|  |  |
| --- | --- |
| According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is 0579-XXXX. The estimated time to complete this information collection is estimated to average 15 minutes per response, including the time for reviewing existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. | **OMB Approved**0579-XXXXExp: XX/XXXX |

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?