

National Bovine Brucellosis and Tuberculosis Updates

Q2 (January-March 2021) Monthly Report Fiscal Year 2021

U.S. Department of Agriculture
Animal and Plant Health Inspection Service
Veterinary Services
Strategy and Policy, Ruminant Health Center
Cattle Health Center

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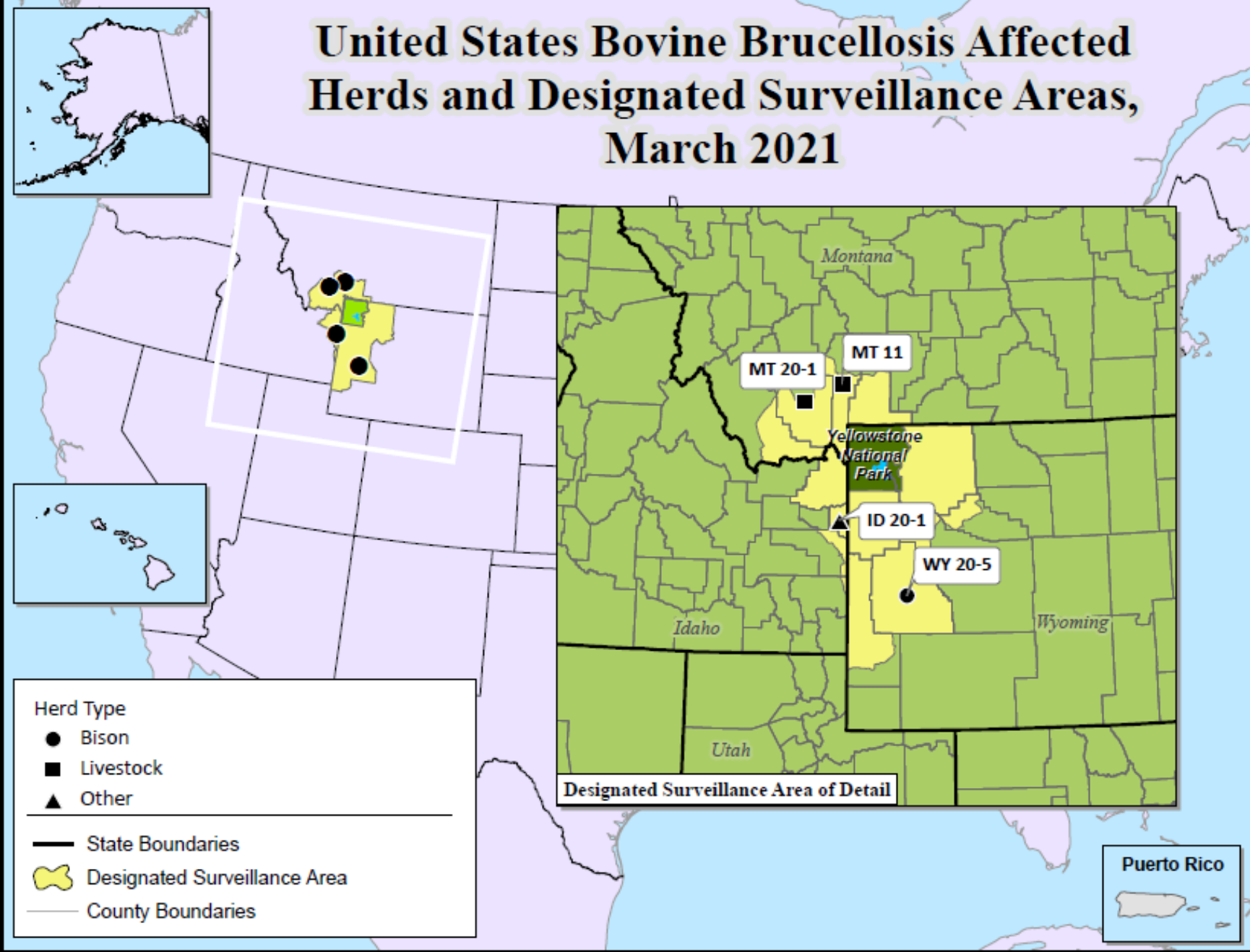
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Brucellosis (*B abortus*)
Q2 (Jan-Mar 2021) updates

Brucellosis affected herds under quarantine in Q2 (Jan-Mar 2021)

Herd ₁	Date Detected	Method of Detection	Herd Type ₂	Herd Management Status	Next Test Tentative Start Date
WY 20-5	September 2020	Diagnostic Testing	Bison	Test-and-Remove	October 2021
ID 20-1	January 2020	DSA Surveillance Testing	Elk/Beef	Test-and-Remove	Fall 2021
WY 20-4	January 2020	DSA Surveillance Testing	Bison	Test-and-Remove Quarantine released January 2021	NA
MT 20-1	December 2019	DSA Surveillance Testing	Livestock	Test-and-Remove	Fall 2021
MT 11	November 2010	DSA Surveillance Testing	Livestock	Test-and-Remove	Fall 2021

United States Bovine Brucellosis Affected Herds and Designated Surveillance Areas, March 2021

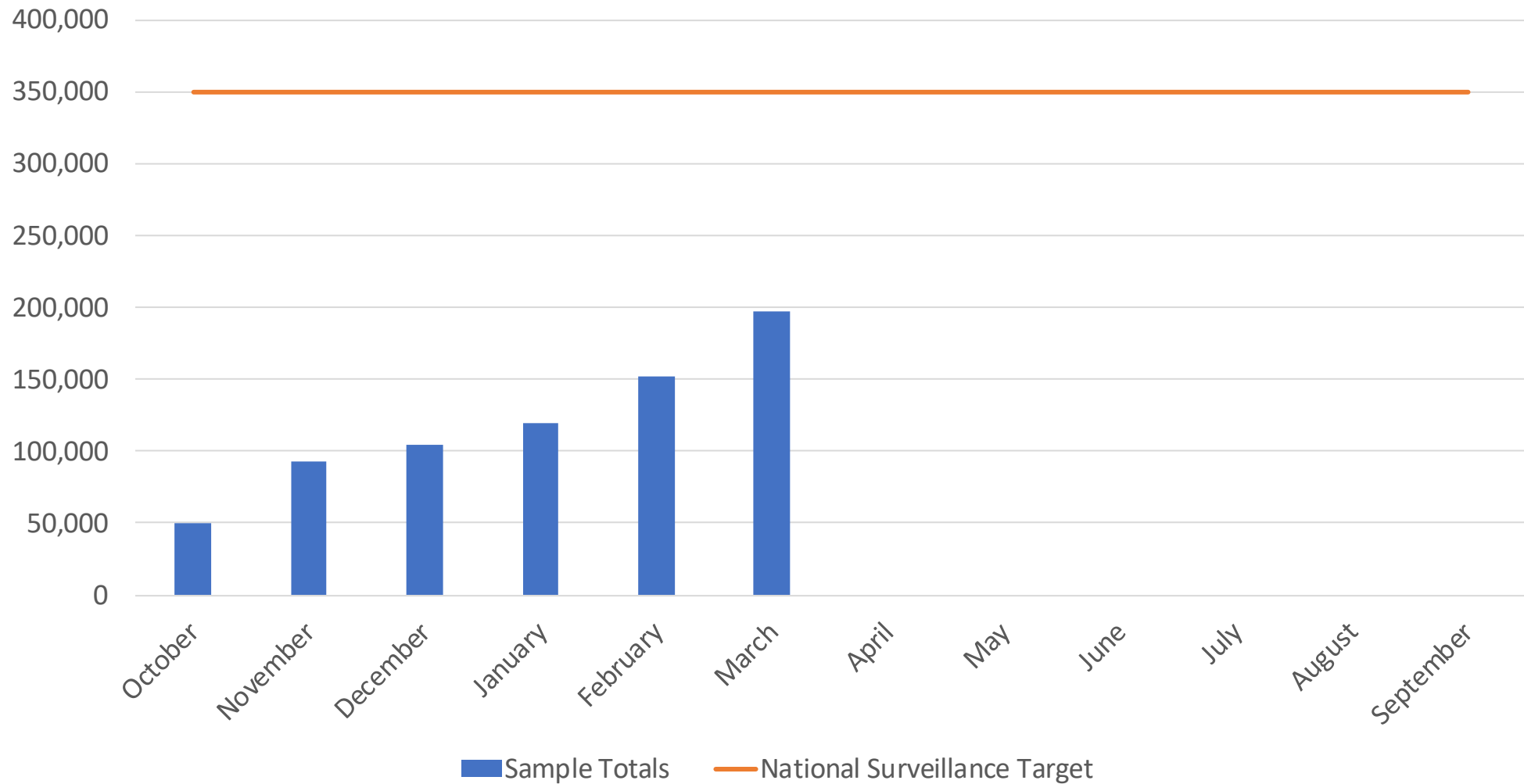


Affected herds are mapped to the center of their county.

Q2 (Jan-Mar 2021) Brucellosis Updates

- WY 20-4
 - Quarantine was released in January 2021 following its third and final negative whole herd test.

FY2021 Cumulative National Brucellosis Slaughter Surveillance Samples



- The orange line represents our annual 350,000 surveillance sample target to detect disease with 95% confidence at a 0.001 percent or higher prevalence.
- One plant stopped sampling due to COVID restrictions in December and resumed sampling in February.

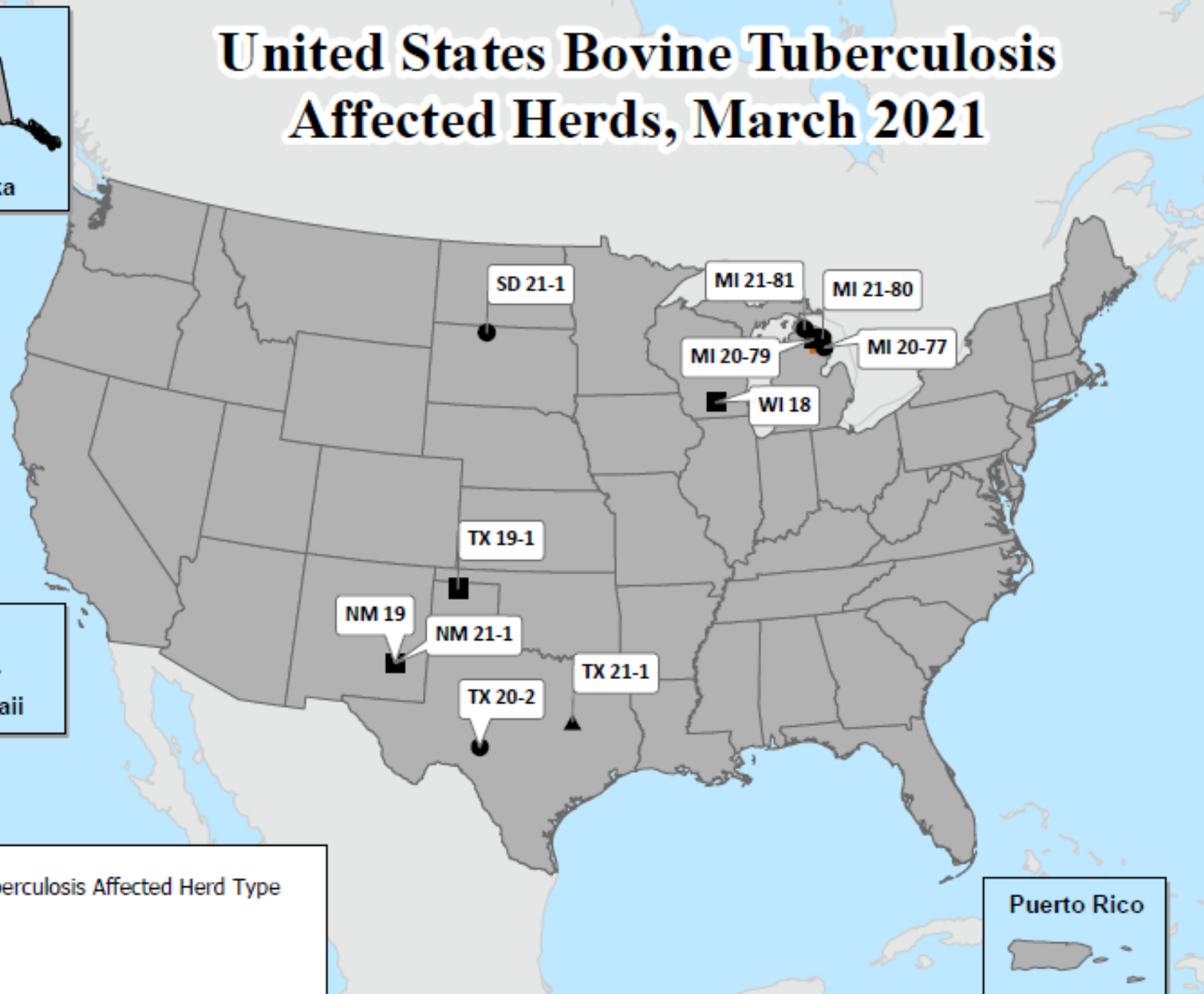
Tuberculosis (*M. bovis*)
Q2 (Jan-Mar 2021) updates

United States Bovine Tuberculosis Affected Herds, March 2021



Bovine Tuberculosis Affected Herd Type

- Beef
- Dairy
- ▲ Other



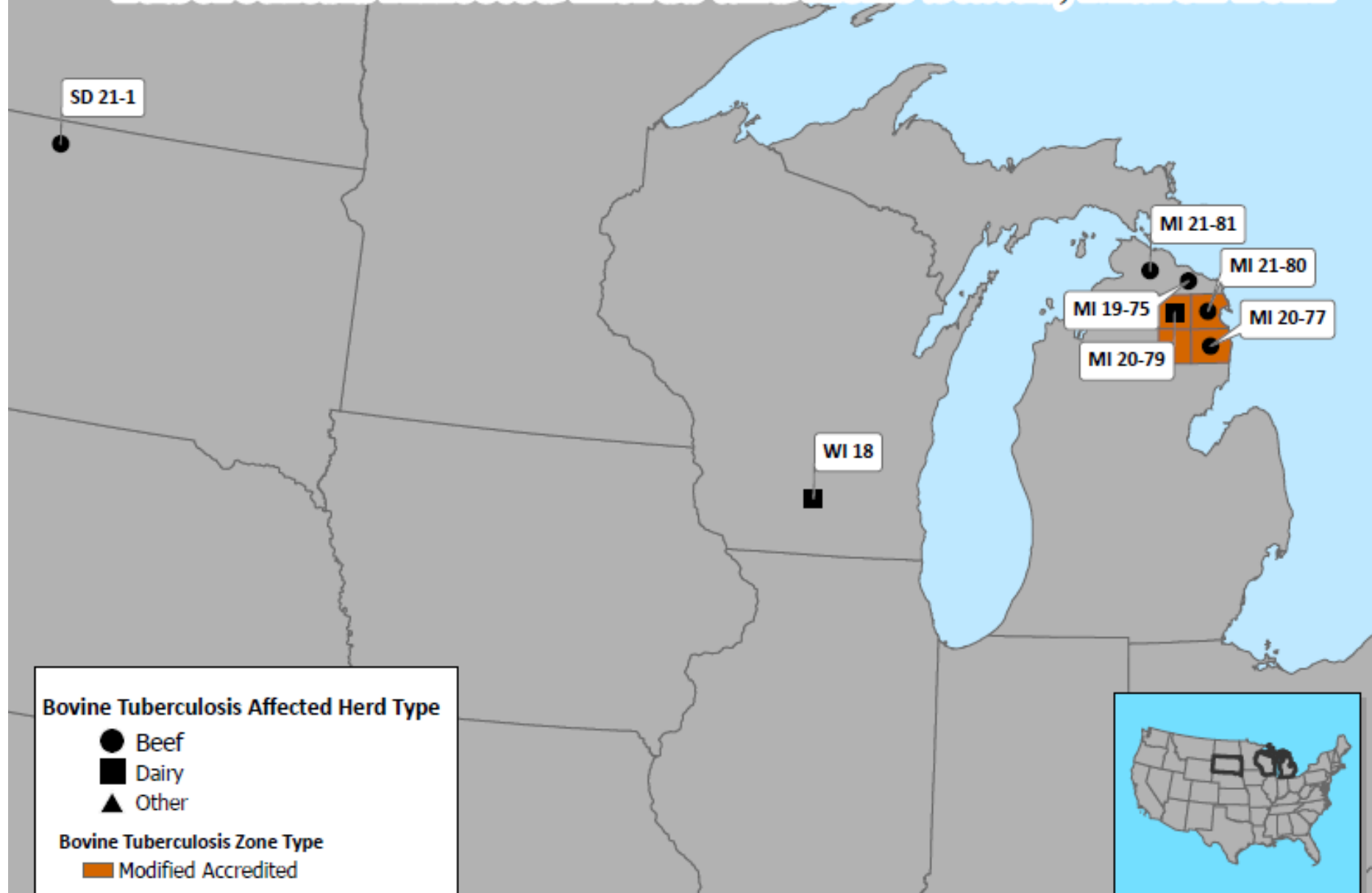
Affected herds are mapped to the center of their county.

TB affected herds under quarantine in Q2 (Jan-Mar 2021), MI, WI, SD

Location ₁	Date Detected	Method of Detection	Herd Type	Herd Management Status	Next Test Tentative Start Date
SD 21-1	March 2021	Slaughter Trace	Beef	Depopulation	TBD
MI 21-81	March 2021	Area Surveillance	Beef	TBD	TBD
MI 21-80	November 2020	Movement Test	Beef	Test-and-Remove Phase	April 2021
MI 20-79	July 2020	Area Surveillance	Dairy	Test-and-Remove Phase	July 2021
MI 20-77	January 2020	Area Surveillance	Beef	Test-and-Remove Phase	April 2021
MI 19-75	April 2019	Area Surveillance	Beef	Depopulated Quarantine released March 2021	NA
WI 18	October 2018	Slaughter Trace	Dairy	Test-and-Remove Phase	July/Aug 2021

1. Herds are named with the last 2 digits of the fiscal year and in order of occurrence within a state during that fiscal year, with Michigan's numbers being cumulative across years.

Michigan, South Dakota, and Wisconsin Bovine Tuberculosis Affected Herds and Zone Status, March 2021



Affected herds are mapped to the center of their county.

Q2 (Jan-Mar 2021) TB Updates (MI, WI, SD)

- MI 21-81

- Identified from a single CCT suspect during routine surveillance testing in October that was necropsied and PCR positive in March.
- A whole herd test is planned for April 2021.

- MI 21-80

- Final culture returned in March with no isolation made for the one animal removed during the assessment test (Dec 2020).
- First removal test was completed in February with no responders and no animals removed.
- This herd has detected one infected animal to-date.

- MI 20-77

- Final culture returned in March as *M. bovis* for the two animals removed during the fourth removal test (Dec 2020), bringing the total number of infected animals in this herd to 44.
- Fifth removal test was completed in February with no responders and no animals removed.

- MI 19-75

- This herd was released from quarantine in March following implementation of an approved herd plan.

- SD 21-1:

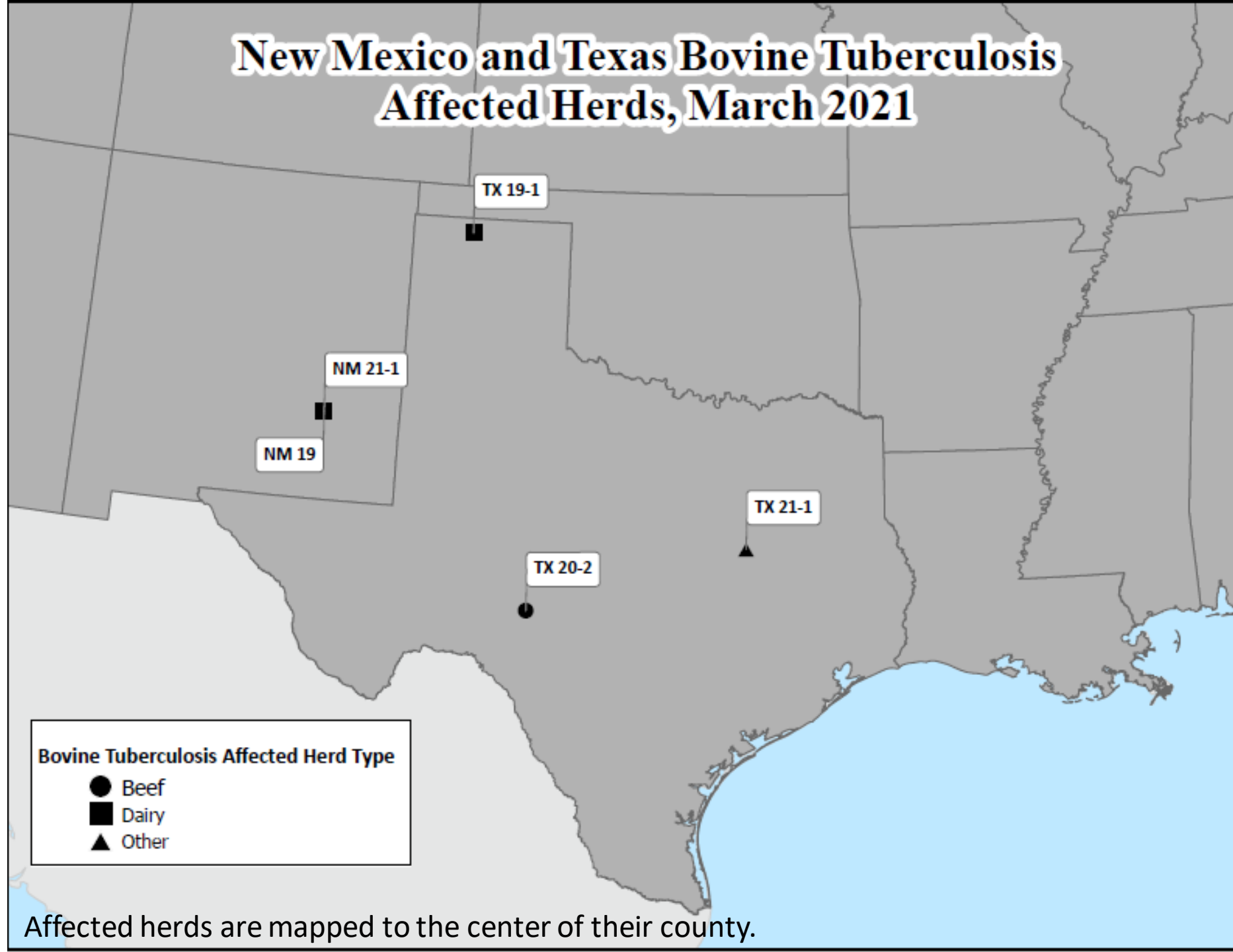
- Identified from a 6-35 slaughter trace from a TB affected animal found at a slaughter plant in Minnesota with PCR positive in February 2021.
- Completed its first whole herd test in March 2021 with 2 histocompatible, PCR positive animals out of 11 CFT responders.
- Herd management plan is pending.

TB affected herds under quarantine in Q2 (Jan-Mar 2021), TX, NM

Location ₁	Date Detected	Method of Detection	Herd Type	Herd Management Status	Next Test Tentative Start Date
NM 21-1	October 2020	Assurance Test	Dairy	Test-and-Remove Phase	April/May 2021
TX 21-1	October 2020	Slaughter Trace	Exhibition	Hold order with testing	TBD
TX 20-2	September 2020	Slaughter Trace	Beef	Test-and-Remove Phase	In progress
TX 20-1	January 2020	Slaughter Trace	Dairy	Test-and-Remove - Assurance Phase	December 2021
NM 19	May 2019	Slaughter Trace	Dairy	Test-and-Remove Phase	April/May 2021
TX 19-1	February 2019	Epi Investigation	Dairy	Test-and-Remove Phase	June 2021
TX 15	June 2015	Slaughter Trace	Dairy	Test-and-Remove - Assurance Phase	November 2021

1. Herds are named with the last 2 digits of the fiscal year and in order of occurrence within a state during that fiscal year, with Michigan's numbers being cumulative across years.

New Mexico and Texas Bovine Tuberculosis Affected Herds, March 2021



Affected herds are mapped to the center of their county.

Q2 (Jan-Mar 2021) TB Updates (TX, NM)

- NM 21-1

- First removal test completed January 2021 with no histo-compatible animals identified, cultures pending.

- NM 19

- Completed its seventh removal test in February 2021 with CFT responders removed and 8 histocompatible animals identified from that group.
- Next removal test scheduled for April-May 2021.

Bovine TB cases found through routine slaughter FY2021 Q2 (Jan-Mar)

Slaughter Type	Month confirmed	Slaughter Plant State	Slaughter Origin State	Outcome/current status
Adult	February 2021	MN	SD	Traced to SD 21-1

Tuberculosis (*M. bovis*)

Terms and Definitions

Designation of Herds as “Quarantined”

- Affected herds are considered “quarantined” due to a formal quarantine order of the entire herd or informal hold order for subgroups of exposed animals.
- Herds under quarantine due to tracing investigations are generally excluded from this report due to the temporary nature of their restrictions.
- Quarantined herds are removed from this report once the quarantine or hold order is removed, typically after verification testing.

Methods of Detection of TB-Affected Herds

- **Area surveillance:** Surveillance in a defined area such as counties in or bordering the modified accredited zone in Michigan.
- **Assurance test:** Herds identified during the assurance testing phase of a test and remove herd plan.
- **Epi investigation:** Herds identified as part of epidemiologic investigations associated with TB-affected animals or TB-affected herds.
- **Movement test:** Herds identified through testing of animals for routine movements, e.g., export and interstate commerce.
- **Slaughter trace:** Herds identified as the source of animals with suspicious lesions during routine slaughter surveillance. Also called “6-35 traces”

Definitions and Acronyms

- **6-35 Trace:** Tracing of the source of a suspected or confirmed case of TB that was identified during slaughter surveillance and reported on a VS 6-35 form; known otherwise as a “slaughter trace.”
- ***M. bovis*:** *Mycobacterium bovis*, known as bovine or zoonotic tuberculosis
- **NGL:** No gross lesions on postmortem examination
- **NVSL:** National Veterinary Services Laboratories
- **PCR:** Polymerase Chain Reaction; A molecular biology method of assessing for presence of segments of generic material, i.e., DNA and RNA
- **WGS:** Whole Genome Sequencing of TB bacterial DNA; used to assess relatedness among TB bacterial strains