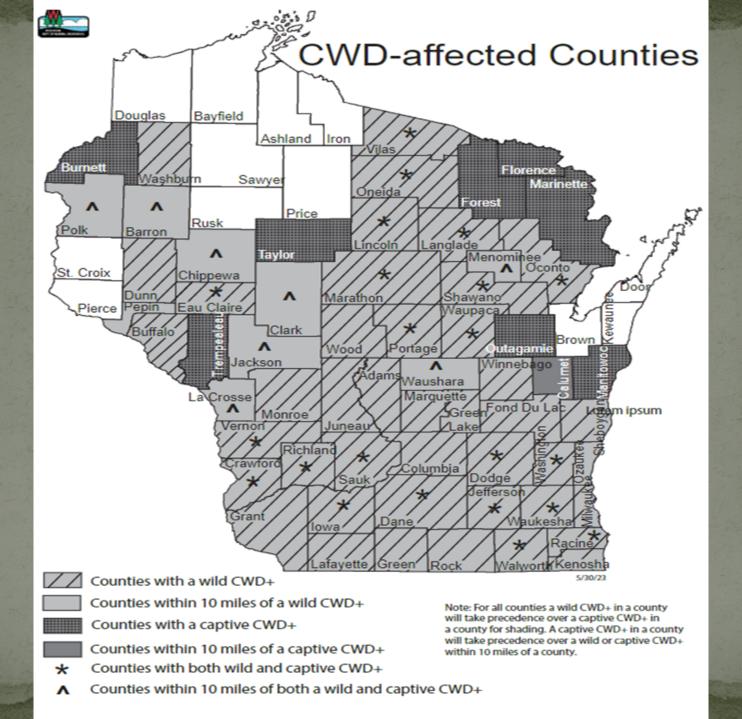


#### County Deer Advisory Council 2014 Final Recommendations **Deer Population Objectives** Intended Change in Deer Population Increase Maintain Decrease Bayfield Douglas Deer Management Zones Washburn **Northern Forest Zone** Marinette Forest Central Lincoln Langlade Farmland Chippewa st Croix Zone Oconto Marathon Eau Claire Buffalo Central Central <del>Farmland</del> Forest: Waushara Zone Zone Fond du Lac Columbia Ozaukee Dodge Richland Southern Farmland Zone Dane Grant Racine Rock Lafayette Population objectives are not established for tribal reservation units as identified on this map.

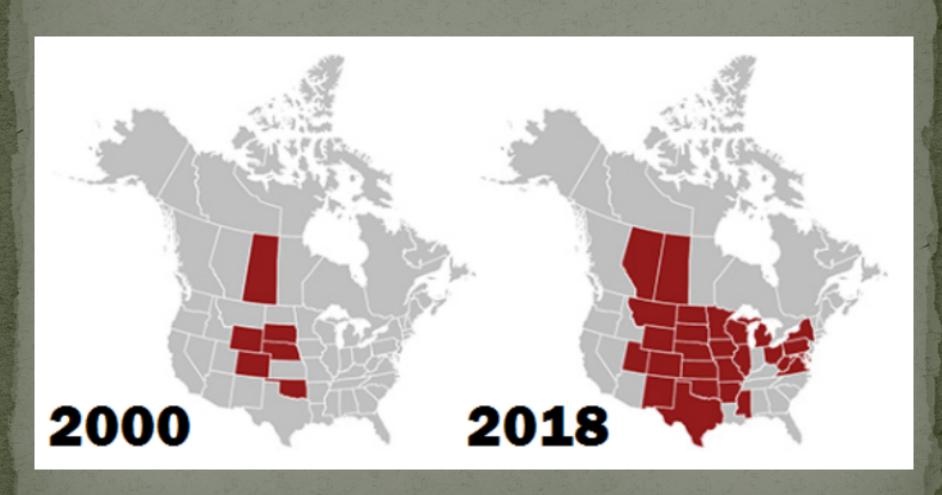
# 2024 MENOMINEE RESERVATION WHITE-TAILED DEER PELLET GROUP SURVEY RESULTS

TOWNSHIPS	TRANSECTS COMPLETED	TOTAL DEER PELLET #'S	<u>2023</u>	BY TOWNSHIP DEER/MI2
T30N,R13E	15	82	12.9	15.0
T30N,R14E	14	23	8.4	4.5
T30N,R15E	10	40	10.4	11.0
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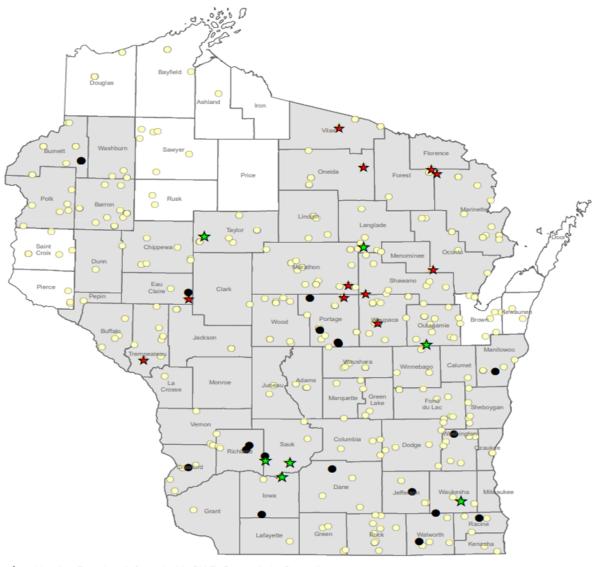
**Cumulative CWD Positive Locations of** Wild Deer in Wisconsin and Illinois. Ashland Bayfield Iron Douglas Vilas Washbum Sawyer Florence Oneida Price Forest Polk Rusk Barron Marinette Lincoln Langlade Taylor Chippewa St Croix Menominee Dung Marathon Door Shawano Pierce Eau Claire Clark Pepin K⊭waun Portage Waupaca Wood Brown Outagamie Buffalo rempealeau Manitowoo Waushara Winnebago Calumet Monroe La Crosse Fond du Lac Sheboygan Washington Ozaukee Waukesha Milwaukee .. Kenosha WISCONSIN ILLINOIS **CWD Positive Location CWD Affected County** Map printed 5/19/23 WI locations as of 5/19/23. Illinois locations as of 5/19/23.



# CWD AFFECTED AREAS PROGRESSION



# Registered Deer Farms and Past/Current CWD Farms January 2022

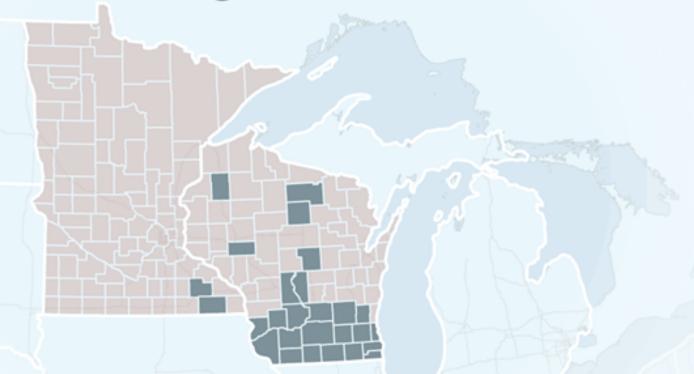


- ★ Hunting Ranches Infected with CWD Currently in Operation
- ★ Deer Farm Infected with CWD Currently in Operation
- Past Positive CWD Farms, Depopulated
- Currently Registered Farm-Raised Deer Farms





# Chronic wasting disease in the wild



Counties with free range deer populations infected with chronic wasting disease in Wisconsin and Minnesota as of October.

Source: USGS | National Wildlife Health Center

#### Chronic Wasting Disease Positives in Farm-raised Deer

Revised: 1/13/2023

County (Premises #)	Sample Collection Date of First CWD Positive in Farm-raised Deer	Sample Collection Date of Last CWD Positive in Farm-raised Deer	Total CWD Positive in Farm- raised Deer
Portage(1)	9/4/2002	1/18/2006	82
Walworth(1)	9/20/2002	12/13/2002	6
Manitowoc	3/5/2003	3/5/2003	1
Sauk(1)	10/3/2003	10/3/2003	1
Racine	5/1/2004	5/1/2004	1
Walworth(2)	7/28/2004	11/3/2004	3
Crawford	1/19/2005	1/25/2007	2
Portage(2)	9/22/2008	11/18/2008	2
Jefferson	12/1/2008	12/1/2008	1
Marathon	11/7/2013	11/3/2021	114
Richland(1)	9/13/2014	11/19/2014	8
Eau Claire(1)	6/8/2015	11/24/2015	34
Oneida	11/4/2015	11/8/2022	44
lowa(1)	1/22/2016	5/4/2022	6
Oconto	9/4/2016	11/23/2022	605
Shawano	9/18/2017	11/17/2022	105
Waupaca	9/21/2017	12/7/2017	12
Washington	2/18/2018	11/15/2018	12
Richland(2)	5/11/2018	5/11/2018	1
Dane	5/16/2018	5/16/2018	1
lowa(2)	5/18/2018	5/18/2018	21
Marinette	5/19/2018	11/7/2022	4
Sauk(2)	6/4/2018	6/11/2022	5
Portage(3)	10/23/2018	10/23/2018	1
Portage(4)	11/16/2018	5/1/2019	8
Forest	1/8/2019	10/31/2022	20
Burnett(1)	7/30/2019	7/30/2019	1
Trempealeau	11/7/2019	11/1/2022	6
Burnett(2)	9/3/2020	9/3/2020	1
Sauk(3)	7/19/2021	7/19/2021	1
Taylor	7/24/2021	7/28/2022	84
Outagamie	8/12/2021	9/3/2021	2
Langlade	8/13/2021	8/13/2021	1
Portage(5)	9/8/2021	11/17/2022	11
Vilas	9/9/2021	9/9/2021	1
Eau Claire(2)	10/13/2021	11/1/2021	3
Waukesha	12/3/2021	8/3/2022	11



Wisconsin Department of Agriculture, Trade and Consumer Protection Division of Animal Health 2811 Agriculture Dr., P.O. Box 8911, Madison, WI 53708 https://www.datep.wi.gov

Chronic Wasting Disease Positives in Farm-raised Deer Revised: 1/30/2024					
	Sample	Sample			
	Collection Date	Collection Date			
	of First CWD	of Last CWD	Total CWD		
County	Positive in Farm-	Positive in Farm	Positive in Farm		
(Premises #)	Raised Deer	Raised Deer	Raised Deer		
Portage(1)	9/4/2002	1/18/2006	82		
Walworth(1)	9/20/2002				
Manitowoc	3/5/2003	3/5/2003	1		
Sauk(1)	10/3/2003	10/3/2003	1		
Racine	5/1/2004	5/1/2004			
Walworth(2)	7/28/2004				
Crawford	1/19/2005	1/25/2007	2		
Portage(2)	9/22/2008	11/18/2008	2		
Jefferson	12/1/2008	12/1/2008	1		
Marathon	11/7/2013	11/28/2023	117		
Richland(1)	9/13/2014	11/19/2014	8		
Eau Claire(1)	6/8/2015	11/24/2015	34		
Oneida(1)	11/4/2015	10/31/2023	52		
lowa(1)	1/22/2016	5/4/2022	6		
Oconto	9/4/2016	1/31/2024	723		
Shawano	9/18/2017	12/3/2023	113		
Waupaca	9/21/2017	12/7/2017	12		
Washington	2/18/2018	11/15/2018	12		
Richland(2)	5/11/2018	5/11/2018	1		
Dane	5/16/2018	5/16/2018	1		
lowa(2)	5/18/2018	5/18/2018	21		
Marinette	5/19/2018	11/10/2023	16		
Sauk(2)	6/4/2018	1/24/2023	6		
Portage(3)	10/23/2018	10/23/2018	1		
Portage(4)	11/16/2018	5/1/2019	8		
Forest	1/8/2019	9/30/2022	16		
Burnett(1)	7/30/2019	7/30/2019	1		
Trempealeau	11/7/2019	10/31/2023	7		
Burnett(2)	9/3/2020		1		
Sauk(3)	7/19/2021				
Taylor	7/24/2021		84		
Outagamie	8/12/2021				
Langlade	8/13/2021				
Dantage (E)	0/0/2024	42/0/2022			

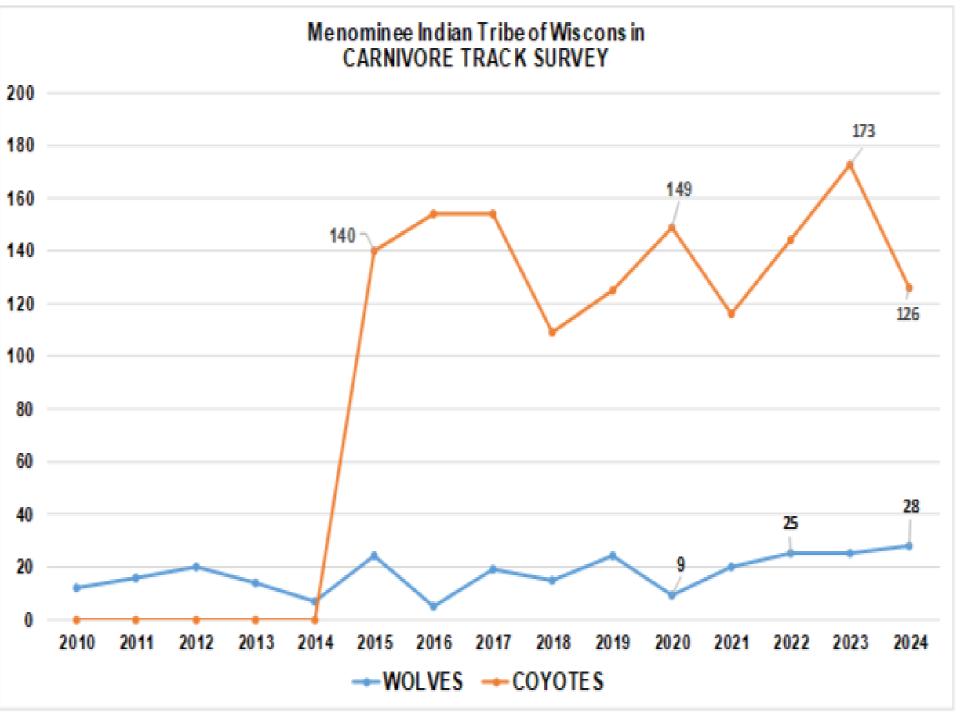
# **PREDATORS**

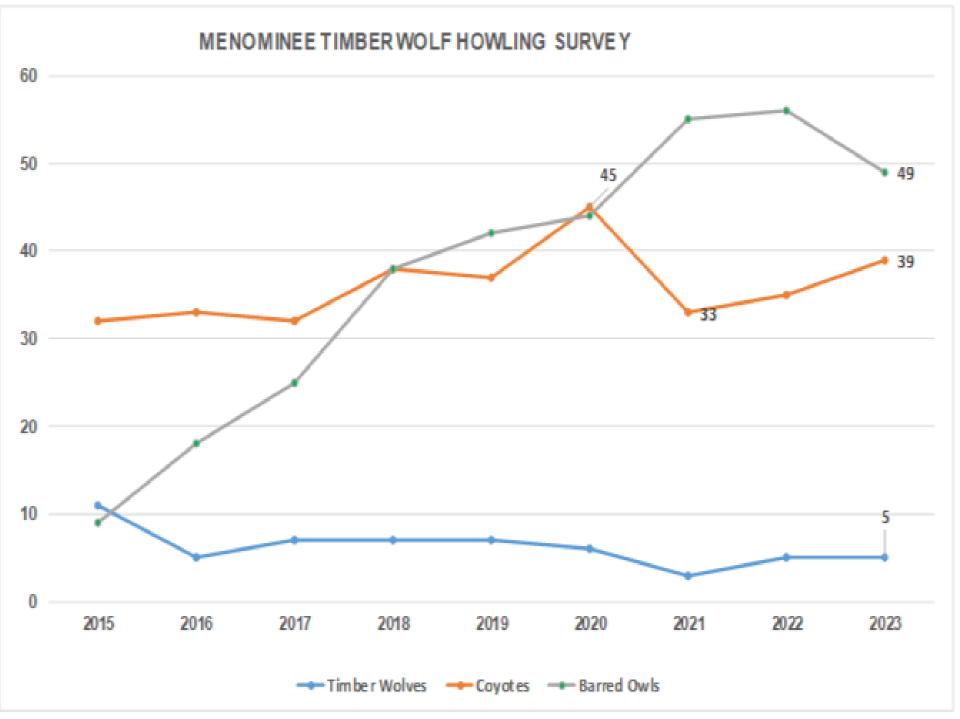


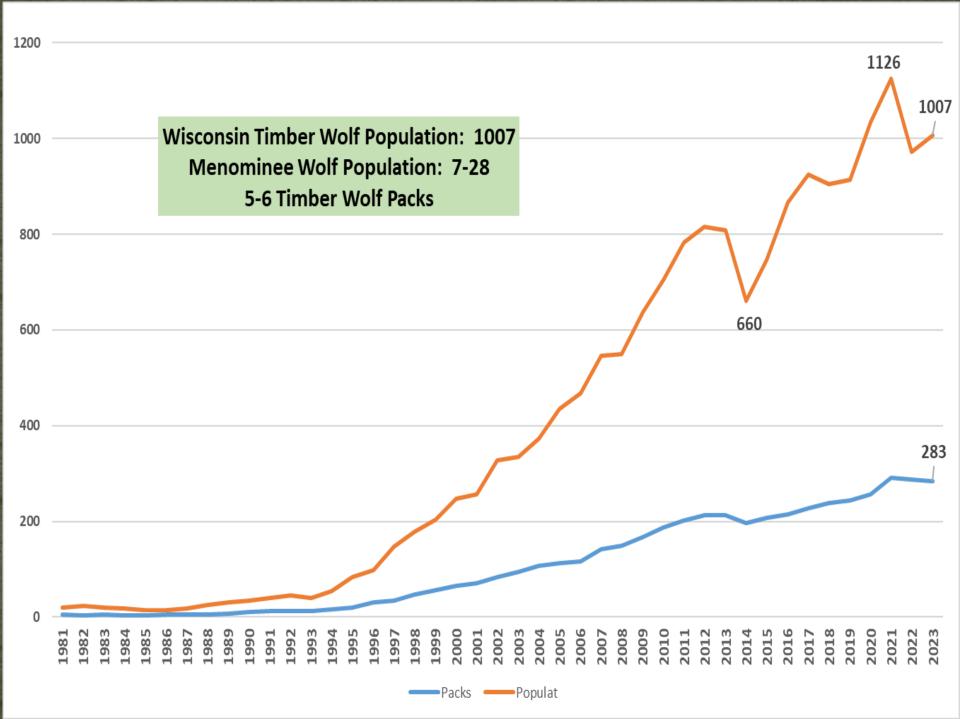




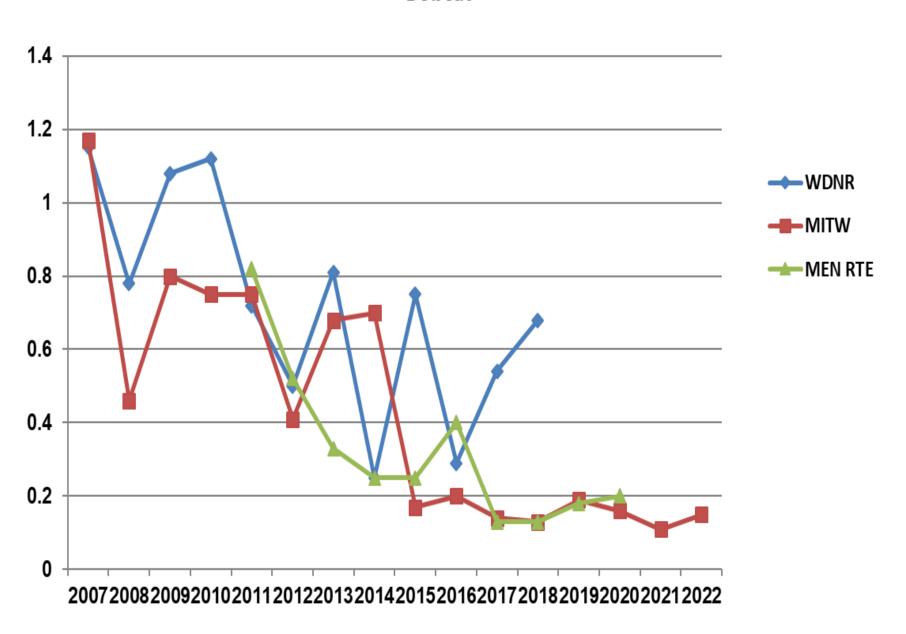




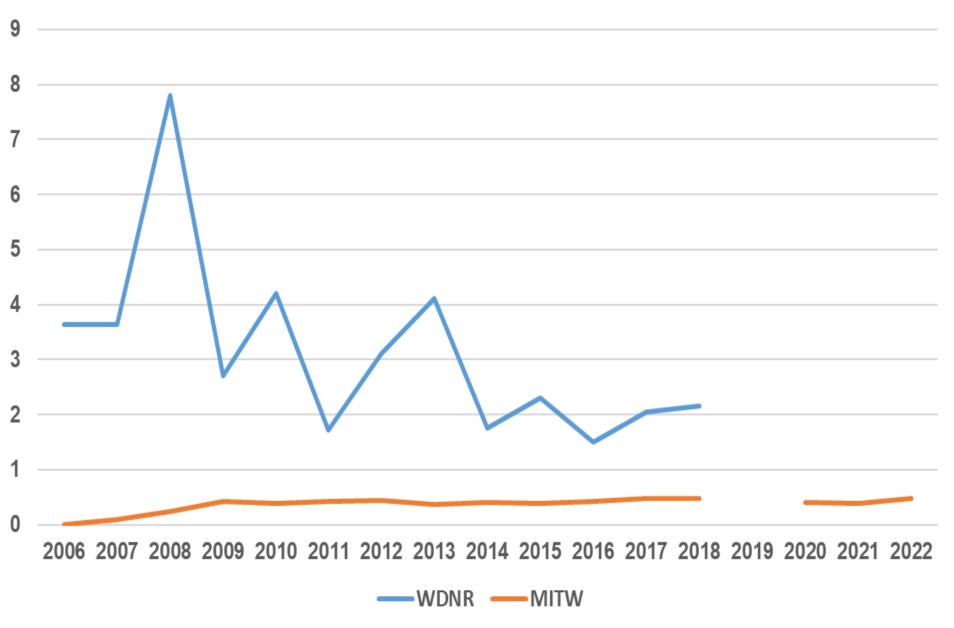


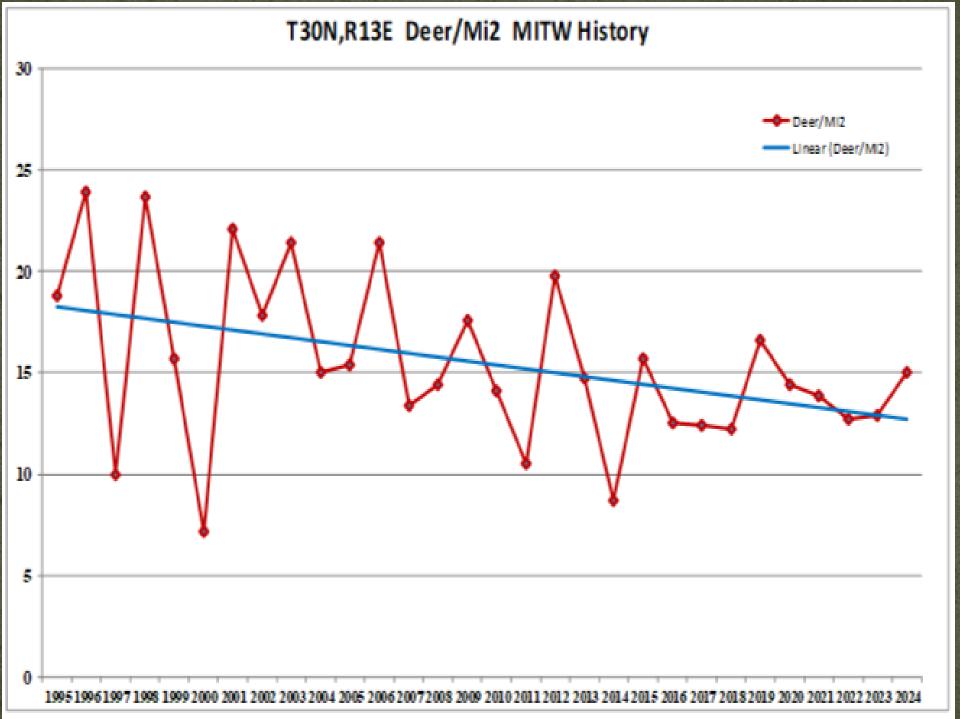


# Menominee Winter Track Survey Bobcat

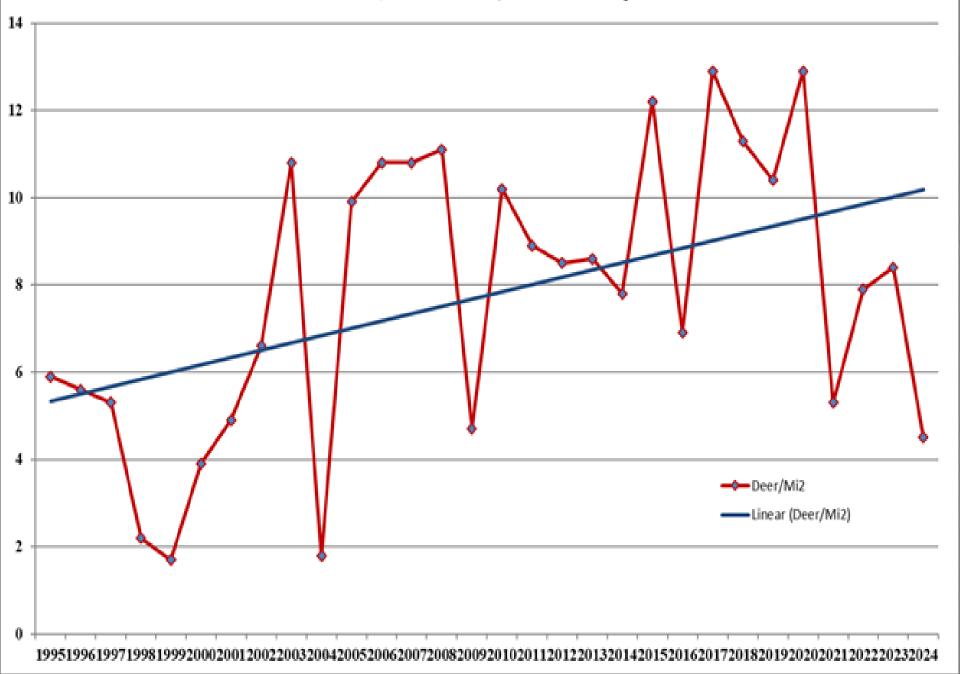


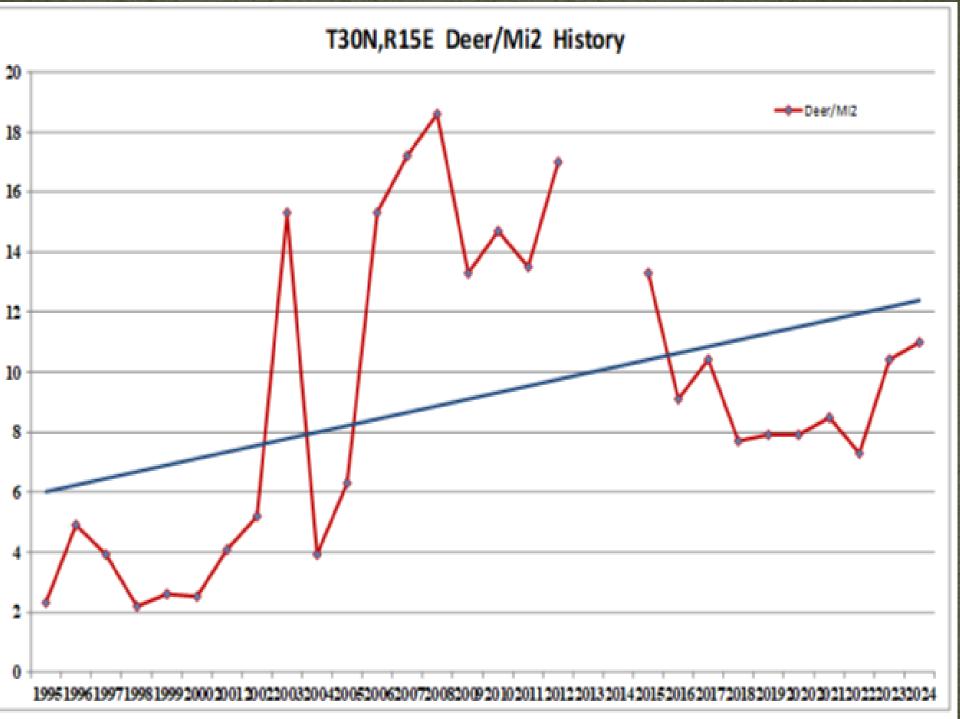
# Menominee Indian Tribe of Wisconsin FOX WINTERTRACK SURVEY (2006-2022)



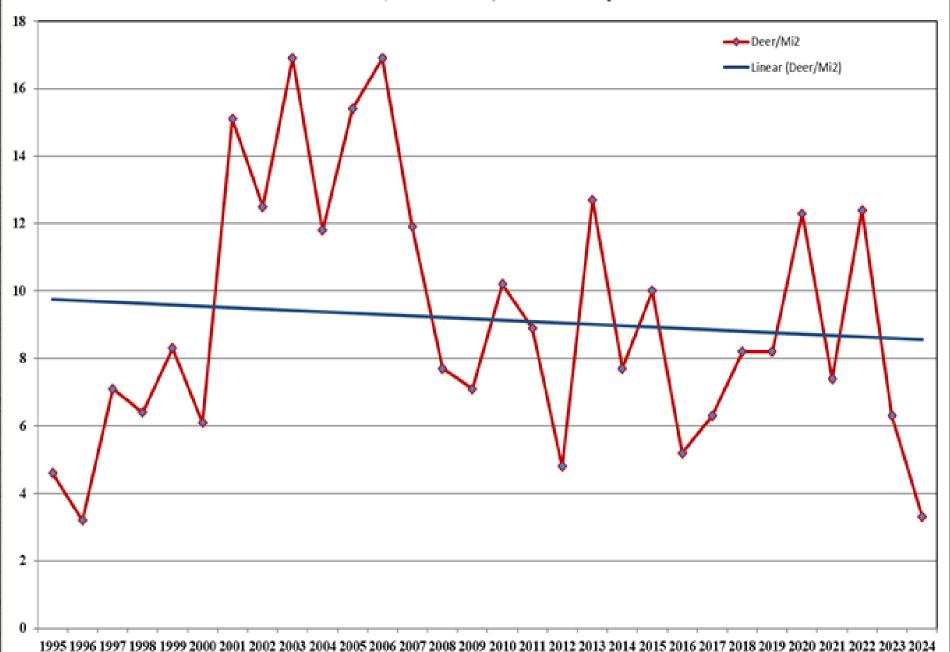


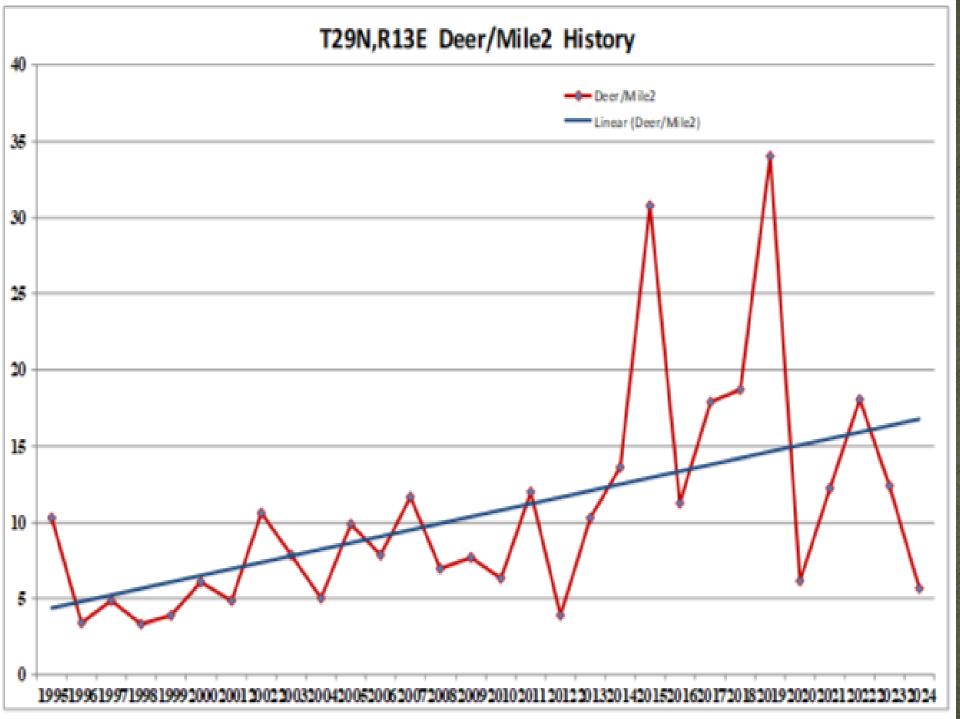
# T30N,R14E Deer/Mi2 History

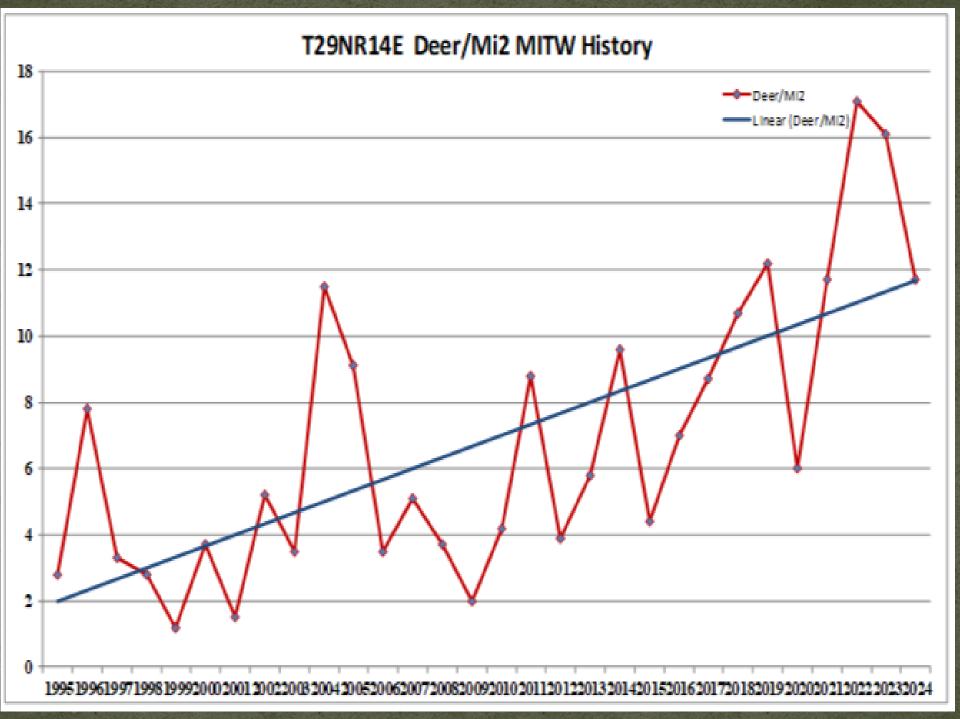


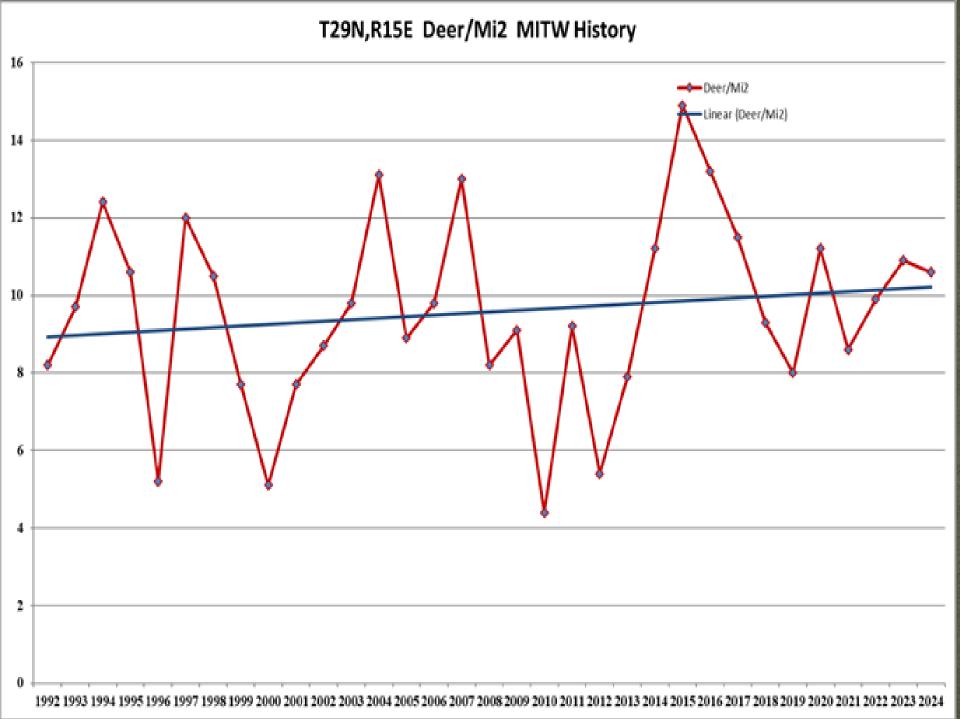


## T30N,R16E Deer/Mi2 History

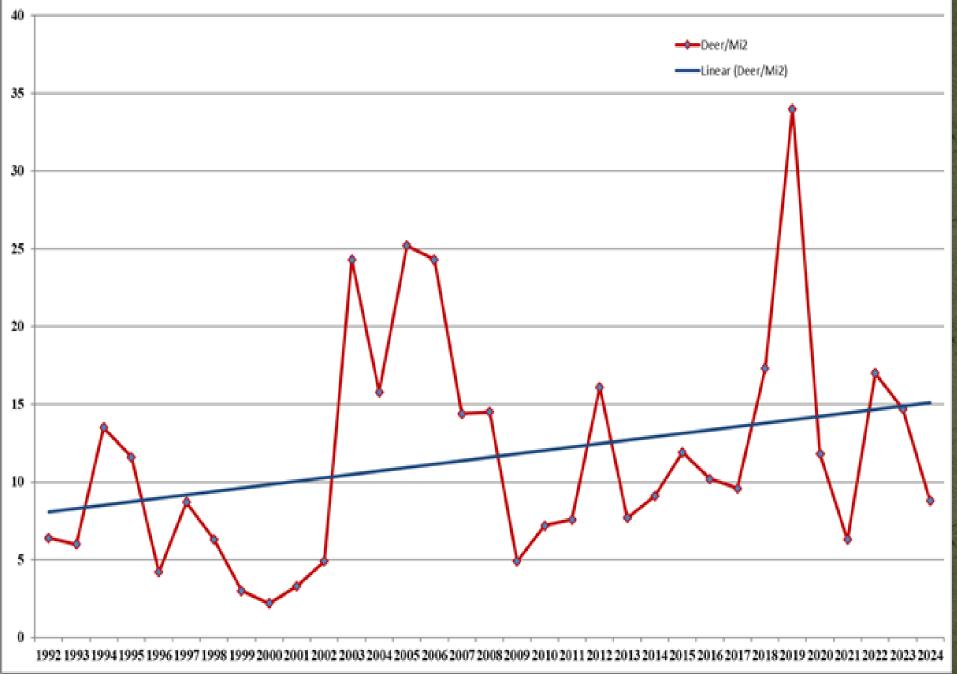


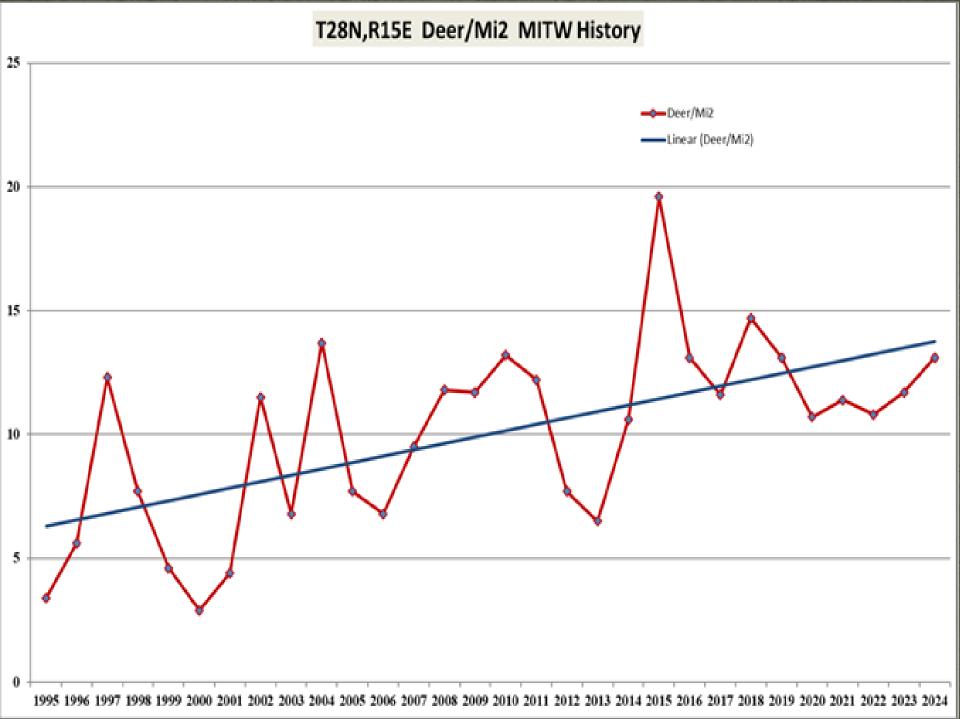




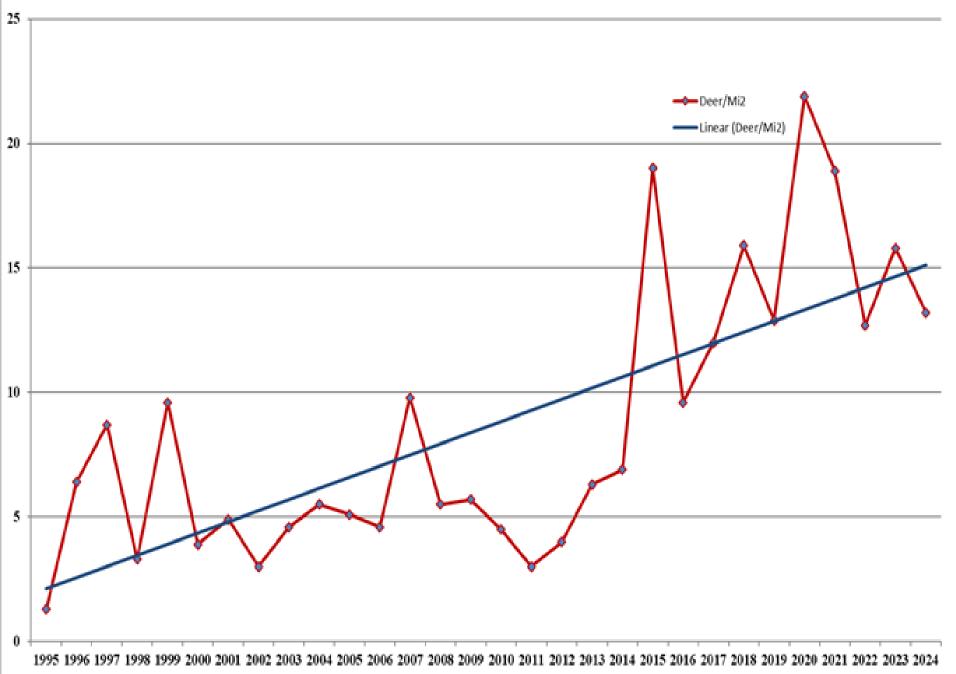


# T29N,R16E Deer/Mi2 MITW History

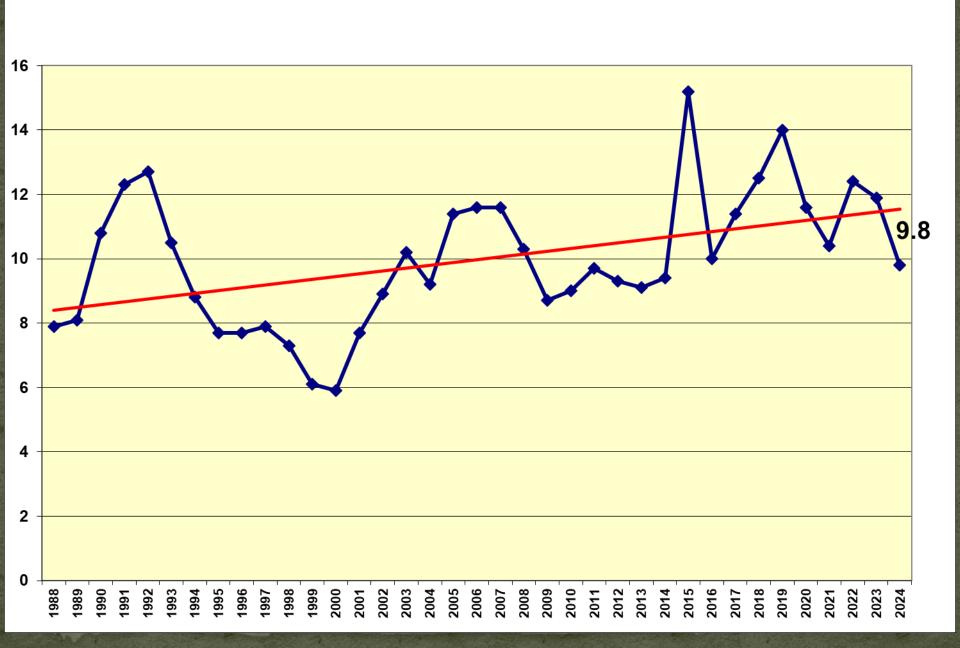


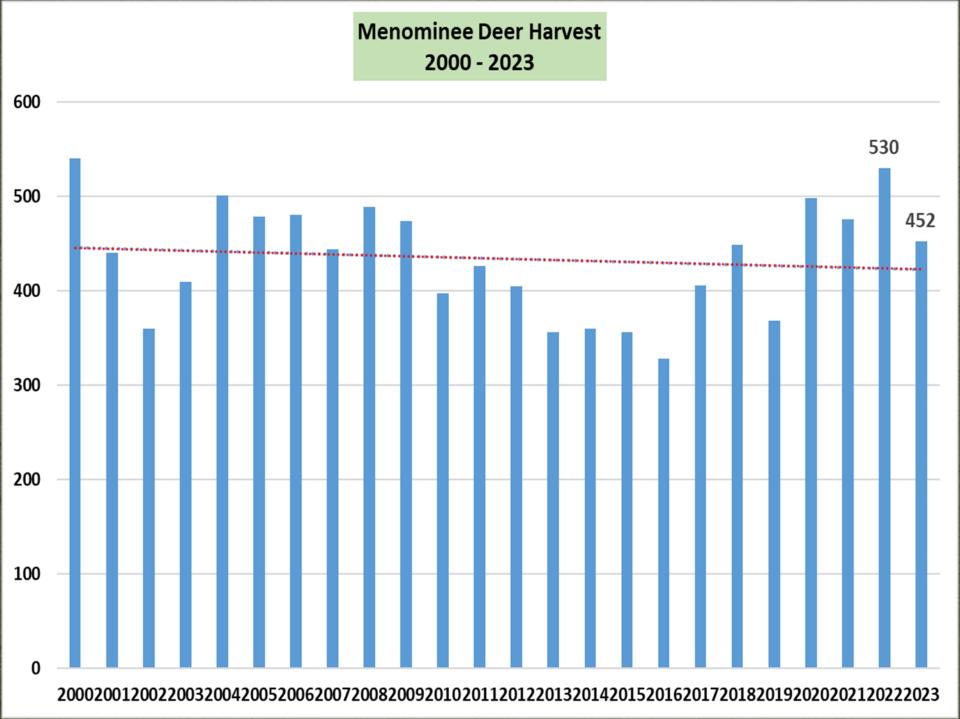






### MITW Deer/Mi2





# MENOMINEE DEER MANAGEMENT

Each and every spring, Menominee Tribal Enterprises Marking Crew, Environmental Services Department. MITW and others help determine how many deer the forest holds by counting the most visible part of a deer. Deer pellets, which is the nice term for deer waste. This technique, known as white-tailed deer pellet group counts, is a widely used approach to estimate deer densities. Calibrated years ago by observing how many times per day white-tailed deer eliminate waste. The method consists of counting the pellet groups found along miles of unmarked paths in very early spring to obtain estimates of how many deer inhabit a given area over the winter. Deer population estimates calculated from the pellet group counts are indispensable because they allow scientists to track how variation in deer population densities affects plant diversity.

In this report will look at:

- 1.) Menominee Deer per Square Mile
- 2.) Menominee Deer Harvest
- 3.) Menominee Winter Severity Index
- 4.) Chronic Wasting Disease
- 5.) Predators: Coyote and Wolf

### MENOMINEE DEER PER SQUARE MILE:

Is there significant Habitat? Yes there is. Checking deer yards and different forest management cover types indicate no loss of habitat. There is no presence of an established browse line. There is enough habitat present on the Menominee Forest to maintain an average deer herd of 12 deer per square mile. The 2023 Menominee White-tailed deer population estimate was 11.7 deer per square mile. The 2024 White-tailed Deer Population is 9.8 deer per square mile. The deer population is in good shape. A total of 120 of 120 transacts were completed across the ten townships. The completion rate was one hundred percent (120/120 = 100%). The deer per square mile was pretty uniform per township from previous years.

#### **MENOMINEE DEER HARVEST:**

No wild animal in Menominee is as recognizable as the white-tailed deer. The 2022 White-tailed Deer Harvest was 432 (page 29). The 2024 White-tailed Deer Estimate is 9.8 deer per square mile.

Menominee Hunters are allowed to harvest deer by Regular Still Hunt, Vehicle and Bow Hunt as means of harvesting deer. "Buck only season" is from August 1 through August 31. Bucks and Does Season will run from September 1-December 31.

# MENOMINEE DEER MANAGEMENT

#### **Season for Tribal Members:**

Tribal members may hunt Deer from August 1 to December 31 in accordance with all applicable laws and rules specified herein as well as in Chapter 287 Conservation Code and all laws of the Menominee Indian Tribe. No tags will be issued to any person under the age of 10 years.

#### **Season for Descendants:**

Descendants may hunt deer from November 1 to November 30. In accordance with all applicable laws and rules specified herein as well as in Chapter 287 Conservation Code and all laws of the Menominee Indian Tribe. Bow hunting is prohibited unless done within the season of November 1 to November 30. Permit required for all persons years or older, individuals younger than 10 years will not be eligible for any tags.

### **Season for Spouses:**

Spouses may hunt deer from the Saturday before Thanksgiving to the following Sunday, totaling (9)-days. In accordance with all applicable laws and rules specified herein as well as in Chapter 287 Conservation Code and all laws of the Menominee Indian Tribe. Bow hunting is prohibited except within the (9)-day period listed above and bow must have a minimum 35-LB pull.

### WINTER SEVERITY INDEX FOR WINTER 2022-2023

The State of Wisconsin had an overall Winter Severity Index of 69 which labelled as "Moderate" The Menominee Indian Tribe of Wisconsin a is listed as a "Mild" Winter. The Winter Severity Index for Menominee during the winter of 2022-2023 is 25 (Page 11) which could indicate Deer will have an incredibly high reproductive potential with mature females 2-1/2 to 5-1/2 years old nearing a 100 percent pregnancy rate each fall. If mild conditions persist, we could expect to see good fawn production with healthy birth weights, along with does that are in good condition to meet the physical demands of nursing. Fluctuations in deer populations are a normal aspect of wildlife management and with management and favorable conditions, populations can rebound quite quickly.

#### MENOMINEE CHRONIC WASTING DISEASE:

The Menominee Indian Tribe of Wisconsin (MITW) Chronic Wasting Disease Monitoring and Response Plan is a comprehensive approach to identify the earliest possible intrusion of Chronic Wasting Disease (CWD) into Menominee Reservation. The highest priority is to collect lymph nodes and/or brain stems to test sick and harvested deer to determine cause of death. Testing will be required within ten mile radius of a positive identified CWD Sample Site. Risk factors were informed by field surveys conducted by Wisconsin Department of Natural Resources (WDNR) and Environmental Services Department, MITW.

In 2023 Environmental Services Department, MITW will work on key objectives of this MITW Chronic Wasting Disease Response Plan are to:

♦ Prevent new introductions of CWD in areas where disease is not currently believed to be present .

Enforcement of baiting ban. Wild Deer Herd Response Public notification.

♦ Monitor for new areas of CWD infection (new foci)

Collect biological samples.
Work in cooperation with other agencies

♦ Monitor and collect biological samples in High Priority Areas of CWD infection (new foci)

T30N,R14E; T30N,R15E; T28N,R15E; T28N,R16E, T29N,R16E

### **COYOTES AND WOLVES:**

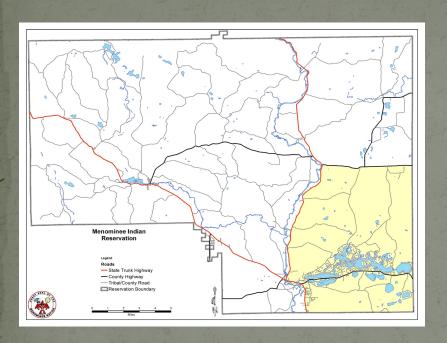
Predation: Along with coyotes, wolves, bobcats and black bears, coyotes are one of the few remaining predators of white-tailed deer. Many deer hunters believe that "coyotes keep down the white-tailed deer population." This has led to many coyotes being killed by deer hunters in the name of "saving" the deer herd, but is this true? No. Coming to this seemingly simply answer requires an understanding of population dynamics—how populations change over time and the ecology of each species.

Since coyotes and wolves struggle to take down healthy adult deer, they mainly predate fawns. But fawns are hard to find, they are camouflaged, almost scentless, and spend most of the day motionless in dense vegetation. If a fawn survives its first 30 days, it is highly likely to survive to adulthood, as it will be able to outrun potential predators.

#### **ENVIRONMENTAL SERVICES RECOMMENDATION:**

The recommendation from the Environmental Services Department shall be to leave the season "As Is" The White-tailed Deer herd has decreased from 11.9 deer per square mile to 9.8 deer per square mile. As a Manager I would exercise caution. There is no significant increases or decreases seen the population that would warrant drastic objectives to be followed.

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- 5.) To test for CWD you would need Mandatory Registration (Will not look at this option)
- 6.) We will go "As Is" this year.

**Chronic Wasting Disease Sampling** 

The 2024 White-tailed Deer Season:

- 1.) The Environmental Services Dept. will be developing a CWD Testing Plan with options in the yellow highlighted area.
- 2.) Try to get a freezer in Neopit and Zoar for deer head drop off.
- 3.) For every sample you will be provided another deer tag providing on MCC Assistance. Limit 2 CWD Samples (Will not look at this option)
- 4.) Department will go and request deer heads from hunters to test for CWD

