

**Montana Department  
of  
Fish, Wildlife & Parks**



1400 So. 19th  
Bozeman, MT 59715

July 1, 1996

TO: Governor's Office, Glenn Marx, Room 204, State Capitol, P.O. 200801, Helena, MT 59620-0801  
Environmental Quality Council, Capitol Building, Room 106, P.O. Box 201704, Helena, MT 59620  
Dept. Environmental Quality, Metcalf Building, P.O. Box 200901, Helena, MT 59620-0901  
Montana Fish, Wildlife & Parks

Director's Office  
Parks Division  
Fisheries Division  
Wildlife Division  
Enforcement Division  
Lands Section  
Design & Construction Bureau  
Legal Unit  
Dennis Flath  
FWP Commissioners

MT Historical Society, State Historic Preservation Office, POB 201202, Helena, MT 59620-1202  
MT State Parks Association, P.O. Box 699, Billings, MT 59103  
MT State Library, 1515 E. Sixth Ave., POB 201800, Helena, MT 59620  
James Jensen, Montana Environmental Information Center, POB 1184, Helena, MT 59624  
Janet Ellis, Montana Audubon Council, POB 595, Helena, MT 59624  
George Ochenski, POB 689, Helena, MT 59624  
Jerry DiMarco, P.O. Box 1571, Bozeman, MT 59771  
Wildlife Federation, P.O. Box 1175, Helena, MT 59624  
Wayne Hurst, P.O. Box 728, Libby, MT 59923  
Glen Hockett, 745 Doane Road, Bozeman, MT 59715  
Madison County Commissioners, County Courthouse, Virginia City, MT 59755  
Jefferson Valley Sportsmen's Association, P.O. Box 6, Whitehall, MT 59759  
Skyline Sportsmen's Association, P.O. Box 173, Butte, MT 59701

Ladies and Gentlemen:

The enclosed Environmental Assessment (EA) has been prepared for the Gooby Game Farm near Twin Bridges, Montana. This EA is provided for your review and comment.

Comments will be accepted from July 1, until 5:00 p.m. July 14, 1996. If you have questions, feel free to contact me at 994-4042. All comments should be sent to: Gooby Game Farm E.A., c/o Montana Fish, Wildlife & Parks, 1400 So. 19th, Bozeman, MT 59715.

Thank you for your interest.

Sincerely,

Stephen L. Lewis  
Regional Supervisor

# DRAFT

## MEPA/NEPA/HB495 CHECKLIST

### PART I. PROPOSED ACTION DESCRIPTION

1. Type of Proposed State Action Environmental Assessment

2. Agency Authority for the Proposed Action Montana Fish, Wildlife & Parks

The department's authority to regulate game farms is contained in sections 87-4-406 through 87-4-428, MCA and ARM 12.6.1501 through 12.6.1519.

3. Name of Project Gooby Game Farm

4. Name, Address and Phone Number of Project Sponsor (if other than the agency)

Richard & Mary Ann Gooby  
4955 Patterson Road  
Bozeman, MT 59715

5. If Applicable:

Estimated Construction/Commencement Date N/A

Estimated Completion Date N/A

Current Status of Project Design (% complete) 100%

6. Location Affected by Proposed Action (county, range and township)

Madison County, Township 4 South, Range 6 West, Sections 28 and 33

7. Project Size: Estimate the number of acres that would be directly affected that are currently:

|   |                              |                  |
|---|------------------------------|------------------|
| (a) Developed:                                    | (d) Floodplain . . . . .     | <u>0</u> acres   |
| residential . . . . .                             |                              |                  |
| industrial . . . . .                              | (e) Productive:              |                  |
|   | irrigated cropland . . . . . | <u>75</u> acres  |
| (b) Open Space/Woodlands/<br>Recreation . . . . . | dry cropland . . . . .       | <u>0</u> acres   |
|   | forestry . . . . .           | <u>0</u> acres   |
|   | rangeland . . . . .          | <u>300</u> acres |
| (c) Wetlands/Riparian<br>Areas . . . . .          | other . . . . .              | <u>0</u> acres   |
|   |                              |                  |

8. Map/site plan: attach an original 8 1/2" x 11" or larger section of the most recent USGS 7.5' series topographic map showing the location and boundaries of the area that would be affected by the proposed action. A different map scale may be substituted if more appropriate or if required by agency rule. If available, a site plan should also be attached.

**9. Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action.**

The applicants propose to build a game farm approximately five miles south of Twin Bridges, Montana. They have applied for a game farm license to be issued by the Montana Department of Fish, Wildlife & Parks to raise reindeer. Their primary purpose for this business is to raise reindeer for the commercial value of their antlers and breeding stock.

The Gooby's initially plan to develop five acres, which will include working facilities and a quarantine pen. Initially the applicants plan to stock the game farm with reindeer that they will move from their current game farm near Bozeman, Montana. At present they have 20 reindeer to move. The site plan, application and other information associated with this proposed game farm are available for review in the FWP Region Three headquarters in Bozeman. After an undetermined time they may fence and otherwise develop the remainder of the area as a part of the game farm.

The Montana Fish, Wildlife & Parks under 87-4-408, MCA has primary jurisdiction over the licensing of game farms. Section 87-4-409(3) specifies that Fish, Wildlife and Parks has 120 days to notify the applicant of its decision to approve or deny the application. The department is also required, under the Montana Environmental Policy Act, to initiate an environmental review process for any State action that may have any significant impacts on the human environment, FWP must therefore comply with the Montana Environmental Policy Act (MEPA) in the licensing process, as well as the Game Farm Statutes.

**10. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.**

(a) Permits:

| <u>Agency Name</u> | <u>Permit</u> | <u>Date Filed/#</u> |
|--------------------|---------------|---------------------|
|--------------------|---------------|---------------------|

N/A

(b) Funding:

| <u>Agency Name</u> | <u>Funding Amount</u> |
|--------------------|-----------------------|
|--------------------|-----------------------|

N/A

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

| <u>Agency Name</u> | <u>Type of Responsibility</u> |
|--------------------|-------------------------------|
|--------------------|-------------------------------|

|                         |   |
|-------------------------|---|
| Department of Livestock | Regulation of game farm animal health, testing transportation, etc. |
|-------------------------|---|

**11. List of Agencies Consulted During Preparation of the EA:**

Natural Resource Conservation Service, Sheridan, Montana  
Department of Livestock, State of Montana  
Madison County Commission, Virginia City, Montana  
State Historic Preservation Office, Helena, Montana

## **PART I. ENVIRONMENTAL REVIEW**

### **A. EVALUATION OF THE IMPACTS OF THE PROPOSED ACTION ON THE PHYSICAL ENVIRONMENT.**

#### **1. Land Resources**

Impact of Proposed Action: Because the facility is comprised of a fenced compound "feedlot" area, there is an unknown potential for ground compaction and vegetation deterioration, leading to topsoil loss. Because an irrigated hay field will be converted to a "feedlot" there could be a minor impact to soil productivity/fertility. However, in agricultural terms productivity may be higher due to a high income per acre value. Because the area is relatively flat there will be a minimal rate of runoff and/or erosion. There will be no impact to any unique geological or physical features.

No Action Alternative: No impact.

#### **2. Air Resources**

Impact of Proposed Action: The "feedlot" situation produces a pulverized soil/droppings mixture which could become airborne causing very locally reduced ambient air quality. The number of animals in confinement and the size of the "feedlot" will determine the magnitude of odors associated with the operation. Mitigating measures would include timely removal of any waste which might accumulate. However, the operation will likely cause minimal impact due to its small size.

No Action Alternative: No impact.

#### **3. Water Resources**

Impact of Proposed Action: Run-off from cattle feedlots has been shown to have increased levels of phosphorous and nitrogen-based compounds, as well as increased BOD and COD levels. The levels depend on number of animals on the feedlot, type of feed, type of soil and slope of feedlot floor. (Agriculture Runoff Management (ARM) model-Version II. Refinement and Testing, 1977. Env. Res. Lab. Office of Res. and Develop. US EPA Athens, GA. pp 294, and Characteristics of Wastes from Southwestern Cattle Feedlots. US EPA. Water Pollution Control Research Series, pp 87). There does exist potential for increased siltation and the possibility of pathogens present in the runoff. However, because of the size of this game farm and the small degree of slope the site will produce a relatively low rate of runoff. There will be little to no change in drainage patterns, little change in the rate or amount of surface runoff, no alteration of flood situation, and no change in the amount of surface or groundwater.

There is an unknown potential impact to the quality of groundwater. Groundwater close to the surface would be affected by nitrogenous compounds from waste material. Chemical compounds that may be used to treat game farm animals in the feedlot for flies or other parasites could contaminate ground water.

There are no expected impacts to any existing water rights or reservation. However, effects on the quality of surface or groundwater on other water users is unknown and is impossible to determine at this point in time. However, impact is expected to be minor given the size of the proposed operation.

No Action Alternative: No impact.

#### 4. Vegetation Resources

Impacts of Proposed Action: Animals in the feedlot can be expected to trample and destroy most plants within the enclosed area. However, impacts are expected to be confined to a relatively small area. In addition, it is unlikely native plants exist in the feed lot area since the property is primarily non-native hay meadow. The presence of any unique, rare, threatened, or endangered plant species nearby is unknown. There should be no reduction in acreage of agricultural land. There may be a change in its productivity, with the landowner expecting it to increase. Year-long intensive use by game farm animals is expected to create areas of possible weed infestation. However, correct herbicide application, mechanical control and trampling by the animals should be sufficient to control invading noxious weeds.

No Action Alternative: No impact.

#### 5. Fish/Wildlife Resources

Impacts of Proposed Action: It is unlikely due to terrain, presence of domestic livestock and lack of woody vegetation, that any significant numbers of big game or upland game bird species presently occupying the site would be affected by the location, size and operation of the proposal. The site of the proposed game farm is located on level grassland (hay meadow). The site is likely only intermittently used by game species (pronghorn antelope, whitetail deer, Hungarian partridge). No wildlife migration corridors would be affected and no known endangered species of plants or animals are located in the area of the proposed game farm. Any negative effects of the game farm would likely be felt by unknown numbers of non-game wildlife that may be using the existing vegetation. It is the intention of the Gooby's to raise reindeer on the site. Introduction of exotic and hybrid wildlife to the wild has occurred from other game farms in the past (MDFWP, 1992; Kahn, 1992; Youmans, 1992). The serious consequences of exotic and hybrid animals being liberated into the wild, prompted the Montana Fish, Wildlife and Parks Commission to institute emergency rules during 1992 to prevent the transport of certain animals into the State of Montana. Caribou/reindeer (*Rangifer* sp.) are classified as a "restricted species" of game farm animals in Montana (MCA, 87-4-424; ARM, 12.6.1515(8)(b)(ii)). In part, this classification is due to genetic concerns associated with the Montana/Idaho interstate caribou population. Therefore, they are allowed only if their destination is east of the continental divide. The Gooby Game Farm is located east of the divide.

The Department of Fish, Wildlife & Parks and Livestock have designated reindeer/caribou (*Rangifer* sp.) as "restricted species" primarily on the basis of specific animal health risks that they pose to wildlife and/or domestic livestock. As a result all reindeer that are shipped to Montana must originate in herds located south of the Canada/U.S. border and from herds certified brucellosis (*B. suis* and *B. abortus*) and tuberculosis free as determined by whole herd testing, (ARM, 12.6.1515(8)(b.i.)).

The Gooby's plan on transferring reindeer from their existing game farm in Bozeman, Montana, so that there will be no importation of reindeer associated with this transfer. Their Bozeman game farm was established about two years ago.

Inadvertent, introductions of parasites and diseases of major significance have taken place at other sites in Montana and in other states. The *B. suis* type 4 form of brucellosis is prevalent in free-ranging caribou and herded reindeer populations in Canada, Alaska and Scandinavia. *B. suis* type 4 is known to be fatal to moose but it is not known how exposure would affect mule deer or whitetail deer. Although brucellosis is less durable than tuberculosis, Dr. Calvin Campbell (Regional Epidemiologist, Western Region of Veterinary Services, APHIS, USDA, specializing in brucellosis) notes the organism can remain viable for days or weeks if cool moist conditions exist. If an animal is infected, some pathogenic discharge will occur via saliva and nasal discharge or through body waste. Fluids associated with the birthing process are the source of brucellosis transmission. Isolation of female animals in an area by themselves where they may calve and clean the newborn, further aids in stemming contamination and transmission of brucellosis.

Tuberculosis has been documented on six Montana game farms. Transmission of tuberculosis to free-ranging wildlife populations would have a significant impact. Efforts to control it, to protect wildlife resources as well as the state's livestock industry, would be very expensive and probably futile. In the case of bovine tuberculosis, if conditions are suitable, the organism may survive from 3 to 6 months (Dr. Robert Meyer, Regional Epidemiologist, Western region of Veterinary Services, APHIS, USDA, specializing in bovine tuberculosis). Suitable conditions include a moist cool (or freezing) climate, out of direct sunlight. The TB organism survives better than most pathogens due to its waxy lipid cell wall which protects it from drying. Moist cooled fecal material, out of direct sunlight, would provide the correct environment for tuberculosis to remain viable.

Disease pathogens and parasites remain viable in contaminated soil for varying lengths of time (up to several years in the case of *Elaphostrongylus cervi*) depending upon their life cycle and durability. Game farm animals in New Zealand have been known to contract disease from sites that had housed diseased animals from the previous year. Many parasites of concern are passed through fecal material. Manure, other effluent and contaminated soil from game farms is a recognized dispersal source for transmission of disease and parasites. If through erosion and runoff this contamination were to be transported below the penned area to other private lands, the potential for inadvertent transmission of pathogens would be high.

Because the property is relatively flat, the operation is fairly small and contact with wildlife is expected to be minimal, the risk of potentially adverse environmental effects is minor.

No Action Alternative: No impact.

## **B. EVALUATION OF THE IMPACTS OF THE PROPOSED ACTION ON THE HUMAN ENVIRONMENT.**

### **1. Noise/Electrical Effects**

Impacts of Proposed Action: No impact.

No Action Alternative: No impact.

### **2. Land Use**

Impacts of Proposed Action: The present land use currently involves raising hay and livestock. The conversion to a game farm operation will change that use from class of animal.

No Action Alternative: No impact.

### **3. Risk/Health Hazards**

Impacts of Proposed Action: Pathogens or chemicals could contaminate ground water or other water systems. Some of the common diseases that humans are capable of contracting from wildlife include brucellosis (undulant fever) and bovine tuberculosis. *B. suis* type 4 can be transmitted to humans and is considered by some to present a more serious threat to human health than *B. abortus*. Human deaths attributed to *B. suis* type 4 infections occur most commonly among native peoples in Canada and Alaska.

If Montana wildlife populations were to be infected with tuberculosis, hunting and other wildlife related recreational activities could be adversely affected. If the ground water system were to be contaminated, this could create health hazards for humans. The potential risk relative to ground water contamination is unknown.

No Action Alternative: No Impact.

**4. Community Impact**

Impact of Proposed Action: No Impact.

No Action Alternative: No Impact.

**5. Public Services/Taxes/Utilities**

Impact of Proposed Action: Licensing of the game farm will require the FWP to prepare an E.A. and conduct periodic inspections to assure compliance with regulations and rules. Partial mitigation for costs related to licensing and inspections will be covered by the game farm licensing fee. However, this will fall far short of the actual cost.

The escape of game farm animals may necessitate expenditures of FWP time and funds for recapture or destruction of the animals. The necessity of destroying diseased animals could require a cost to the Department of Livestock as well as FWP. FWP and Department of Livestock may require reimbursement for costs associated with recapture or disposing of animals.

No Action Alternative: No impact.

**6. Aesthetics/Recreation**

Impact of Proposed Action: No impact.

No Action Alternative: No impact.

**7. Cultural/Historical Resources**

Impact of Proposed Action: No impact to any known heritage sites. The Historical Society was contacted and indicated that there were no identified historical sites on the property. They did indicate, because of the location of the proposed game farm, that if ground disturbance is anticipated, the project could result in adverse effects to unknown or unrecorded cultural sites.

No Action Alternative: No impact.

**8. Summary Evaluation of Significance**

Impact of Proposed Action: The disease issue is a potentially significant concern. There is concern among professionals (both wildlife and veterinarians) over whether existing problems involving disease (tuberculosis) infected game farm herds in Montana are being dealt with effectively. Game farms in general generate substantial debate and controversy about the nature of the impacts that would be created.

No Action Alternative: No impact.

**PART II. ACTIONS PROPOSED TO REDUCE POTENTIAL FOR NEGATIVE IMPACTS OF THE PROPOSAL.**

1. In order to negate the possibility of gates being left open, which would cause ingress and egress problem no extra gates should be located on the exterior perimeters of the fences. Gates should be placed only at points where animal handling and transportation areas will be established.

2. Fencing requirements are to be complied with as listed in ARM rule 12.6.1503A.
3. Feed bunks and watering troughs should be elevated above the ground to reduce the initiation and transmission of disease.
4. Operator will be required to comply with genetic and disease testing rules as directed by the Montana Department of Livestock or FWP.
5. Operator will be required to obtain approval from the Montana Department of Livestock for the proposed quarantine facilities.
6. Where possible, it is recommended that the owners allow for the rotation of grazing in pastures to provide for the maintenance of existing vegetation through the elimination of continuous season-long grazing.

### **PART III. E.A. CONCLUSION SECTION.**

1. Based on the significance criteria evaluated in this E.A., is an EIS required? NO

Due to the limited size and scope of the proposed project, an EIS is not required. The E.A. covers the entire 376 acres. However, the operator plans to, in the early phase, develop a five acre site for the initial pasture, holding pens and quarantine facilities. If a game farm license is issued to the applicant it will be conditional on the inspection and approval of fencing by FWP. Planned future expansions by the owner within the 376 acres must be submitted to FWP for approval as required by the game farm statutes and rules.

2. Describe the level of public involvement for this project, if any, and given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?

Agencies were notified and public notification was placed in the paper documenting the E.A. availability. The Department of Livestock, Soil Conservation District and the Madison County Commission were contacted and did not express any concerns about the proposed game farm. No public meeting was held due to the limited size and scope of the project. Copies of the draft E.A. were made available to the public and special interest groups through the Region Three Headquarters located at 1400 South 19th, Bozeman, Montana, 59715.

3. Duration of comment period for the Environmental Assessment:

Comment period will be 14 days starting July 1, 1996, and extending through July 14, 1996.

4. Name, title, address and phone number of the Person(s) Responsible for Preparing the E.A.:

Bob Brannon, Wildlife Biologist, Montana Fish, Wildlife & Parks, 1400 South 19th, Bozeman, MT 59715; 994-4042.

Jim DeBoer, Game Warden, Montana Fish, Wildlife & Parks, 1400 South 19th, Bozeman, MT 59715; 994-4042.

## LITERATURE CITED.

Kahn, Rick. August 1991. Game farming seminar. Helena, MT.

Kahn, Rick. 1992. Ingress and egress from game farms in Colorado. Colorado Division of Wildlife. 4pp.

Montana Department of Fish, Wildlife and Parks, 1992. Summary of background information pertaining to regulation of the game farm industry. Prepared by Heidi Youmans. 24pp.

Williams, Ted. 1992. Canned Hunts. Audubon. Jan.-Feb. Issue, pp 12-19.

Williams, Ted. 1992. The elk-ranch boom. Audubon. May-June Issue, pp. 14-20.

Youmans, Heidi. 1992. Summary of Background Information Pertaining to Regulation of the Game Farm Industry. MDFWP "White Paper" publication. 24 pp.

Youmans, Heidi. March 1992. Summary of Game Farm Workshop, Boise, ID.