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| NAHMS BISON Study needs assessment survey |  |
| NAHMS BISON STUDY |  |

**Please complete survey by October 30, 2020.**

Thank you in advance for providing input for the upcoming National Animal Health Monitoring System (NAHMS) study of the bison industry. You are in a unique position to know the information needs of the U.S. bison industry and to determine which issue areas should be the focus in the upcoming study. The survey should take about 5 or 10 minutes to complete, and your responses will help establish objectives for the study. There is a section at the end where you can add general comments. Thank you for your responses.

**1. What is your primary involvement with the bison industry?** *(Check only one.)*

\_\_\_\_ Producer/operator

\_\_\_\_ Processor/marketer

\_\_\_\_ Allied industry member (e.g., nutritionist, feed or equipment supplier)

\_\_\_\_ Veterinary practitioner

\_\_\_\_ University employee/extension specialist/researcher

\_\_\_\_ Federal or State bison herd manager

\_\_\_\_ Tribal bison producer

\_\_\_\_ Tribal herd manager

\_\_\_\_ Tribal government representative

\_\_\_\_ Federal or State government animal health official

\_\_\_\_ Non-governmental organization (e.g., non-profit organization) representative

\_\_\_\_ Other (please specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Which other farmed species are you involved with?** *(Check all that apply.)*

\_\_\_\_ Cattle

\_\_\_\_ Sheep/goat

\_\_\_\_ Swine

\_\_\_\_ Poultry

\_\_\_\_ Deer/elk (wapiti)

\_\_\_\_ Exotic wildlife

\_\_\_\_ Other farmed livestock (please specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3.a. Indicate the segments of the bison industry in which you are involved.** *(Check all that apply.)*

A. \_\_\_\_ Breeding stock

B. \_\_\_\_ Commercial meat production

C. \_\_\_\_ Hunting operation

D. \_\_\_\_ Conservation herd

E. \_\_\_\_ Agritourism

F. \_\_\_\_ Bison processing

G. \_\_\_\_ Farm direct marketing (farmers’ markets, on-line, on-farm, etc.)

H. \_\_\_\_ Other (please specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3.b. Which segment of the bison industry is your *primary* involvement?** (*Please write appropriate letter (A – H) from list for 3.a. on the following blank*) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**4. Please rank the top three topics that you would like to have as the focus of the upcoming NAHMS Bison Study. From the list below, choose one topic for each column.** Please note there is an “other” option at the bottom of the list if you would like to add a topic.

|  |  |  |  |
| --- | --- | --- | --- |
| **Topic to be a focus of the NAHMS Bison Study** | Firstpriority | Secondpriority | Thirdpriority |
| Animal welfare |  |  |  |
| Availability of approved pharmaceuticals and vaccines |  |  |  |
| Biosecurity practices (sources and introduction of new animals, quarantine) / disease prevention |  |  |  |
| Contact with other livestock (cattle, sheep, farmed deer, etc.) and/or feral swine/native wildlife |  |  |  |
| Death loss |  |  |  |
| Disease surveillance, testing, and impediments to testing |  |  |  |
| Environmental stewardship/sustainability |  |  |  |
| Export markets |  |  |  |
| Food safety |  |  |  |
| Foreign animal disease |  |  |  |
| Genetics (improvement, conservation, identification, parentage) |  |  |  |
| Handling practices |  |  |  |
| Marketing |  |  |  |
| Nutrition/feed management (minerals, etc.) |  |  |  |
| Organic meat production |  |  |  |
| Parasite control |  |  |  |
| Pasture/grazing management |  |  |  |
| Reproductive health/management (pregnancy diagnosis, weaning, breeding soundness) |  |  |  |
| Traceability/ animal identification |  |  |  |
| Vaccination/immunization |  |  |  |
| Veterinarians- use and availability |  |  |  |
| Other (please specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) |  |  |  |

1. **For each of the three highest-ranked topics identified in Question 4 above, give one specific question or topic to be addressed.**

First priority topic

Specific topic:

Second priority topic

Specific topic:

Third priority topic

Specific topic:

**6. Please rank the top three diseases, disorders, or pathogens that you would like to have as a focus of the upcoming NAHMS Bison Study.** From the list below, choose one topic for each column. Please note there is an “other” option at the bottom of the list if you would like to add a disease, disorder, or pathogen.

|  |  |  |  |
| --- | --- | --- | --- |
| **Disease, Disorder, or Pathogen** | **First priority** | **Secondpriority** | **Thirdpriority** |
| Anaplasmosis |  |  |  |
| Anthrax |  |  |  |
| Bovine Viral Diarrhea (BVD) |  |  |  |
| Brucellosis |  |  |  |
| Clostridium (tetanus, blackleg, malignant edema, enterotoxemia/overeating disease/grain overload) |  |  |  |
| Digestive diseases/diarrhea (e.g., cryptosporidiosis, coronavirus, *E. coli*, rotavirus) |  |  |  |
| Foreign animal diseases (foot-and-mouth disease/FMD, etc.) |  |  |  |
| *Histophilus somni* disease |  |  |  |
| Hemorrhagic diseases (e.g., bluetongue/epizootic hemorrhagic disease) |  |  |  |
| Hoof problems or lameness |  |  |  |
| Johne’s disease (*Mycobacterium avium* ssp *paratuberculosis*) |  |  |  |
| Malignant catarrhal fever (MCF) |  |  |  |
| Trace mineral deficiencies |  |  |  |
| *Mycoplasma bovis* |  |  |  |
| Necrobacillosis (foot rot, lumpy jaw) |  |  |  |
| Ocular disease (pinkeye, etc.) |  |  |  |
| Other pneumonia/respiratory disease (e.g., BRSV, IBR, pasteurellosis, PI3) |  |  |  |
| Parasites—external (e.g., ticks, lice, flies) |  |  |  |
| Parasites—internal (e.g., *Toxocara vitulorum* or other gastrointestinal parasites, lung worms, liver flukes) |  |  |  |
|  *If this response picked, specify top parasite problem:*  | *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* |
| Reproductive disorders (e.g., dystocia, abortion, trichomoniasis) |  |  |  |
| Toxins (e.g., toxic plants, organochlorine residues) |  |  |  |
| Tuberculosis (bovine TB) |  |  |  |
| Other (please specify): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |  |

**7. For each of the three priority diseases, disorders, or pathogens identified above, give one specific question or topic to be addressed.**

First priority topic

Specific topic:

Second priority topic

Specific topic:

Third priority topic

Specific topic:

**8. Which of the following do you believe represents the greatest risk or burden to your operation/bison** (please select NA if you are not a producer/operator)**?** (*Please select one.*)

* + NA (not applicable—not a producer or operator)
	+ Access to processing
	+ Access to reliable information specific to bison health, production, disease, etc.
	+ Access to veterinarians and/or pharmaceuticals
	+ Disease or other health problems
	+ Import/export of live animals or reproductive tissues
	+ Management costs—cost of animals
	+ Management costs—cost of feed
	+ Management costs—cost of handling facilities
	+ Management costs—cost of health care, veterinary visit, pharmaceuticals, etc.
	+ Management costs—cost of land
	+ Management costs—cost of processing
	+ Management costs—other costs (specify ).
	+ Marketing of animals/products
	+ Other (please specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

**9. Which of the following do you believe represents the greatest risk or burden to the bison industry?** (*Please select one.*)

* + Access to adequate processing capacity
	+ Access to veterinarians and/or pharmaceuticals
	+ Disease / health problems
	+ Import/export of live animals or reproductive tissues
	+ Inadequate or misdirected public policy (Federal, State) (specify: )
	+ Management costs
	+ Marketing
	+ Potential consumer misperception
	+ Small size of the bison sector
	+ Other (please specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

**10. From the list below, rank the top three incentives you believe would encourage bison producers to participate in the NAHMS Bison Study.**  Please note there is an “other” option at the bottom if you would like to add an incentive.

|  |  |  |  |
| --- | --- | --- | --- |
| **Possible incentives for study participation** | **Firstpriority** | **Secondpriority** | **Thirdpriority** |
| Drinking water analysis (e.g., for nitrates, sulfates) |  |  |  |
| Electronic ID tags |  |  |  |
| Fecal parasite testing/resistance testing |  |  |  |
| Feed/forage analysis (including minerals) |  |  |  |
| Parentage |  |  |  |
| Soil analysis |  |  |  |
| Other (please specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) |  |  |  |

**11. If you are a producer/operator, would you be willing to help collect samples for testing, if NAHMS provides collection and shipping materials and instructions for proper sample collection and handling?** *Yes/no*

**12. The National Bison Association, South Dakota State University, and the National Buffalo Foundation have established a Center of Excellence for Bison Studies. Please rank your top three priorities for the Center for Excellence.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Possible priorities for the Center for Excellence** | **Firstpriority** | **Secondpriority** | **Thirdpriority** |
| Animal behavior |  |  |  |
| Animal welfare |  |  |  |
| Breeding and genetics |  |  |  |
| Disease research |  |  |  |
| Market development |  |  |  |
| Meat quality |  |  |  |
| Nutrition research |  |  |  |
| Parasite control |  |  |  |
| Pasture management / soil health |  |  |  |
| Product development |  |  |  |
| Other (please specify: ) |  |  |  |

**13. In which state do you reside?**

**14. If you are a bison producer, how many mature bison are on your operation today?** *(Choose the appropriate category.)*

\_\_\_\_ 0

\_\_\_\_ 1-9

\_\_\_\_ 10-24

\_\_\_\_ 25-49

\_\_\_\_ 50-99

\_\_\_\_ 100-199

\_\_\_\_ 200-499

\_\_\_\_ 500 or more

**15. If you have any other comments about the upcoming NAHMS Bison Study, please enter them in the space below.**

Thank you! We greatly appreciate your response.