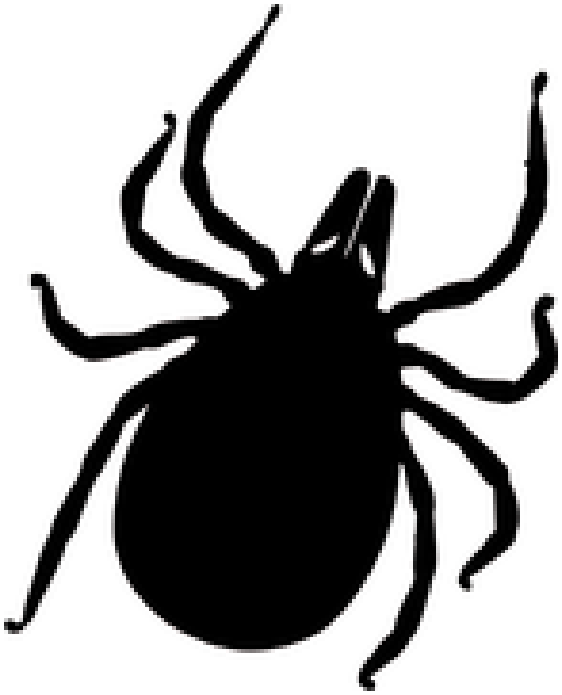
North Dakota
Tick Surveillance
Program Annual Report



2022

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NORTH Dakota | Health & Human Services
Be Legendary.

Division of Laboratory Services

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2022 North Dakota Tick Surveillance Program's Mission

Through tick collection and speciation, the North Dakota Department of Health and Human Services (NDHHS) 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

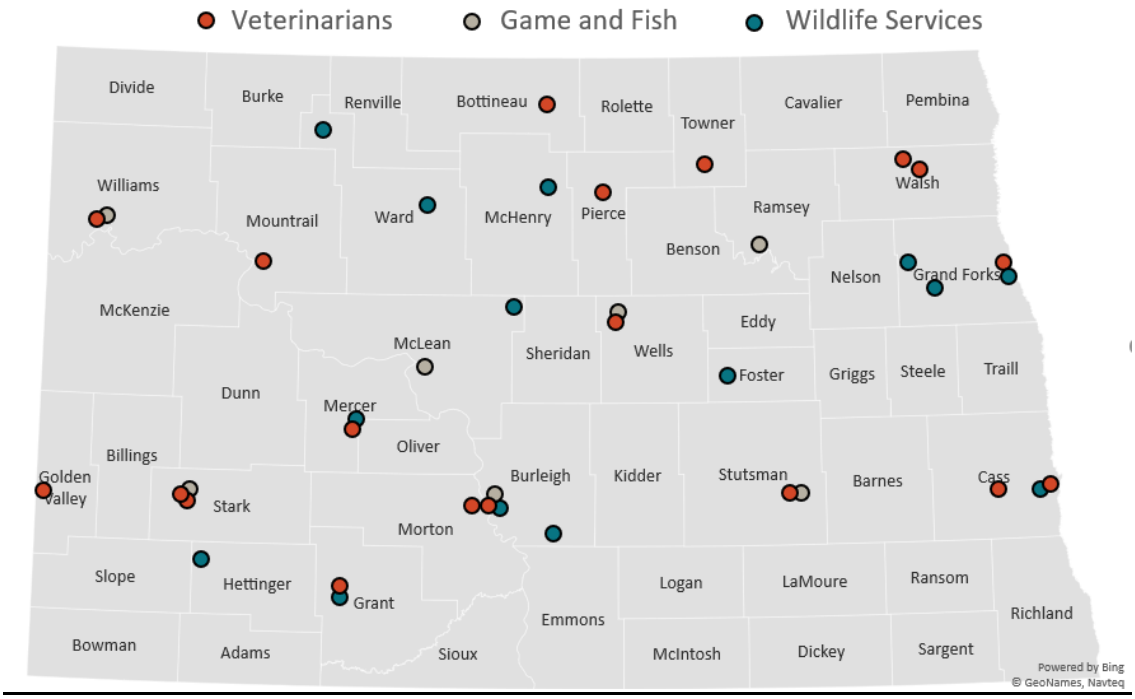
In 2022 passive tick surveillance, ticks collected from animals and humans by submission partners, included 19 veterinarians, 7 Game and Fish staff, and 14 Wildlife Service staff. Submissions were received weekly from April 24-30th to July 24th-30th.

Additionally, from May 9th to May 27th CO_2 traps were deployed at three locations, Grand Forks, Devils Lake, and Bismarck, for three weeks of tick trapping. Only a few *Dermacentor variabilis* ticks were collected and data is not included in this report.

Lastly, an additional 21 ticks were submitted for identification via the ND Submit a Tick Picture email. The email link can be found on the NDHHS website at: [Tickborne Diseases | Health and Human Services North Dakota](), with the link located at the bottom of the page. No ticks were submitted via postal mail.

2022 Passive Tick Surveillance Sites

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

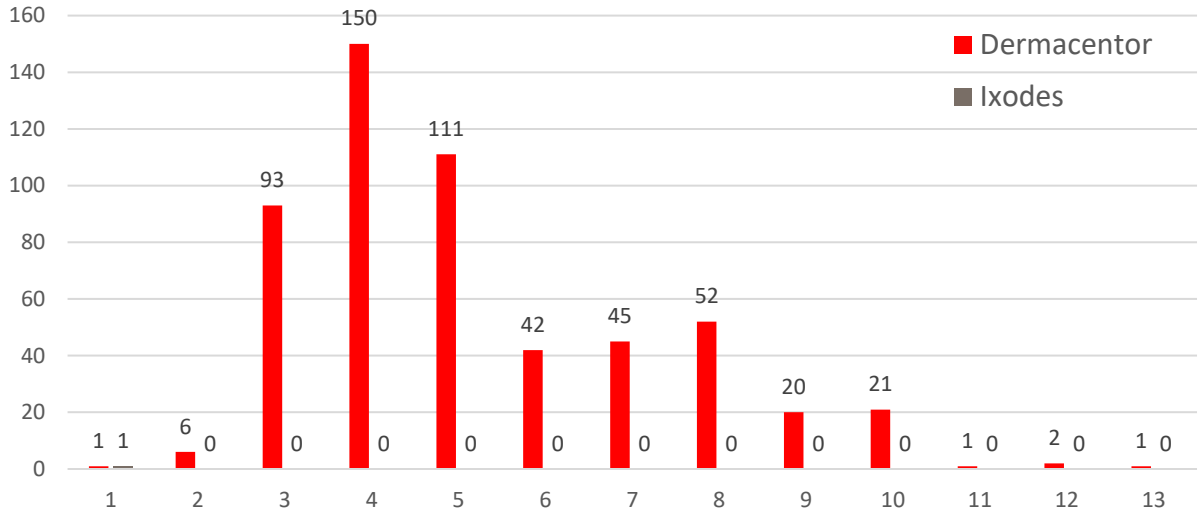


2022 Tick Surveillance Partners	
Veterinarians	
Name	**City in ND**
All Pets Hospital	Grand Forks
All Pets Veterinary Clinic	Bismarck
Beach Veterinary Clinic	Beach
Casselton Veterinary	Casselton
Casselton Veterinary Service-Fargo	Fargo
Dakota Animal Care	Edinburg
Dakota Prairie Veterinary Service	New Town
Dr. Dawn's Pet Shop	Jamestown
Elgin Veterinary Service	Elgin
Gibbens Valley Vet Clinic	Cando
Golden Valley Vet Clinic	Park River
Heart River Animal Hospital	Mandan
Knife River Veterinary Clinic	Beulah
Rugby Veterinary Service	Rugby
Sheridan Animal Hospital	Harvey
State Ave Vet	Dickinson
Turtle Mountain Veterinary Service	Bottineau
West Dakota Veterinary Clinic	Dickinson
Western Veterinary Clinic	Williston
Game and Fish	
Game and Fish- Bismarck	Bismarck
Game and Fish- Devils Lake	Devils Lake
Game and Fish- Dickinson	Dickinson
Game and Fish- Lonetree WMA	Harvey
Game and Fish- Riverdale	Riverdale
Game and Fish- Jamestown	Jamestown
Game and Fish- Williston	Williston
Wildlife Services	
Brent Belland	New England
Jeremy Duckwitz	Moffit
Aaron Freund	Towner
Tyler Haase	Kenmare
Mike Halstead	Elgin
Rick Tischaefer	Butte
Dean Janzen	Niagara
Nick Suzda	Minot AFB
Cody Krause	Carrington
Joshua Kuechle	Grand Forks
Nat Bornsen	Larimore

Wildlife Services Continued	
Kirby Morgenstern	Beulah
Wade Jones	Bismarck
Tony Halpin	West Fargo

2022 Tick Submissions by Week

A total of 545 *Dermacentor variabilis* "Dog" ticks, and one *Ixodes scapularis* "Deer" tick were collected via passive surveillance. Values on the x-axis correspond with collection weeks shown in the table below. The tick collected in week 14 was not included in the graph as it was engorged and could not be identified.

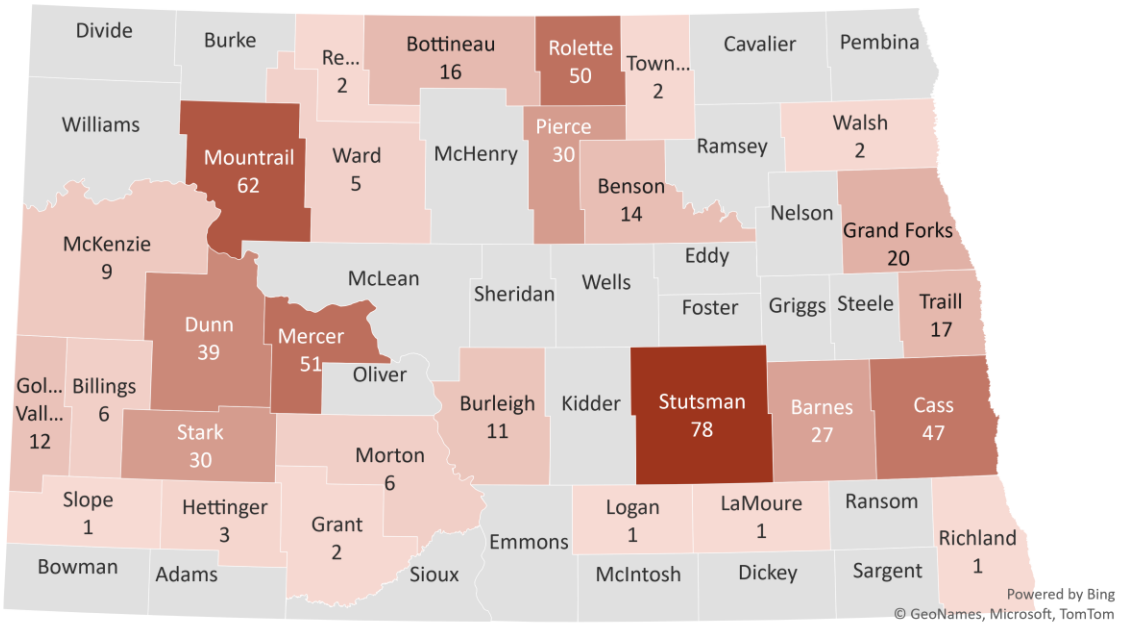


2022 Tick Surveillance	
Week	**Collection Week**
1	April 24- April 30
2	May 1- May 7
3	May 8- May 14
4	May 15- May 21
5	May 22- May 28
6	May 29- June 4
7	June 5- June 11
8	June 12- June 18
9	June 19- June 25
10	June 26- July 2
11	July 3- July 9
12	July 10- July 16
13	July 17- July 23
14	July 24- July 30

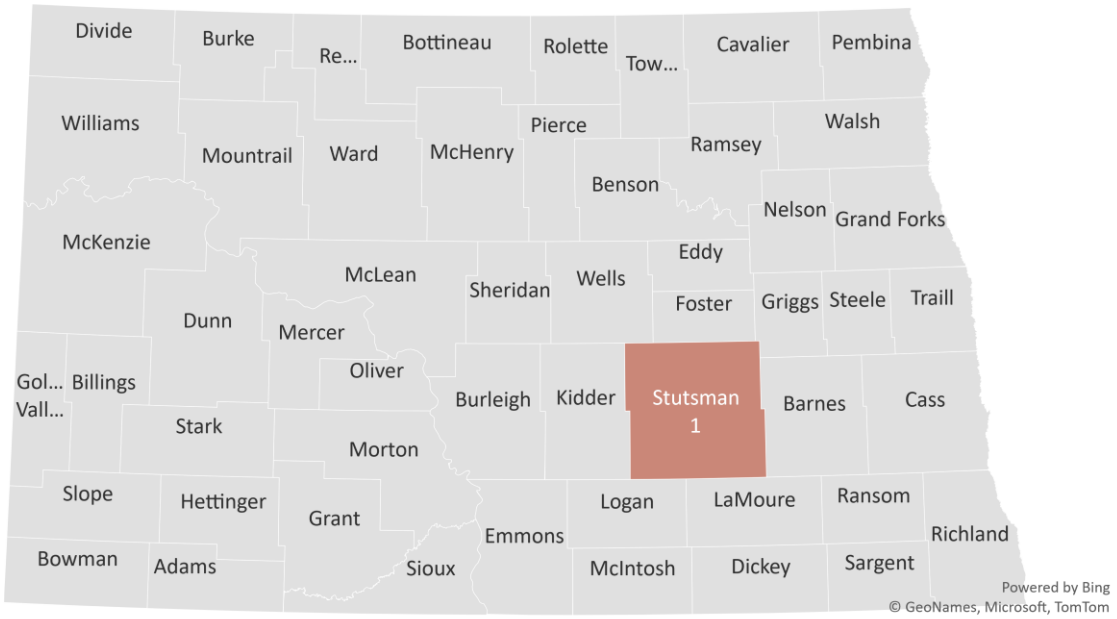
Passive Tick Submission by County

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

Adult *Dermacentor* (Dog) Ticks 2022



Adult *Ixodes* (Deer) Ticks 2022

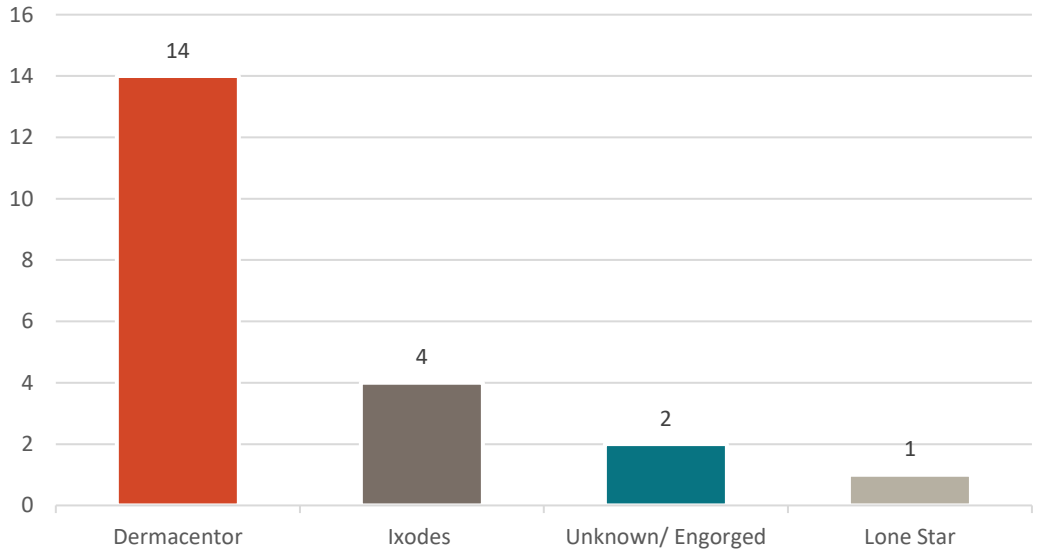


Passive Tickborne Pathogen Testing

Ticks were pooled by week and region. Each pool was tested for the following targets: *Francisella tularensis, Babesia spp., Rickettsia parkeri, Rickettsia rickettsii, Borrelia burgdorferi, Anaplasma spp., Ehrlichia muris*, Powassan virus, and Colorado Tick Fever. All pools for the entire season from all regions tested negative for all targets.

Ticks Submitted Via NDHHS Website Link

A total of 21 tick pictures were submitted via the NDHHS website link. Fourteen of the ticks were identified as dog ticks, *Dermacentor variabilis*. Four ticks were identified as deer ticks, *Ixodes scapularis*, from Burleigh (2) and Bottineau (2) counties. Two ticks could not be identified due to their engorged state. One Lone Star tick, *Amblyomma americanum,* was found in Grand Forks County. No ticks were mailed to the NDHHS lab for pathogen testing.



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.