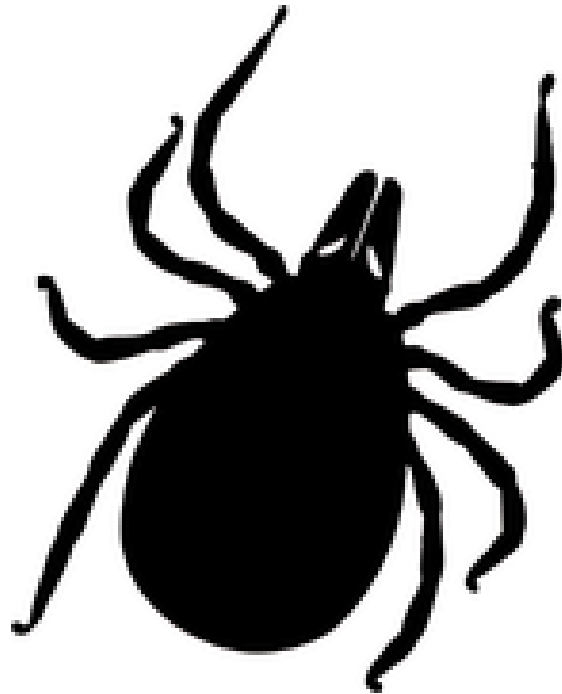


# North Dakota Tick Surveillance Program Annual Report



2024

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## **2024 North Dakota Tick Surveillance Program's Mission**

Through tick collection and speciation, the North Dakota Department of Health and Human Services (HHS) monitors the risk of infection from tickborne pathogens known to exist in this region. The North Dakota Tick Surveillance Team focuses on *Dermacentor variabilis* and *Ixodes scapularis* for pathogen identification.

## **North Dakota Tick Surveillance Program Overview**

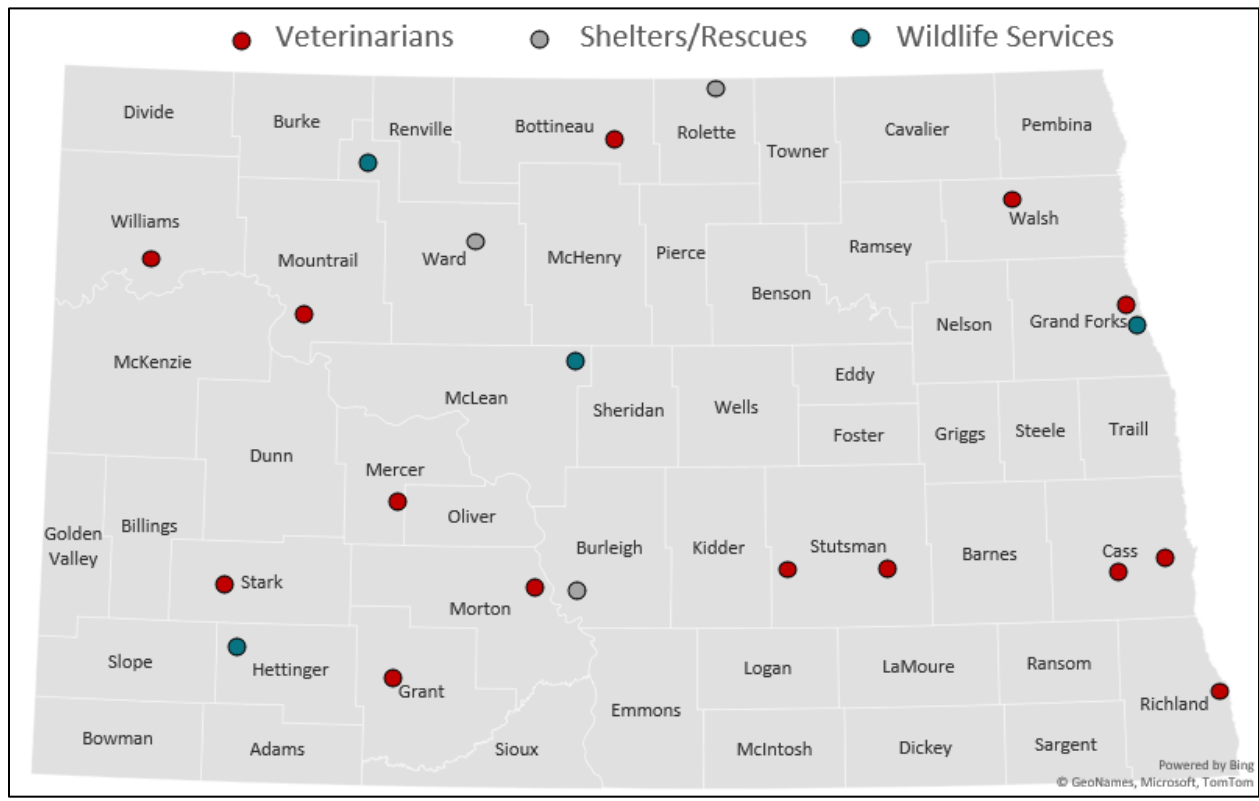
In 2024 passive tick surveillance included 14 veterinarians, three animal shelters/rescues, and North Dakota Wildlife Services staff. Passive tick surveillance is when ticks are collected from animals and humans and does not include trapping or active searching for ticks. Submissions were received weekly starting week one of collection on April 14<sup>th</sup>-20<sup>th</sup> and ending week 16 July 28<sup>th</sup>-August 3<sup>rd</sup>. All weeks and their respective dates are listed below.

Active tick surveillance - ticks that were collected from traps or from dragging a collection cloth across the ground to collect ticks - was conducted on five separate dates from late May through late June.

Lastly, additional ticks were submitted for identification in pictures or physical drop-offs via the ND Submit a Tick Picture email and contact information. The email link can be found on the HHS website at: [Tickborne Diseases | Health and Human Services North Dakota](#), with the link located at the bottom of the page. Ticks submitted via email were included in passive and total surveillance numbers. No ticks were submitted via postal mail.

## 2024 Passive Tick Surveillance Sites

Collection partner locations are seen in the map below. Red dots correspond with veterinarians, gray dots for animal shelters/rescues, and blue dots for base locations of Wildlife Services staff. Ticks passively collected by each partner may have come from other locations depending on where animals going to the veterinarian live, and whether Wildlife Services staff travel to other locations within their jurisdiction.

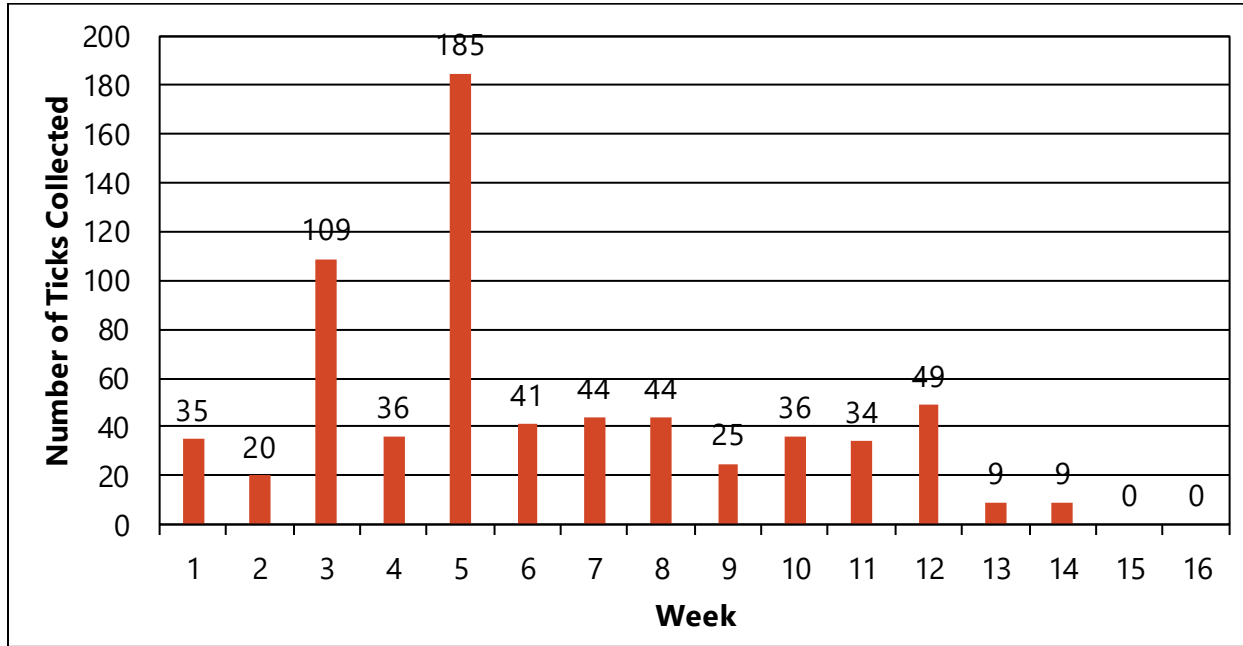


<b>2024 Tick Surveillance Partners</b>	
<b>Veterinarians</b>	
<b>Name</b>	<b>City</b>
All Pets Hospital	Grand Forks
Casselton Veterinary	Fargo
Casselton Veterinary	Casselton
Dakota Animal Care	Edinberg
Dr. Dawn's Pet Stop	Jamestown
Dakota Prairie Veterinary Service	New Town
Dakota Veterinary Hospital	Wahpeton
Elgin Veterinary Service	Elgin
Heart River Animal Hospital	Mandan
Knife River Veterinary Clinic	Beulah
Steele Veterinary Clinic	Steele
Turtle Mountain Veterinary Service	Bottineau
West Dakota Veterinary Clinic	Dickinson
Western Veterinary Clinic	Williston

<b>Animal Shelters/Rescues</b>	
Furry Friends Rockin Rescue	Lincoln
Souris Valley Animal Shelter	Minot
Turtle Mountain Animal Rescue	St. John
<b>Wildlife Services</b>	
Brent Belland	New England
Marissa Haase	Kenmare
Rick Tischaefter	Butte
Dean Janzen	Niagara

## 2024 Tick Submissions by Week

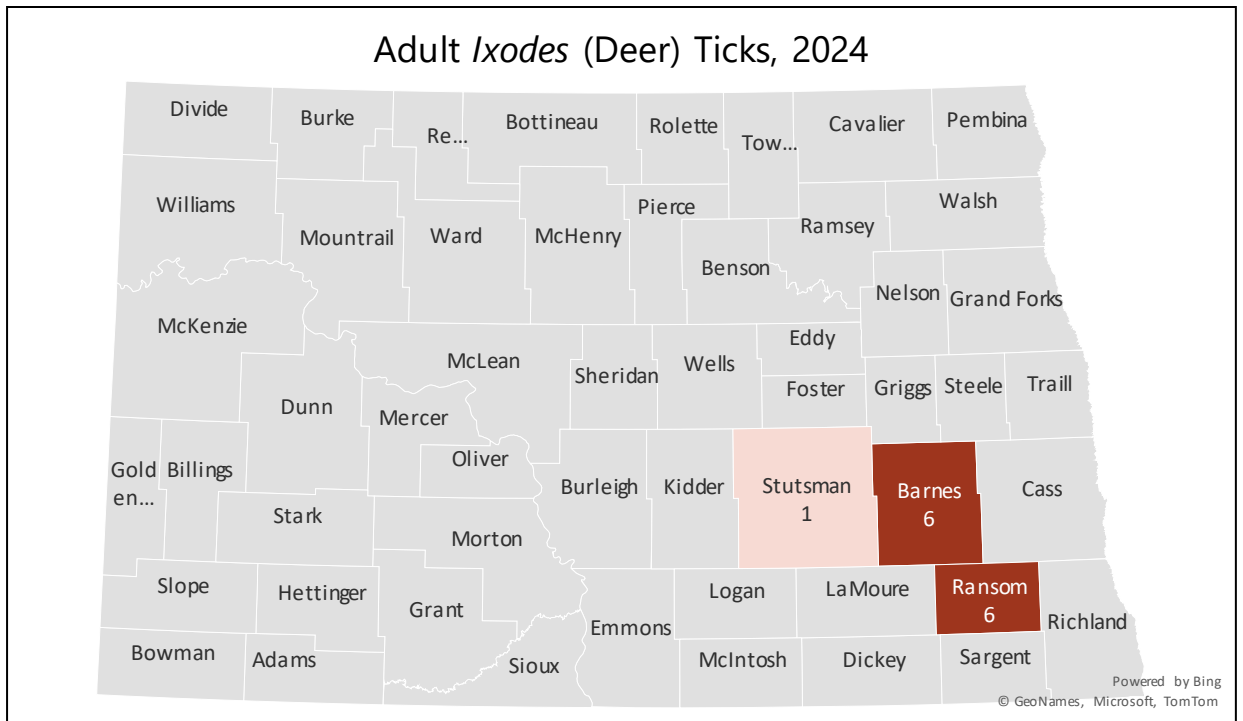
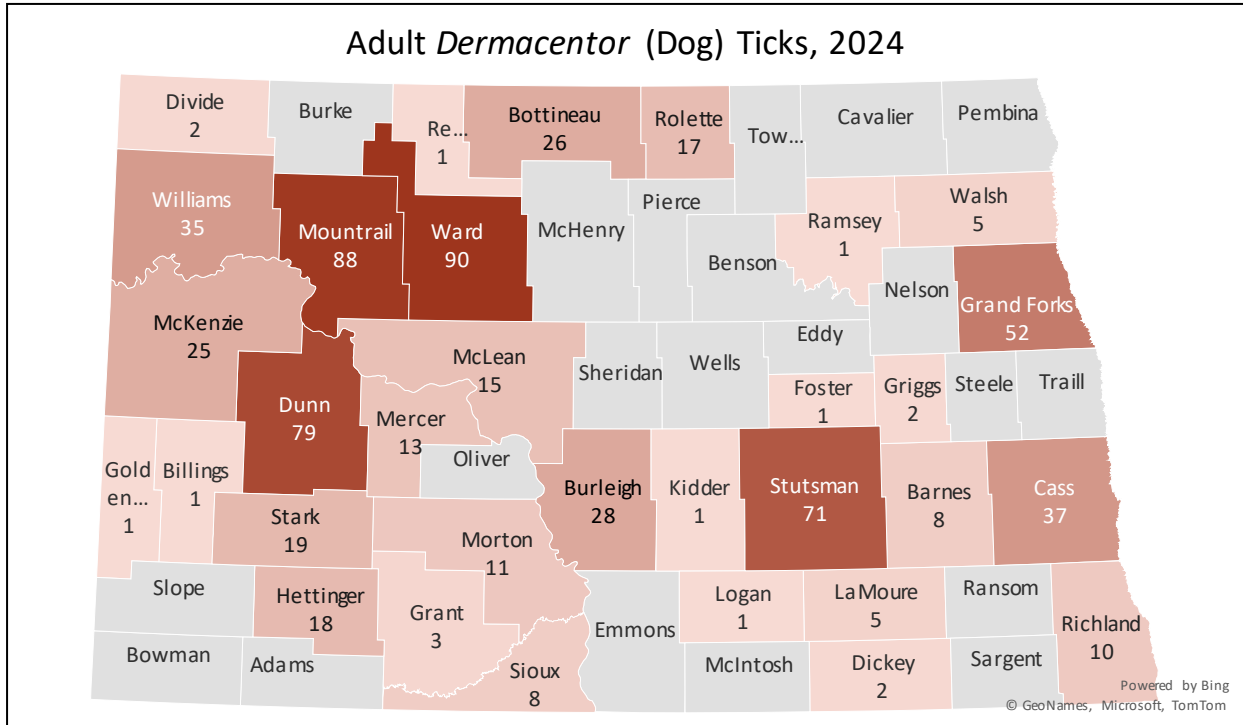
A total of 676 *Dermacentor variabilis* "Dog" ticks, 16 *Ixodes scapularis* "Deer" ticks and one Lone Star tick, were collected via all surveillance methods in 2024. Due to large numbers of dog ticks and small numbers of other ticks, only dog ticks are shown. Values on the x-axis correspond with collection weeks displayed in the table below.



2024 Tick Surveillance	
Week	Collection Week
1	April 14- April 20
2	April 21-April 27
3	April 28-May 4
4	May 5-May 11
5	May 12-May 18
6	May 19-May 25
7	May 26-June 1
8	June 2-June 8
9	June 9-June 15
10	June 16-June 22
11	June 23-June 29
12	June 30-July 6
13	July 7-July 13
14	July 14-July 20
15	July 21-July 27
16	July 28-August 3

## Total (Active and Passive) Tick Submission by County

Maps below depict counties in which ticks were collected. Counties without data do not indicate a lack of ticks, rather that surveillance was not taking place in those locations, or no ticks were collected within those counties.



## **Tickborne Pathogen Testing**

Dog ticks were not tested for pathogens. Moving forward from 2024 on, pathogen testing will focus resources on deer ticks.

Deer ticks were sent to CDC for testing. Each tick was tested for the following targets: *Anaplasma phagocytophilum* (both human and non-human active strain), *Borrelia burgdorferi sensu stricto*, *Borrelia mayonii*, *Borrelia miyamotoi*, *Babesia microti*, and *Ehrlichia muris eauclairensis*. Two of the females and one male deer ticks collected from Ransom county tested positive for *Borrelia burgdorferi*, the causative agent for Lyme disease.

## **Ticks Submitted Via HHS Website Link**

A total of 13 tick pictures/in person samples were submitted via the HHS website link during the tick season. Seventeen of the ticks were identified as dog ticks, one as a deer tick, and one tick was identified as a Lone Star tick from Barnes County.

## **Resources**

For additional resources on past tick data, tickborne disease, and how to handle ticks, please visit the NDHHS website at: [Tickborne Diseases | Health and Human Services North Dakota](#).

Additional information concerning ticks can be found on the CDC website at: [Ticks | Ticks | CDC](#).