|  |  |  |
| --- | --- | --- |
| 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 information collection is 0579-0420. The time required to complete this information collection is estimated to average 67 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collected. | | **OMB Approved**  0579-0420  EXP: XX/**XX**XX |
| UNITED STATES DEPARTMENT OF AGRICULTURE  ANIMAL AND PLANT HEALTH INSPECTION SERVICE  VETERINARY SERVICES  **NATIONAL ANIMAL HEALTH MONITORING SYSTEM**  **2150 CENTRE AVE, BLDG B**  FORT COLLINS, CO 80526 | nahms  bison 2022  study survey | |

|  |
| --- |
| The information you provide will be used for statistical purposes only. Your responses will be kept confidential and any person who willfully discloses ANY identifiable information about you or your operation is subject to a jail term, a fine, or both. This survey is conducted in accordance with the Confidential Information Protection and Statistical Efficiency Act of 2018, Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35 and other applicable Federal laws. For more information on how we protect your information please visit: https://www.nass.usda.gov/confidentiality. Response is **voluntary**. |
|  |
| If you would like to have your bison tested for internal parasites or enteric microbes and/or have your pasture forage tested for nutritional value, please sign up for this free testing at the end of this questionnaire. Thank you! | | |

**Section 1. Inventory**

For the purposes of this study, an “operation” is defined as a person or entity raising one or more bison that are under common ownership (public or private) and kept on one or more locations for commercial or conservation purposes. This includes conservation herds. For example, an operation might consist of one location for commercial bison cow-calf production and another location for a bison finishing operation. **Unless specifically stated otherwise, please answer for the entire operation.**

* INCLUDE all bison raised on this operation, whether owned by your operation or raised under contract for another owner.
* EXCLUDE bison raised on another person’s or entity’s operation, even if you own the bison.

1. From July 1, 2021, through June 30, 2022, were any bison present on   
this operation, regardless of ownership? b1001 o1 Yes—**Continue** o3 No—**GO TO section 10**

2. From July 1, 2021, through June 30, 2022, did this operation have bison

at more than one location? b1002 o1 Yeso3 No

3. On July 1, 2022, how many bison were on this operation, by sex and age group? If you don’t know sex of bison less than 1 year old, please enter total number of bison for the age group.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bison** | **Bison more than 3 years old** | **Bison 1 to 3 years old** | **Bison less than 1 year old** | **Total bison on July 1, 2022** |
| a. Females | b1003 | b1006 | b1009 | b1012 |
| b. Males | b1004 | b1007 | b1010 | b1013 |
| **Total** (*add items 3.a and 3.b for each column)* | b1005 | b1008 | b1011 | b1014 |

4. From July 1, 2021, through June 30, 2022, were any bison

added to this operation’s herd? b1015 o1 Yes—**Continue** o3 No—**GO TO question 7**

5. From July 1, 2021, through June 30, 2022, how many bison were added to this operation’s herd from the following external sources?

|  |  |  |  |
| --- | --- | --- | --- |
| **Source** | **Bison more than  3 years old** | **Bison 1 to 3 years old** | **Bison less than 1 year old** |
| a. Private sale | b1016 | b1022 | b1028 |
| b. Trade | b1017 | b1023 | b1029 |
| c. Auction/sale barn | b1018 | b1024 | b1030 |
| d. Dealer/broker | b1019 | b1025 | b1031 |
| e. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0120 | b1020 | b1026 | b1032 |
| **Total** (*add items 5.a–5.e in each column)* | b1021 | b1027 | b1033 |

6. From July 1, 2021, through June 30, 2022, did this operation import any live bison from the following?

a. Canada b1034 o1 Yeso3 No

b. Mexico b1035 o1 Yeso3 No

c. Other country(-ies) (specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0136 b1036 o1 Yeso3 No

7. From July 1, 2021, through June 30, 2022, did any **live** bison permanently leave this operation’s herd for any reason, including those that were slaughtered on the ranch? b1037 o1 Yes—**Continue** o3 No—**GO TO question 9**

8. From July 1, 2021, through June 30, 2022, how many **live** bison permanently left the operation   
or were removed from the operation by the following methods?

|  |  |  |  |
| --- | --- | --- | --- |
| **Method of removal** | **Bison more than  3 years old** | **Bison 1 to 3 years old** | **Bison less than**  **1 year old** |
| a. Slaughtered on ranch | b1038 | b1050 | b1062 |
| b. Direct to off-site slaughter/packer | b1039 | b1051 | b1063 |
| c. Direct to feedlot | b1040 | b1052 | b1064 |
| d. Sold at auction/sale barn | b1041 | b1053 | b1065 |
| e. Sold to dealer/broker | b1042 | b1054 | b1066 |
| f. Private sale—for breeding stock | b1043 | b1055 | b1067 |
| g. Private sale—onsite hunting | b1044 | b1056 | b1068 |
| h. Private sale—for meat or other products | b1045 | b1057 | b1069 |
| i. Traded or given away | b1046 | b1058 | b1070 |
| j. Lost or stolen | b1047 | b1059 | b1071 |
| k. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0148 | b1048 | b1060 | b1072 |
| **Total** *(add items 8.a–8.k for each column)* | b1049 | b1061 | b1073 |

9. From July 1, 2021, through June 30, 2022, did this operation export any live bison or bison products  
**to the following**?

a. Canada b1074 o1 Yeso3 No

b. Mexico b1075 o1 Yeso3 No

c. Other country(-ies) (specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0176 b1076 o1 Yeso3 No

10. From July 1, 2021, through June 30, 2022, were mobile units used

for slaughter of any bison on this operation? b1077 o1 Yes—**Continue** o3 No—**GO TO question 13**

11. What was the primary reason for using mobile slaughter units on this operation? [*Check one only.*] b1078

o1 Hunter-killed animals

o2 Animal welfare

o3 Transportation reasons

o4 Lack of nearby processing facility or availability

o5 Marketing reasons

o6 Other (specify b0178)

12. Did the COVID-19 (SARS-CoV-2) pandemic affect this operation’s use of mobile slaughter units during 2021 and 2022? [*Check one only.*] b1079

o1 Yes--Increased use of mobile slaughter

o2 Yes--Reduced use of mobile slaughter

o3 No--Maintained same use of mobile slaughter

o4 Other (specify: ) b0179

13. From July 1, 2021, through June 30, 2022, did any of this operation’s bison die

(including by euthanasia) due to natural causes? b1080 o1 Yes—**Continue** o3 No—**GO TO section 2**

14. From July 1, 2021, through June 30, 2022, how many of this operation’s bison died or were euthanized due to the following natural causes?

|  |  |  |  |
| --- | --- | --- | --- |
| **Cause of natural death or euthanasia** | **Bison more than  3 years old** | **Bison 1 to 3 years old** | **Bison less than**  **1 year old** |
| a. Disease, disorder, or other health problem | b1081 | b1089 | b1097 |
| b. Injury/trauma not related to predation, handling, or weather | b1082 | b1090 | b1098 |
| c. Predation | b1083 | b1091 | b1099 |
| d. Handling-related problem | b1084 | b1092 | b1100 |
| e. Weather-related problem (e.g., lightning, flood) | b1085 | b1093 | b1101 |
| f. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0186 | b1086 | b1094 | b1102 |
| g. Unknown | b1087 | b1095 | b1103 |
| **Total** *(add items 14.a–14.g for each column)* | b1088 | b1096 | b1104 |

**Section 2. Operation Management**

1. From July 1, 2021, through June 30, 2022, were bison kept on this operation  
for the following reasons?

a. Bison cow-calf production (offspring intended for meat production) b2001 o1 Yeso3 No

b. Seedstock production (offspring intended for breeding purposes) b2002 o1 Yeso3 No

c. Finishing on grass (bison finished on pasture/grass for slaughter) b2003 o1 Yeso3 No

d. Backgrounding/stocking (young bison prepared for a feedlot) b2004 o1 Yeso3 No

e. Feedlot operation (bison from this or other operations   
 being finished in feedlot for slaughter) b2005 o1 Yeso3 No

f. Game ranch/hunting on this operation b2006 o1 Yeso3 No

g. Preparation/sale of byproducts (e.g., hides, skulls, horns, hair) b2007 o1 Yeso3 No

h. Conservation b2008 o1 Yeso3 No

i. Hobby/pasture pet b2009 o1 Yeso3 No

j. Agri-tourism/eco-tourism b2010 o1 Yeso3 No

k. Cultural use b2011 o1 Yeso3 No

l. Cutting horse training b2012 o1 Yeso3 No

m. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0213 b2013 o1 Yeso3 No

2. Which one reason in question 1 is the **primary** reason bison were kept

on this operation? *[Enter one letter, a through m.]* b2014\_\_\_\_\_ letter

3. How many years have bison been raised at this location? b2015 \_\_\_\_\_ years

4. Which of the following best describes plans for the bison herd on

this operation over the next year? *[Check one only.]* b2016

o1 Increase herd size

o2 Maintain same herd size

o3 Decrease herd size

o4 Get out of the business (specify reason: ) b0216

5. From July 1, 2021, though June 30, 2022, were the following records

maintained (electronic or handwritten) for this operation? *[NA=Not applicable.]*

a. Purchases and sales b2017 o1 Yeso3 Noo4 NA

b. Breeding b2018 o1 Yeso3 Noo4 NA

c. Health b2019 o1 Yeso3 No

d. Treatment of individual bison with antibiotics b2020 o1 Yeso3 Noo4 NA

e. Pasture/natural resource conditions b2021 o1 Yeso3 Noo4 NA

f. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0222 b2022 o1 Yeso3 No

6. Please answer the following questions about formally identifying your bison. Answer for the total bison inventory on July 1, 2022 (Section 1, Question 3), in number **OR** percentage of bison, whichever is easier for you. *[Write in “NA” for Not Applicable if no bison in the age category.]*

a. As of July 1, 2022, how many or what percentage of bison **1 year or older** had a **herd identification** (something that indicates a bison is a member of your operation’s herd)? b2023 \_\_\_\_\_\_\_# *OR \_\_*\_\_\_\_% bison

b. As of July 1, 2022, how many or what percentage of bison **less than 1 year old** had a **herd identification** (identifies a bison as being a member of your operation’s herd)? b2024 \_\_\_\_\_\_\_# *OR \_\_\_*\_\_\_\_% bison

c. As of July 1, 2022, how many or what percentage of bison **1 year or older** had a   
**unique individual identification** (a unique identifier for each animal that enables it to be   
distinguished from all other bison in the herd)? b2025 \_\_\_\_\_\_\_\_\_\_\_\_# *OR \_\_\_\_\_\_*\_\_\_\_\_% bison

d. As of July 1, 2022, how many or what percentage of bison **less than 1 year old** had a   
**unique individual identification** (a unique identifier for each animal that enables it to be   
distinguished from all other bison in the herd)? b2026 \_\_\_\_\_\_\_\_\_\_\_\_# *OR \_\_\_\_\_\_*\_\_\_\_% bison

e. As of July 1, 2022, how many or what percentage of bison **1 year or older** did **not** have any identification  
 (no herd identification and no unique individual identification)? b2027 \_\_\_\_\_\_\_\_\_# *OR \_\_\_\_\_*\_\_\_\_% bison

**[If questions 6.c and 6.d BOTH = zero (no bison have unique individual identification) or BOTH = NA (no bison in the age category), GO TO question 8; otherwise, continue.]**

7. For total bison inventory on July 1, 2022 (Section 1, Question 3), how many **OR** what percentage of this operation’s bison had the following methods of individual identification?

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Method of individual identification** | |  | **Bison 1 year  and older** | | **Bison less than  1 year old** | |  |
|  | (Number *OR* Percent) | | (Number *OR* Percent) | |  |
| a. | Official ear tag (e.g., for brucellosis vaccination, national uniform eartagging system) |  | # | % | # | % | b2028/ b2034 | |
| b. | Other metal ear tag or plastic ear tag |  | # | % | # | % | b2029/ b2035 | |
| c. | Electronic ear tag (radio-frequency identification [RFID]) |  | # | % | # | % | b2030/ b2036 | |
| d. | Electronic implant/microchip |  | # | % | # | % | b2031/ b2037 | |
| e. | Tattoo/freeze brand |  | # | % | # | % | b2032/ b2038 | |
| f. | Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0233 |  | # | % | # | % | b2033/ b2039 | |

8. Does this operation have facilities for handling/restraining bison? b2040 o1 Yeso3 No

**If “Yes,” were these facilities designed specifically for bison?** b2041 o1 Yeso3 No

**Section 3. Grazing and Pasture Management**

1. From July 1, 2021, through June 30, 2022, were any of this operation’s bison on range/pasture?

o1 Yes—**How many months were they on range/pasture during that period?** b3001/ b3002  \_\_\_\_\_ months

o3 No—**GO TO question 7**

2. From July 1, 2021, through June 30, 2022, how many times did this operation round up or  
 gather the majority of its pastured bison as a group? b3003 \_\_\_\_\_ # times

**[If question 2 = zero, GO TO question 4; otherwise, continue.]**

3. For the most recent time this operation rounded up or gathered the majority of its pastured bison

as a group, were they gathered for the following reasons?

a. Tagging/identification b3004 o1 Yeso3 No

b. Vaccination b3005 o1 Yeso3 No

c. Deworming b3006 o1 Yeso3 No

d. Pregnancy checking b3007 o1 Yeso3 No

e. Disease testing b3008 o1 Yeso3 No

f. Other veterinary need (e.g., physical exam, treatment for illness) b3009 o1 Yeso3 No

g. Weaning b3010 o1 Yeso3 No

h. Shipping (e.g., to slaughter, pasture) b3011 o1 Yeso3 No

i. Other (specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0312 b3012 o1 Yeso3 No

4. From July 1, 2021, through June 30, 2022, what was the average stocking rate of bison   
 on range/pasture (number of acres per bison animal unit) for this operation? b3013 \_\_\_\_\_ acres/animal unit

5. What is this operation’s primary grazing system? *[Check one only.]* b3014

o1 Rotational (often based on set number of days in each paddock)

o2 Continuous

o3 Holistic (requires some site-based evaluation and decision making to   
assess regeneration and determine schedule for moving animals among paddocks)

o4 Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0314

6. From July 1, 2021, through June 30, 2022, were this operation’s bison ever provided the following while onrange/pasture?

a. Hay/roughage b3015 o1 Yeso3 No

b. Mineral supplements b3016 o1 Yeso3 No

c. Vitamin supplements b3017 o1 Yeso3 No

d. Energy/concentrates (e.g., grain) b3018 o1 Yeso3 No

7. Does this operation use the following production practices for its bison?

a. Certified organic (certified to USDA organic standards) ……………….. b3019 o1 Yeso3 No

b. Grass fed (bison raised to meet USDA or American Grassfed Association  
 [AGA] standards) b3020 o1 Yeso3 No

c. Raised without antibiotics b3021 o1 Yeso3 No

d. Raised without feeds containing genetically modified organisms (GMOs) b3022 o1 Yeso3 No

e. Certified for animal welfare, such as Global Animal Partnership (GAP) certified,   
 Certified Humane®, American Humane Certified™ b3023 o1 Yeso3 No

8. During the previous 5 years, did this operation ever conduct the following types of testing?

a. Forage testing b3024 o1 Yeso3 No

b. Soil testing b3025 o1 Yeso3 No

c. Water testing b3026 o1 Yeso3 No

**Section 4. Biosecurity**

1. From July 1, 2021, through June 30, 2022, were the following farmed animals ever present on **this** **operation**?  
If “Yes,” could they have had physical contact with this operation’s bison?

|  |  |  |  |
| --- | --- | --- | --- |
| **Farmed animal** | **On operation?** | **Contact with bison?** |  |
| *If Yes, answer next column.* **⟶** |  |
| a. Cattle (beef or dairy) | o1 Yeso3 No | o1 Yeso3 No | b4001/ b4009 |
| b. Sheep or lambs | o1 Yeso3 No | o1 Yeso3 No | b4002/ b4010 |
| c. Goats | o1 Yeso3 No | o1 Yeso3 No | b4003/ b4011 |
| d. Horses, donkeys, etc. | o1 Yeso3 No | o1 Yeso3 No | b4004/ b4012 |
| e. Swine | o1 Yeso3 No | o1 Yeso3 No | b4005/ b4013 |
| f. Poultry | o1 Yeso3 No | o1 Yeso3 No | b4006/ b4014 |
| g. Deer, elk, or other cervids | o1 Yeso3 No | o1 Yeso3 No | b4007/ b4015 |
| h. Other (specify: \_\_\_\_\_\_\_\_\_\_\_) b0408 | o1 Yeso3 No | o1 Yeso3 No | b4008/ b4016 |

2. From July 1, 2021, through June 30, 2022, were any of the following **farmed** animals belonging to   
**nearby operations** ever located within **1 mile** of this operation’s bison?   
If “Yes,” could they have had fence-line contact with this operation’s bison?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Neighboring farmed animal** | **Within 1 mile of operation’s bison?** | | **Fence-line contact  with operation’s bison?** |  |
| *If Yes, answer next column.* | **⟶** |  |
| a. Bison | o1 Yes o2 Don’t knowo3 No | | o1 Yeso3 No | b4017/ b4021 |
| b. Cattle (beef or dairy) | o1 Yes o2 Don’t knowo3 No | | o1 Yeso3 No | b4018/ b4022 |
| c. Sheep or lambs | o1 Yes o2 Don’t knowo3 No | | o1 Yeso3 No | b4019/ b4023 |
| d. Deer, elk, or other cervids | o1 Yes o2 Don’t knowo3 No | | o1 Yeso3 No | b4020/ b4024 |

3. From July 1, 2021, through June 30, 2022, were the following **wild** animals ever seen

inside this operation’s perimeter fence or just outside the perimeter fence?

|  |  |  |  |
| --- | --- | --- | --- |
| **Wild animal** | **ANSWER BOTH COLUMNS** | |  |
| **Inside perimeter  fence?** | **Just outside perimeter fence?** |  |
| a. Bison | o1 Yeso3 No | o1 Yeso3 No | b4025/ b4031 |
| b. Pronghorn (antelope) | o1 Yeso3 No | o1 Yeso3 No | b4026/ b4032 |
| c. Sheep (e.g., bighorn) | o1 Yeso3 No | o1 Yeso3 No | b4027/ b4033 |
| d. Deer, elk, or other cervids | o1 Yeso3 No | o1 Yeso3 No | b4028/ b4034 |
| e. Feral swine or wild boars | o1 Yeso3 No | o1 Yeso3 No | b4029/ b4035 |
| f. Other (specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0430 | o1 Yeso3 No | o1 Yeso3 No | b4030/ b4036 |

4. From July 1, 2021, through June 30, 2022, did this operation take any actions to control

**wild** animals or prevent them from accessing operation property or resources? b4037 o1 Yes o3 No

5. From July 1, 2021, through June 30, 2022, were any new bison brought on to this operation

(temporarily or permanently), or did any bison leave the operation and return (such as being bred

or grazed off-site, taken to a show and returned, etc.)? b4038 o1 Yes—**Continue** o3 No—**GO TO question 12**

6. From July 1, 2021, through June 30, 2022, were any male or female bison

temporarily **brought in** from other herds for breeding purposes?

a. Male bison b4039 o1 Yeso3 No

b. Female bison b4040 o1 Yeso3 No

7. From July 1, 2021, through June 30, 2022, were any male or female bison from this operation

**sent** to other herds for breeding purposes and subsequently **returned** to this operation?

a. Male bison b4041 o1 Yeso3 Noo4 NA—No male bison on site

b. Female bison b4042 o1 Yeso3 Noo4 NA—No female bison on site

8. From July 1, 2021, through June 30, 2022, were any bison from this operation **sent** off the operation for

grazing and subsequently **returned** to this operation? b4043 o1 Yes—**Continue** o3 No—**GO TO question 10**

9. Were bison sent off the operation for grazing commingled on pasture with the following farmed animals?

a. Bison from other operations b4044 o1 Yes o2 Don’t knowo3 No

b. Cattle from other operations b4045 o1 Yes o2 Don’t knowo3 No

c. Sheep or lambs from other operations b4046 o1 Yes o2 Don’t knowo3 No

10. From July 1, 2021, through June 30, 2022, how often were the following types of bison isolated  
(kept physically separated) before being commingled with this operation’s bison? *[NA=Not applicable; did not have that type of bison on the operation in the time frame.]*

a. Bison returning to the operation b4047 o1 Alwayso2 Sometimeso3 Nevero4 NA

b. New bison joining the operation permanently or temporarily  
 b4048 o1 Alwayso2 Sometimeso3 Nevero4 NA

**[If questions 10.a and 10.b BOTH = Never or NA, GO TO question 12; otherwise, continue.]**

11. How many days were these types of bison typically isolated? *[NA=Not applicable; did not have that type of bison on the operation in the time frame.]*

a. Bison returning to the operation b4049 \_\_\_\_\_ # days o4 NA

b. New bison joining the operation permanently or temporarily b4050 \_\_\_\_\_ # days o4 NA

12. From July 1, 2021, through June 30, 2022, did this operation ever transport bison  
in trucks and/or trailers shared with other livestock operations? b4051 o1 Yeso3 No

13. From July 1, 2021, through June 30, 2022, did this operation ever share any equipment other than  
trucks and trailers—such as tractors, chutes, feeding equipment, manure spreaders—  
with other livestock operations? b4052 o1 Yes—**Continue** o3 No—**GO TO question 15**

14. Was shared equipment (other than trucks or trailers) cleaned prior to use? b4053…..o1 Yeso2 DKo3 No

**If “Yes,” which of the following best describes the cleaning procedures?** *[Check only one.]*  b4054

o1 Wash equipment with water or steam only

o2 Chemically disinfect only

o3 Wash equipment and chemically disinfect

o4 Other (specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ) b0454

15. For the following question, please answer with your best **estimates** to help us describe general visitor and bison contact patterns on operations. *Count a group of people visiting at the same time as a single visit.*

For visitor types with more than zero visits, please complete the next two columns.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of visitor**  **from July 1, 2021, though June 30, 2022** | **Number of visits per month or year by this visitor type to your operation** (best estimate) | | | | | **Did the visitors typically have contact with operation bison? (touch/handle live bison or walk through areas where bison are or have recently been kept)** | **What is the most likely** **one-way distance traveled to your operation by this visitor type? (miles)** |  | |
| Month | *OR* | | Year | |  | |
| *If any visits, answer next two columns.* | | | | **⟶** |  | |
| Business Visitors |  | |  | | |  |  |  | |
| 1. Private or government veterinarian or animal health worker |  | |  | | | □ Yes □ No |  | b4055/b4072/ b4089/b4106 | |
| 1. Extension agent |  | |  | | | □ Yes □ No |  | b4056/b4073/ b4090/b4107 | |
| 1. Nutritionist or feed company consultant |  | |  | | | □ Yes □ No |  | b4057/b4074/ b4091/b4108 | |
| 1. Other consultant(s) (specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0458 |  | |  | | |  |  | b4058/b4075/ b4092/b4109 | |
| 1. Bison trader, order buyer, or dealer/broker |  | |  | | | □ Yes □ No |  | b4059/b4076/ b4093/b4110 | |
| 1. Video auction representative |  | |  | | | □ Yes □ No |  | b4060/b4077/ b4094/b4111 | |
| 1. Livestock hauler |  | |  | | | □ Yes □ No |  | b4061/b4078/ b4095/b4112 | |
| 1. Feed (hay or grain) hauler |  | |  | | | □ Yes □ No |  | b4062/b4079/ b4096/b4113 | |
| 1. Manure hauler |  | |  | | | □ Yes □ No |  | b4063/b4080/ b4097/b4114 | |
| 1. Mobile slaughter team |  | |  | | | □ Yes □ No |  | b4064/b4081/ b4098/b4115 | |
| 1. Renderer |  | |  | | | □ Yes □ No |  | b4065/b4082/ b4099/b4116 | |
| 1. Consumer seeking bison products— e.g., meat, hides, skulls |  | |  | | | □ Yes □ No |  | b4066/b4083/ b4100/b4117 | |
| 1. Consumer seeking activity—e.g., agri- or eco-tourism, game ranch/hunting |  | |  | | | □ Yes □ No |  | b4067/b4084/ b4101/b4118 | |
| 1. School and other field trip visitors |  | |  | | | □ Yes □ No |  | b4068/b4085/ b4102/b4119 | |
| Non-business Visitors |  | |  | | |  |  |  | |
| 1. Family, neighbors, friends, etc. |  | |  | | | □ Yes □ No |  | b4069/b4086/ b4103/b4120 | |
| 1. Other types of visitors not yet listed (home maintenance personnel, delivery, general services personnel, utility personnel, etc.) |  | |  | | | □ Yes □ No |  | b4070/b4087/ b4104/b4121 | |
|  | | |  | | | | | |  |
| 1. Employees |  | |  | | | □ Yes □ No |  | b4071/b4088/ b4105/b4122 | |

16. For business visitors, non-business visitors, and employees, what number OR percentage of visits counted in Question 15 occurred in each season? If no visits occurred in a season, enter zero. The values for the four seasons should add up to 100% for each visitor class (unless there were zero visitors in the class).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Season** | **Business visitors** | | **Non-business visitors** | | **Employees** | |  |
| (Number *OR* Percent) | | (Number *OR* Percent) | | (Number *OR* Percent) | |  |
| 1. Winter (December, January, February) | # | % | # | % | # | % | b4123/ b4127/ b4131 |
| 1. Spring (March, April, May) | # | % | # | % | # | % | b4124/ b4128/ b4132 |
| 1. Summer (June, July, August) | # | % | # | % | # | % | b4125/ b4129/ b4133 |
| 1. Fall (September, October, November) | # | % | # | % | # | % | b4126/ b4130/ b4134 |
| **Total** | # | 100% | # | 100% | # | 100% |  |

**Section 5. Reproduction**

1. From July 1, 2021, through June 30, 2022, were any

bison bred while on this operation? b5001 o1 Yes—**Continue** o3 No—**GO TO section 6**

2. Were the following practices used during the most recent breeding season for bison bred on this operation?

a. Natural breeding (bulls placed with cows and heifers) b5002 o1 Yeso3 No

b. Artificial insemination b5003 o1 Yeso3 No

c. Embryo transfer b5004 o1 Yeso3 No

3. Were the following reproductive techniques used for or during the most recent breeding season?

a. Body condition scoring b5005 o1 Yeso3 No

b. Bull breeding soundness exam (e.g., semen evaluation, scrotal exam) b5006 o1 Yeso3 No

c. Palpation for pregnancy b5007 o1 Yeso3 No

d. Ultrasound b5008 o1 Yeso3 No

e. Other (specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0509 b5009 o1 Yeso3 No

4. Were heifers bred on this operation during the most recent breeding season? Heifers are female bison that have not yet had a calf.

o1 Yes—**At what age (months) were they first bred?** b5010/ b5011 \_\_\_\_\_ months

o3 No

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 5. For this operation’s breeding females that were bred in 2021, what percentage of heifers and cows had a calf born in 2022 that survived (or likely will survive) until weaning? *[Enter NA for Not Applicable if no bison bred in given category.]* | | **% heifers** | | **% cows** |
| b5012 | | b5013 |
|  | |  | |  |
| 6. For as long as this operation has been breeding bison**,** what is the average **annual** percentage of bred females (heifers and cows) that bore a calf that survived until weaning?  *[Total number of years bison have been bred on operation* b5016 \_\_\_\_\_ years*]* | **% heifers** | | **% cows** | |
| b5014 | | b5015 | |

7. How are calves on this operation typically weaned? *[Check one only].*

o1 Natural weaning by mother bison b5017

o2 Separation weaning / management practice

8. At what age (months) are calves on this operation typically weaned, whether naturally by   
the mother bison or by management practice? b5018 \_\_\_\_\_ months

9. Which of the following is this operation’s **primary** basis for selecting new breeding bison? *[Choose one only unless multiple factors are used* ***equally*** *as the* ***primary*** *basis for selecting breeding bison; then, check all used equally.]*

o1 Random selection (e.g., choosing every third group at handling time, or gate cut)

o2 Size/conformation

o3 Behavior/manageability

o4 Genetics (DNA testing for parentage, ancestral line, genetic diversity, or cattle hybridization)

o5 Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0519 b5019

**Section 6. Diseases, Parasites, and Health Management**

1. How familiar are you with the following diseases in bison? *[Check one box per row.]*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Disease** | **Never heard of it** | **Recognize the name, not much else** | **Know some basics** | **Fairly knowl-edgeable** | **Extremely knowl-edgeable** |  |
| a. Bovine tuberculosis (TB) | 🞏1 | 🞏2 | 🞏3 | 🞏4 | 🞏5 | b6001 |
| b. Brucellosis | 🞏1 | 🞏2 | 🞏3 | 🞏4 | 🞏5 | b6002 |
| c. Bovine viral diarrhea (BVD) | 🞏1 | 🞏2 | 🞏3 | 🞏4 | 🞏5 | b6003 |
| d. Malignant catarrhal fever (MCF) | 🞏1 | 🞏2 | 🞏3 | 🞏4 | 🞏5 | b6004 |
| e. Clostridial diseases | 🞏1 | 🞏2 | 🞏3 | 🞏4 | 🞏5 | b6005 |
| f. Epizootic hemorrhagic disease (EHD)/ bluetongue | 🞏1 | 🞏2 | 🞏3 | 🞏4 | 🞏5 | b6006 |
| g. *Mannheimia*/*Pasteurella* | 🞏1 | 🞏2 | 🞏3 | 🞏4 | 🞏5 | b6007 |
| h. *Mycoplasma bovis* | 🞏1 | 🞏2 | 🞏3 | 🞏4 | 🞏5 | b6008 |

2. From July 1, 2021, through June 30, 2022, how often did you or someone on your operation undertake a visual inspection of your bison for general health purposes? [*Check one only*.] b6009

1 Once a day 4 Once every two weeks

2 Once every few days 5 Once a month or less often

3 Once a week 6 Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0609

3. From July 1, 2021, through June 30, 2022, were any

of this operation’s bison dewormed? b6010 o1 Yes—**Continue** o3 No—**GO TO question 7**

4. From July 1, 2021, through June 30, 2022, how many times were   
the majority of the bison on this operation dewormed? b6011 \_\_\_\_\_ # times

5. From July 1, 2021, through June 30, 2022, were the following dewormers used

on this operation? If “Yes,” what was the average cost of the product used per bison per treatment?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Product** | **Product used?** | | **Average cost?** |  |
| *If Yes, answer next column.* | ⟶ |  |
| 1. Conventional dewormers (e.g., Ivermectin, Safeguard®, Doramectin) | o1 Yeso3 No | | $/bison/trtmt | b6012/ b6015 |
| 1. Natural/alternative dewormers (e.g., diatomaceous earth, botanicals, cayenne pepper) (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) | o1 Yeso3 No | | $/bison/trtmt | b0613/ b6013/ b6016 |
| 1. Other dewormer (specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_) | o1 Yeso3 No | | $/bison/trtmt | b0614/ b6014/ b6017 |

6. From July 1, 2021, through June 30, 2022, were dewormers ever administered   
on this operation by the following methods?

a. Pour-on b6018 o1 Yeso3 No

b. Injectable b6019 o1 Yeso3 No

c. Directly into the mouth (e.g., drench, bolus, paste) b6020 o1 Yeso3 No

d. Feed or water additive b6021 o1 Yeso3 No

e. Mineral additive b6022 o1 Yeso3 No

7. From July 1, 2021, through June 30, 2022, did this operation do the following

activities as part of a parasite control program?

a. Perform laboratory (fecal) testing for intestinal parasites ……………….. b6023 o1 Yeso3 No

**If “Yes,” who completed the majority of the fecal tests?** [*Check one only*.] b6024

1 Self or employee on the operation 4 Private laboratory

2 Private veterinarian 5 Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0624

3 State/university laboratory

b. Rotate dewormer type b6025 o1 Yeso3 No

c. Give a combination of two or more dewormer drugs at once b6026 o1 Yeso3 No

d. Use a different dose of dewormer in bison than the labeled dose  
 recommended for cattle b6027 o1 Yeso3 No

e. Rotate pastures b6028 o1 Yeso3 No

f. Reduce stocking density b6029 o1 Yeso3 No

g. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0630 b6030 o1 Yeso3 No

8. From July 1, 2021, through June 30, 2022, were the following fly-control methods

ever used on this bison operation?

a. Diatomaceous earth (environmentally, topically, and/or orally) b6031 o1 Yeso3 No

b. Other environmental fly control (e.g., sprays, foggers, strips, zappers) b6032 o1 Yeso3 No

c. Topical products (e.g., dust bags, dips, sprays, backrubs) b6033 o1 Yeso3 No

d. Oral products (e.g., feed-through larvicides) b6034 o1 Yeso3 No

e. Treated ear tags b6035 o1 Yeso3 No

f. Biological control (e.g., predator wasps) b6036 o1 Yeso3 No

g. Garlic salt b6037 o1 Yeso3 No

h. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0638 b6038 o1 Yeso3 No

9. From July 1, 2021, through June 30, 2022, did this operation vaccinate any bison against the

following diseases or pathogens? *[Check box at top of column if none of that type of bison.]*

|  |  |  |  |
| --- | --- | --- | --- |
|  | **ANSWER BOTH COLUMNS** | |  |
| **Vaccinated against** | **Bison on pasture** o4 NA–No bison on pasture | **Bison in feedlot** o4 NA–No bison in feedlot | b0601/ b0602 |
| a. Anthrax | o1 Yeso3 No | o1 Yeso3 No | b6039/ b6051 |
| b. Brucellosis | o1 Yeso3 No | o1 Yeso3 No | b6040/ b6052 |
| c. Bovine respiratory syncytial virus (BRSV) | o1 Yeso3 No | o1 Yeso3 No | b6041/ b6053 |
| d. Bovine viral diarrhea virus (BVDV) | o1 Yeso3 No | o1 Yeso3 No | b6042/ b6054 |
| e. *Clostridium* species (tetanus, blackleg; e.g., 7-way) | o1 Yeso3 No | o1 Yeso3 No | b6043/ b6055 |
| f. Infectious bovine rhinotracheitis (IBR) | o1 Yeso3 No | o1 Yeso3 No | b6044/ b6056 |
| g. Leptospirosis | o1 Yeso3 No | o1 Yeso3 No | b6045/ b6057 |
| h. *Mycoplasma bovis* | o1 Yeso3 No | o1 Yeso3 No | b6046/ b6058 |
| i. Parainfluenza 3 virus (PI3) | o1 Yeso3 No | o1 Yeso3 No | b6047/ b6059 |
| j. *Pasteurella* species | o1 Yeso3 No | o1 Yeso3 No | b6048/ b6060 |
| k.Rotavirus/coronavirus | o1 Yeso3 No | o1 Yeso3 No | b6049/ b6061 |
| l. Other disease/pathogen (specify: \_\_\_\_\_\_\_\_\_\_\_\_) b0650 | o1 Yeso3 No | o1 Yeso3 No | b6050/ b6062 |

10. From July 1, 2021, through June 30, 2022, did a veterinarian **visit this operation**

in person concerning its bison? b6063 o1 Yes—**Continue** o3 No—**GO TO question 12**

11. Did the veterinarian visit the bison operation in person for the following reasons?

a. Medical treatment of bison, for illness or injury b6064 o1 Yeso3 No

b. Consultation, such as nutrition or reproduction advice b6065 o1 Yeso3 No

c. Vaccination b6066 o1 Yeso3 No

d. Health certificate issuance b6067 o1 Yeso3 No

e. Reproductive procedure (e.g., pregnancy check) b6068 o1 Yeso3 No

f. Disease testing/sample collection b6069 o1 Yeso3 No

g. Tranquilization/handling b6070 o1 Yeso3 No

h. Euthanasia b6071 o1 Yeso3 No

i. Postmortem exam/necropsy b6072 o1 Yeso3 No

j. Employee training b6073 o1 Yeso3 No

k. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0674 b6074 o1 Yeso3 No

12. From July 1, 2021, through June 30, 2022, were the following health problems present (suspected  
or confirmed) in any bison in the indicated age groups on this operation? *[DK = Don’t know/Not sure.]*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Health problem** | **Bison more than  3 years old** | **Bison 1 to 3 years old** | **Bison less than  1 year old** |  |
| a. Pneumonia/respiratory | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6075/ b6085/ b6095 |
| b. Abortion/reproductive disorder | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | *not applicable* | b6076/ b6086 |
| c. Arthritis/lameness | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6077/ b6087/ b6096 |
| d. Internal parasites | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6078/ b6088/ b6097 |
| e. Off feed/weight loss | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6079/ b6089/ b6098 |
| f. Diarrhea | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6080/ b6090/ b6099 |
| g. Oral erosions | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6081/ b6091/ b6100 |
| h. Eye lesions | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6082/ b6092/ b6101 |
| i. Toxin exposure | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6083/ b6093/ b6102 |
| j. Other (specify: \_\_\_\_\_\_\_\_\_) b0684 | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6084/ b6094/ b6103 |

13. Were any individual bison that became sick on this operation treated   
with antibiotics? b6104 o1 Yes—**Continue** o3 No—**GO TO question 16**

14. For individual bison that were administered antibiotics to treat illness, how often   
was the following information noted in a record-keeping system? *[Check one box per row.]*

a. Date(s) treated b6105 o1 Alwayso2 Sometimeso3 Nevero4 DK

b. Antibiotic given b6106 o1 Alwayso2 Sometimeso3 Nevero4 DK

c. Antibiotic dose, regimen, or protocol b6107 o1 Alwayso2 Sometimeso3 Nevero4 DK

15. How important were the following factors in the selection of an antibiotic for treatment of a health problem? *[Check one box per row.]*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Factor** | **Not important** | **Slightly important** | **Moderately important** | **Very important** | **Extremely important** |  |
| a. Veterinarian recommendations | o1 | o2 | o3 | o4 | o5 | b6108 |
| b. Other producers’ recommendations | o1 | o2 | o3 | o4 | o5 | b6109 |
| c. Laboratory test results | o1 | o2 | o3 | o4 | o5 | b6110 |
| d. Drug company advertisement | o1 | o2 | o3 | o4 | o5 | b6111 |
| e. Personal experience (past response rates) | o1 | o2 | o3 | o4 | o5 | b6112 |
| f. Cost of an antibiotic | o1 | o2 | o3 | o4 | o5 | b6113 |
| g. Approved route by which an antibiotic is given | o1 | o2 | o3 | o4 | o5 | b6114 |
| h. Duration of action (e.g., only needs to be given once) | o1 | o2 | o3 | o4 | o5 | b6115 |
| i. Drug withdrawal time | o1 | o2 | o3 | o4 | o5 | b6116 |
| j. Over the counter availability (i.e., no prescription required) | o1 | o2 | o3 | o4 | o5 | b6117 |
| k. Other (specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) | o1 | o2 | o3 | o4 | o5 | b0618/  b6118 |

16. From July 1, 2021, through June 30, 2022, did any of the operation’s bison in the indicated age groups  
die because of the following diseases, disorders, or health problems? *[DK = Don’t know.]*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cause of death** | **Bison more than  3 years old** | **Bison 1 to 3 years old** | **Bison less than  1 year old** |  |
| 1. *Mycoplasma bovis* (confirmed by vet or lab) | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6119/ b6130/ b6141 |
| b. Malignant catarrhal fever (MCF) | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6120/ b6131/ b6142 |
| c. Epizootic hemorrhagic disease (EHD)/bluetongue | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6121/ b6132/ b6143 |
| d. Parasitism as primary  cause of death | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6122/ b6133/ b6144 |
| e. *Mannheimia*/*Pasteurella* | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6123/ b6134/ b6145 |
| f. Other respiratory illness/ pneumonia | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6124/ b6135/ b6146 |
| g. Digestive illness | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6125/ b6136/ b6147 |
| h. Neurologic disorder | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6126/ b6137/ b6148 |
| i. Nutritional deficiency (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b1627/ b6127/ b6138/ b6149 |
| j. Other disease  (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b1628/ b6128/ b6139/b6150 |
| k. Unknown health problem | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | o1 Yeso2 DKo3 No | b6129/ b6140/ b6151 |

17. From July 1, 2021, through June 30, 2022, were necropsies

performed on any of this operation’s bison? b6152 o1 Yes—**Continue** o3 No—**GO TO question 19**

18. Who performed the majority of necropsies? *[Check one only.]* b6153

o1 Owner/manager/staff

o2 Private veterinarian

o3 Federal or state veterinarian

o4 Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b1653

19. From July 1, 2021, through June 30, 2022, which of the following was the primary method   
for disposing of dead bison? *[Check one only.]* b6154

o1 NA - No bison died o5 Rendered

o2 Composted o5 Incinerated

o2 Onsite burial o6 No disposal method (left to nature/scavengers)

o3 Sent to landfill o7  Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b1654

20. Within the past **5 years**, did this operation experience one or more months of abnormally high   
disease-related death loss in its bison herd? **Abnormally high death loss** is defined here for questions 21 through 24 as a level of death loss in your herd more than twice what you’d normally expect for your herd.  
 b6155 o1 Yes—**Continue** o3 No—**GO TO section 7**

21. During the **most recent period** of abnormally high death loss, did bison in the following  
age groups experience high death loss? [*NA = Not applicable; no bison in age group.*]

a. Bison more than 3 years old b6156 o1 Yes o3 No o4 NA

b. Bison 1 to 3 years old b6157 o1 Yes o3 No o4 NA

c. Bison less than 1 year old b6158 o1 Yes o3 No o4 NA

d. Bison fetuses (spontaneous abortions) b6159 o1 Yes o3 No o4 NA

22. For the **most recent period** of abnormally high death loss, were the   
following signs observed in bison before they died?

a. Reluctance to move b6160 o1 Yeso3 No

b. Lameness b6161 o1 Yeso3 No

c. Coughing or breathing difficulty b6162 o1 Yeso3 No

d. Severe weight loss b6163 o1 Yeso3 No

e. Diarrhea/scours b6164 o1 Yeso3 No

f. Isolation from the herd b6165 o1 Yeso3 No

23. For the **most recent period** of abnormally high death loss, did the operation receive

confirmed diagnoses from a veterinarian or diagnostic laboratory for the following?

a. *Mycoplasma bovis* b6166 o1 Yeso3 No

b. Malignant catarrhal fever (MCF) b6167 o1 Yeso3 No

c. Parasitism (internal and/or external) b6168 o1 Yeso3 No

d. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b1669 b6169 o1 Yeso3 No

**Section 7. Disease Testing Practices**

1. Has this operation ever had any of its bison tested for TB, either on farm

or prior to purchase/arrival on farm? b7001 o1 Yes—**Continue** o3 No—**GO TO question 6**

2. When was the most recent TB test for any of this operation’s bison? *[Check one only.]* b7002

o1 Less than 1 year ago o4 3 to 5 years ago

o2 1 to 2 years ago o5 More than 5 years ago

o3 2 to 3 years ago

3. During the most recent TB test, which bison did this operation test? *[Check one only.]* b7003

o1 Entire herd o4 Specific bison only (describe: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0703

o2 Bison less than 1 year old only o5 Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0704

o3 Bison 1 year and older only

4. When this operation’s bison were last tested for TB, were they tested for the following purposes?

a. Herd accreditation for TB-free status b7004 o1 Yeso3 No

b. Movement requirement b7005 o1 Yeso3 No

c. Show or exhibition requirement b7006 o1 Yeso3 No

d. State requirement b7007 o1 Yeso3 No

e. Veterinarian (nonregulatory, private practitioner) recommendation b7008 o1 Yeso3 No

f. Sale requirement b7009 o1 Yeso3 No

g. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0710 b7010 o1 Yeso3 No

5. Is this operation’s bison herd an Accredited Herd for Tuberculosis (TB)

or in the process of becoming an Accredited Herd? b7011 o1 Yeso3 No

6. Has this operation ever had any of its bison tested for brucellosis, either on farm

or prior to purchase/arrival on farm? b7012 o1 o1 Yes—**Continue** o3 No—**GO TO question 9**

7. When this operation’s bison were last tested for brucellosis,   
were they tested for the following purposes?

a. Herd certification for Brucellosis-Free Herd status b7013 o1 Yeso3 No

b. Movement requirement b7014 o1 Yeso3 No

c. Show or exhibition requirement b7015 o1 Yeso3 No

d. State requirement b7016 o1 Yeso3 No

e. Veterinarian (nonregulatory, private practitioner) recommendation b7017 o1 Yeso3 No

f. Sale requirement b7018 o1 Yeso3 No

g. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0719 b7019 o1 Yeso3 No

8. Is this operation’s bison herd a Certified Brucellosis-Free Herd or in the

process of becoming a Certified Brucellosis-Free Herd? b7020 o1 Yeso3 No

9. How concerned are you with the following issues and challenges related to testing this operation’s bison  
for diseases, such as TB?

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Issues and challenges** | **Not  concerned** | **Slightly concerned** | **Moderately concerned** | **Very concerned** | **Extremely concerned** |  |
| a. Expense of testing | o1 | o2 | o3 | o4 | o5 | b7021 |
| b. Stress on bison from testing | o1 | o2 | o3 | o4 | o5 | b7022 |
| c. Bison injuries or deaths from handling | o1 | o2 | o3 | o4 | o5 | b7023 |
| d. Reliability of tests (e.g., false-positive results) | o1 | o2 | o3 | o4 | o5 | b7024 |
| e. Amount of time required for testing | o1 | o2 | o3 | o4 | o5 | b7025 |
| f. Lack of facilities to restrain bison for testing | o1 | o2 | o3 | o4 | o5 | b7026 |

**Section 8. Bison Shipments and Movements**

***Note to Producer****: We are requesting detailed information about bison shipments on to and off your operation to provide baseline data for disease-simulation models for emergency preparedness, including comparing disease-control strategies and estimating resources needed in the event of a disease outbreak. The information will help researchers analyze the potential spread of bison diseases and evaluate possible response measures to the diseases to help reduce the negative impacts of an outbreak.*

1. From July 1, 2021, through June 30, 2022, did this operation add any bison to its herd from off-site sources?   
 b8001 o1 Yes—**Continue** o3 No—**GO TO question 4**

2. From July 1, 2021, through June 30, 2022, how many **shipments** of bison were **added to** your operation from the following sources? What were the **estimated** shortest, most likely, and longest one-way distances of those shipments? For the most likely distance, indicate the estimated distance that most shipments likely traveled from the source to your operation.

* A **shipment** is a group of bison (one or more) that are moved together on the same day, regardless of the number of vehicles required to move them. For the average number of bison in a shipment, count all bison regardless of age.
* If no shipments occurred, enter zero to indicate no bison were shipped on to the operation from that source.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Source** | **Number of shipments** | **Average number of bison per shipment** | **Shortest 1-way distance traveled to your operation from this type of source (miles)** | **Most likely 1-way distance traveled to your operation from this type of source (miles)** | **Longest 1-way distance traveled to your operation from this type of source (miles)** |  |
| 1. Private sale |  |  |  |  |  | b8002/ b8008/ b8013/ b8018/ b8023 |
| 1. Trade |  |  |  |  |  | b8003/ b8009/ b8014/ b8019/ b8024 |
| 1. Auction/sale barn |  |  |  |  |  | b8004/ b8010/ b8015/ b8020/ b8025 |
| 1. Dealer/broker |  |  |  |  |  | b8005/ b8011/ b8016/ b8021/ b8026 |
| 1. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) |  |  |  |  |  | b0806/b8006/ b8012/ b8017/ b8022/ b8027 |
| 1. Total *(add items  2.a–2.e)* |  |  |  |  |  | b8007 |

3. Of the total shipments of bison **added to** **your operation** noted in Question 2.f above, what percentage of shipments occurred in each season? If no shipments occurred in a season, enter zero. The values for the four seasons should add up to 100%.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Season** | **Total shipments (Question 2.f)** | | | |  |
| Number | *OR* | | Percent |  |
| * 1. Winter (December, January, February) | # | | % | | b8028 |
| * 1. Spring (March, April, May) | # | | % | | b8029 |
| * 1. Summer (June, July, August) | # | | % | | b8030 |
| * 1. Fall (September, October, November) | # | | % | | b8031 |
| **Total** *(items 3.a–3.d should sum to Item 2.f OR 100%)* | # | | 100% | | b8032 |

4. From July 1, 2021, through June 30, 2022, did this operation send any bison from its herd permanently to off-site destinations? b8033 o1 Yes—**Continue** o3 No—**GO TO section 9**

5. From July 1, 2021, through June 30, 2022, how many **shipments** of bison **left your** operation permanently for the following destinations? What were the estimated shortest, most likely, and longest one-way distances of those shipments? For the most likely distance, indicate the estimated distance that most shipments likely traveled from your operation to the destination

* A **shipment** is a group of bison (one or more) that are moved together on the same day, regardless of the number of vehicles required to move them. For the average number of bison in a shipment, count all bison regardless of age.
* If no shipments occurred, enter zero to indicate no bison were shipped off the operation to that destination.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Destination** | **Number of shipments** | **Average number of bison per shipment** | **Shortest one-way distance traveled from your operation to this type of destination (miles)** | **Most likely one-way distance traveled from your operation to this type of destination (miles)** | **Longest one-way distance traveled from operation to this type of destination (miles)** |  |
| a. Direct to off-site slaughter |  |  |  |  |  | b8034/ b8041/ b8047/ b8053/ b8059 |
| b. Direct to feedlot |  |  |  |  |  | b8035/ b8042/ b8048/ b8054/ b8060 |
| c. Direct to auction/sale barn |  |  |  |  |  | b8036/ b8043/ b8049/ b8055/ b8061 |
| d. Direct to dealer/broker |  |  |  |  |  | b8037/ b8044/ b8050/ b8056/ b8062 |
| e. Direct to another bison operation (for any reason) |  |  |  |  |  | b8038/ b8045/ b8051/ b8057/ b8063 |
| f. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_) |  |  |  |  |  | b0839/b8039/ b8046/ b8052/ b8058/ b8064 |
| g. Total *(sum items 5.a–5.f)* |  |  |  |  |  | b8040 |

6. Of the total shipments of bison **removed from your operation permanently** noted in Question 5.g above, what percentage of shipments occurred in each season? If no shipments occurred in a season, enter zero. The values for the four seasons should add up to 100%.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Season** | **Total shipments (Question 5.g)** | | |  |
| Number | *OR* | **Percent** |  |
| 1. Winter (December, January, February) | # |  | % | b8065 |
| 1. Spring (March, April, May) | # |  | % | b8066 |
| 1. Summer (June, July, August) | # |  | % | b8067 |
| 1. Fall (September, October, November) | # |  | % | b8068 |
| **Total** *(items 6.a–6.d should sum to Item 5.g OR 100%)* | # |  | 100% | b8069 |

**Section 9. Associations and Information Sources**

1. Do you belong to the following bison or cattle associations?

a. National Bison Association b9001 o1 Yeso3 No

b. Regional, state, and/or local **bison** associations b9002 o1 Yeso3 No

c. InterTribal Buffalo Council b9003 o1 Yeso3 No

d. Regional, state, and/or local **Tribal** bison associations b9004 o1 Yeso3 No

e. Canadian Bison Association b9005 o1 Yeso3 No

f. National Cattlemen’s Beef Association b9006 o1 Yeso3 No

g. U.S. Cattlemen’s Association b9007 o1 Yeso3 No

h. R-CALF USA b9008 o1 Yeso3 No

i. Regional, state, and/or local **cattle** associations b9009 o1 Yeso3 No

j. Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) b0910 b9010 o1 Yeso3 No

2. How important to you are the following bison health information sources? *[Check one box per row.]*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Health information sources** | **Not  important** | **Slightly important** | **Moderately important** | **Very important** | **Extremely important** |  |
| 1. Bison association resources/meetings | o1 | o2 | o3 | o4 | o5 | b9011 |
| 1. Producer gatherings (informal) | o1 | o2 | o3 | o4 | o5 | b9012 |
| 1. Other producers—individually | o1 | o2 | o3 | o4 | o5 | b9013 |
| 1. Internet | o1 | o2 | o3 | o4 | o5 | b9014 |
| 1. Magazines/newsletters | o1 | o2 | o3 | o4 | o5 | b9015 |
| 1. University/extension | o1 | o2 | o3 | o4 | o5 | b9016 |
| 1. Veterinarians | o1 | o2 | o3 | o4 | o5 | b9017 |
| 1. Feed and drug salespeople | o1 | o2 | o3 | o4 | o5 | b9018 |
| 1. Other (specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) | o1 | o2 | o3 | o4 | o5 | b0919/ b9019 |

**Section 10. Conclusion**

1. We anticipate that results of this study will be published and available in 2024. Enter your e-mail address here if you would like to be notified when results are available. You can also find survey results at the “Bison Studies” link at [www.aphis.usda.gov/nahms/](http://www.aphis.usda.gov/nahms/) . 0001 e-mail address

2. Please enter the date you completed this questionnaire (mm/dd/2022). 0002 \_\_\_\_\_/\_\_\_\_\_\_/2022

3. How many minutes did it take you to complete the questionnaire? 0003 \_\_\_\_\_\_\_\_ min

4. Which of the following best describes your position with this operation? *[Check one only.]* 0004

o1 Owner

o2 Manager

o3 Family member (other than owner or manager)

o4 Other hired employee

o5 Other (specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) 0005

5. By completing this questionnaire, you are eligible to participate in biological testing of your bison for parasites and enteric microbes and of your pasture forage for nutritional value, at no cost to you. Results will be returned to you confidentially. The biological testing is entirely voluntary.

If you choose to participate in any testing, USDA-NASS staff will provide your contact information to USDA-APHIS-NAHMS, which is a non-regulatory program. NAHMS will then ship you detailed instructions and materials for collecting and shipping samples from your bison/operation. Data collected from the biologics phase of the study will be confidential, using the same strong legal protections afforded this collection, and no name or contact information will be associated with the data. Data are presented only in aggregated summaries.

Please indicate below whether you choose to participate in the listed sampling components.

1. Fecal parasite testing (Fecal Samples)—pre-deworming (Baseline) 0006 o1 Yeso3 No
2. Fecal parasite testing (Fecal Samples)—post-deworming 0007 o1 Yeso3 No
3. Enteric microbe testing (Fecal Samples) 0008 o1 Yeso3 No
4. Pasture forage testing (Pasture Forage Samples) 0009 o1 Yeso3 No

Please see the Timeline/Benefits sheet and the Producer Informed Consent Form for more information; these documents can be found in your survey packet or accessed at <https://www.aphis.usda.gov/nahms>.

**[If you answered “No” to 5.a-d and do not want to do any testing, GO TO question 7; otherwise, continue.]**

6. Please record the operator’s name, phone number, address, e-mail address, and the **FARM ID** (from the front page) below so that you can participate in the biological testing phase.

|  |  |
| --- | --- |
| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  0010 | Phone number:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  0011 |
| Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  0012 | E-mail address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  0013 |
| FARM ID number (from front page):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  0014 |  |

7. Do you have any comments regarding this questionnaire or operation?0015

**Thank you very much for completing the NAHMS Bison 2022 Study Survey!**

**Please return this questionnaire to NASS in the enclosed pre-addressed, postage-paid envelope.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **OFFICE USE ONLY** | | | | | | | | | | | | |
| **Response** | | **Respondent** | | **Mode** | | **Enum.** | **Eval.** | **Change** | **Office Use for POID** | | | |
| 1-Comp  2-R  3-Inaccesible  4-Office Hold  5-R – Est  6-Inac – Est  7-Off Hold – Est | 9901 | 1-Op/Mgr  2-Spouse  3-Acct/Bkpr  4-Partner  9-Oth | 9902 | 1-PASI (Mail)  2-PATI (Tel)  3-PAPI (Face-to-Face)  6-Email  7-Fax  19-Other | 9903 | 9998 | 9900 | 9985 | 9989  \_\_ \_\_ \_\_ - \_\_ \_\_ \_\_ - \_\_ \_\_ \_\_ | | | |
| R. Unit | **Optional Use** | | | |
| 9921 | 9907 | 9908 | 9906 | 9916 |