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MYCOPLASMA BOVIS disease in bison 2022 study

We are attempting to understand the impacts, scope, and risk factors for *Mycoplasma bovis* disease in bison and buffalo herds in the United States. Your participation in this survey is voluntary and can be stopped at any time. Any information you provide will be kept confidential and will not be identified by premise.

By checking this box o , I acknowledge that I am at least 18 years of age and consent to the information I provide in this survey being used to understand the impacts, scope, and risk factors for *Mycoplasma bovis* disease in bison.

**Unless specifically stated otherwise, please answer for the entire operation.**

1. What is your role in completing this survey?

o**a**  Bison herd owner or manager

o**b** Veterinarian for affected herd

o**c** Other allied industry professional entering information for a client

1. Total herd size:

3. What Year herd was established:

4. State where herd spends majority of time:

5. Approximate size of main pasture or pen: 

6. Has this herd ever had an animal confirmed to be infected with *Mycoplasma bovis* by a veterinary diagnostic laboratory.

oa Yes

ob No (skip to 14)

oC No, but *Mycoplasma bovis* was suspected or diagnosed by a veterinarian based on clinical signs.

od No, but Mycoplasma bovis was suspected due to the scope and scale of losses in the herd.

oe Don’t know (skip to 14)

7. Date (can be approximate) when first mortalities were observed in most recent

outbreak:

8. Over how long of a period were deaths observed in the herd?

9. What was the first sign of illness observed in the herd?

10. Have you experienced previous losses or illnesses due to Mycoplasma bovis in this herd?

oa Yes

i. If yes, please list years:

ob  No

oc Don’t know

11. During the most recent outbreak, how many of each age class of animals were lost (can be

approximate):

oa Number of adult bulls

ob Number of adult cows 

oc Number of yearlings 

od Number of calves 

12. Average body condition of animal(s) lost (circle the best answer for the majority of animals that

died):

oa Over conditioned

ob Heavier than average

oc Average

od Poorer than average

oe Poor/skinny

13. Please **circle** all signs of illness observed in the herd during the outbreak:

* 1. Animals found dead without signs of illness
  2. Coughing
  3. Lameness
  4. Loss of condition
  5. Nasal discharge
  6. Eye discharge
  7. Open-mouthed breathing
  8. Abortion
  9. Loss of pregnancy/unusual number of open cows
  10. Bleeding from nose, mouth, anus
  11. Diarrhea
  12. Apparent blindness
  13. Isolation from the herd
  14. Downer animals
  15. Head tilt or droopy ear on one side
  16. Don’t know
  17. Other, please describe:

14. When was the last new animal added to the herd (approximate year or date is fine)?

15. Are new herd additions placed into quarantine prior to being added?

oa Yes

ob  No (Skip to 17)

oc Don’t know

16. If yes, how long is quarantine?

17. Are new herd additions tested for any diseases prior to being added?

oa Yes if yes, please list test performed:

ob  No

oc Don’t know

18. Are any other livestock kept on the premise (circle all that apply)?

1. Domestic cow/calf operation
2. Dairy cattle
3. Feeder cattle
4. Goats
5. Sheep
6. Horses/mules/donkeys
7. Farmed deer/elk/cervids
8. Other:
9. No
10. Don’t know

19. Are the trailers used to ship animals from the affected herd also used to ship cattle

or animals from other herds?

oa Yes, cattle

ob Yes, bison

oc Yes, sheep/goats

od Yes, horses/mules/donkeys

oe Yes, farmed deer/elk/cervids

of Other:

og No

oh Don’t know

1. If yes, are trailers cleaned in between herds?

oa Yes, trailer is sprayed out/pressure washed in between herds

ob Manure removal only after each use

oc Manure removal only after more than one use

od No

oe Don’t know

1. If supplemental feed or minerals other than natural standing pasture forage is available, is this equipment shared with cattle operations?

oa Yes

ob  No

oc Don’t know

1. Does the herd share waterers or water sources with cattle?

oa Yes, water tanks

ob Yes, natural pond/lake/stock dam

oc Yes, river/stream

od No

oe Don’t know

1. Does the herd share pasture with cattle?

oa Yes

ob  No

oc Don’t know

1. Does the herd share fence line with any other herds (circle all that apply)?

oa Domestic cow/calf operation

ob Dairy cattle

oc Feeder cattle

od Bison

oe Horses/mules/donkeys/burros

of Sheep/goats/llamas/alpacas

og Farmed cervids

oh Other species:

oi No

oj Don’t know

1. In the year prior to the first outbreak, have any animals from the herd escaped the premise and been returned to the herd?

oa Yes

ob  No (skip to 27)

oc Don’t know

1. If yes, please explain
2. In the year prior to the first outbreak, have any escaped domestic livestock been found on your premise or in the pen with the herd (i.e., escaped animals from a neighboring farm, trespass, or feral livestock)?

oa Yes

ob  No (skip to 29)

oc Don’t know

1. If yes, please name species, approximate date, and circumstances:
2. What wildlife species have been seen in the pen with the bison herd in the year prior to the outbreak?

oa None

ob Mule deer

oc White-tailed deer

od Deer, unable to tell which species

oe Pronghorn

of Elk

og Other

oh Don’t know

1. Water sources available to animals (circle any that apply):
   1. Automatic waterer
   2. Well or municipal water in water tank
   3. Stock dam or dugout
   4. Natural pond/lake
   5. Natural stream/river
   6. Other
   7. Don’t know
2. Did you notice wildlife death losses in the area in the year prior to the first outbreak?

oa Yes, species:

ob  No

oc Don’t know

1. Supplemental feed provided to the herd in the year prior to this survey or first *Mycoplasma bovis* death (circle any that apply):
   1. None
   2. Alfalfa hay
   3. Alfalfa cubes
   4. Grass hay
   5. Pelleted ration
   6. Corn
   7. Silage/haylage
   8. Distiller’s grain
   9. Protein tubs/blocks
   10. Liquid supplements
   11. Trace minerals/mineral blocks
   12. Salt blocks
   13. Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   14. Don’t know
2. Any change in feeding practices in the year prior to this survey or the first Mycoplasma bovis death?

oa Yes, please explain:

ob  No

oc Don’t know

1. Is artificial insemination used on this herd?

oa Yes, species:

ob  No (skip to 36)

oc Don’t know (skip to 36)

1. If yes, when was approximate date of the last artificial insemination procedure performed?
2. Please **circle** all of the vaccines given to the herd within the last 3 years:
   1. None
   2. 7-way/Clostridial vaccine
   3. Newport or autogenous Mycoplasma bovis vaccine
   4. Other commercial Mycoplasma bovis vaccine
   5. IBR/Infectious bovine rhinotracheitis
   6. Bovine Diarrhea Virus
   7. Bovine Respiratory Syncytial Virus/Bovishield
   8. Calf diarrhea vaccine
   9. Anthrax
   10. Leptospirosis
   11. Other:
   12. Don’t know
3. Is the herd treated with any deworming or anti-parasite products or strategies?

oa Pour-on dewormer

ob Injectable or implant

oc Ear tag

od Oral drench or feed

oe Dewormer blocks or salt

of Pastures are rotated

og Pastures are managed with prescribed fire

oh None

oi Don’t know

1. If you answered yes to any of the above parasite treatments, when are animals treated?

oa All animals are treated on a regular schedule

ob Certain age classes are treated on a regular schedule

oc Individual animals are treated when they appear sick

od All animals in the herd or in an age class are treated when fecal testing indicates a high

level of parasites

oe Individual animals are treated when fecal testing indicates a high level of parasites

of Other:

og Don’t know

1. What do you believe is the source of Mycoplasma bovis disease in bison?
2. Any other comments or information you would like to share?