

# Class Protocol # 013

Adopted 22 July, 2013

## Class Activity: Ungulate Survey Protocol for Species Detection and Monitoring Purposes

### Specific Activities

Ungulate Presence / not detected via observations

### Objectives

To minimize disturbance and potential adverse effects on individual animals while conducting aerial surveys. Aerial surveys may increase stress during energy deficit periods and as a result, this activity must have some limits on its use. *Primarily for baseline assessments and monitoring purposes.*

### Primary Contact/Authority

Director of Fish and Wildlife Policy

### Applicable Personnel

- This protocol applies to non-government research and surveys conducted by industry.
- Project leads must be wildlife biologists and have appropriate experience with ungulates, survey procedures, established search image of the species intended for census, and knowledge of the species' biology, behaviors, and preferred habitat.
- All team members must be wildlife technicians or wildlife biologists with aerial ungulate survey experience.

### Species

Moose, white-tailed deer, mule deer, elk (research permits will not be issued for *bighorn sheep, mountain goat, bison, woodland caribou and antelope*).

### Applicable Geographic Range

Provincial

### Methods

#### Aerial Detection

- Appropriate fixed-wing or rotary wing aircraft are to be used.
- Straight line transects are to be used, spaced at no less than 1.6 km separation between lines, and flight path must not deviate from the transect at any time.
- Aircraft must maintain a height of at least 400 m above ground level when in Caribou Zones between February 15 and July 15.

- Aircraft must maintain a height of at least 200 m above ground level when in Caribou Zones between July 16 and February 14.
- Aircraft must maintain a height of at least 400 m above ground level when in Sheep and Goat Zones between August 22 and July 15. Flights directly over bighorn sheep and mountain goats should be avoided at all times.
- Aircraft must maintain a height of at least 200 m above ground level within 800 m of trumpeter swan nesting lakes between April 1 and September 30.
- Aircraft must maintain a height of at least 200 m above ground level when in Key Wildlife and Biodiversity Zones between January 15 and April 30.
- Aircraft must maintain a height of at least 400 m above ground level when within 3.2 km of sage-grouse critical habitat.
- Aerial detection flight activities that will cause the aircraft to fly over or within 3.2 km of sage-grouse critical habitat will not be allowed unless proposed activities have been reviewed and approved by the senior Wildlife Biologist in the Medicine Hat office. During all approved flights, aircraft must maintain a height of at least 400 m above ground level when within 3.2 km of sage-grouse critical habitat.

### **Ground-Based Detection**

- Ground-based detection methods include snow-tracking, pellet group counts, browse surveys, and remote cameras.
- Bait, lures, or incentives must not be used to attract individuals to sampling stations.
- Ground-based movements within Caribou Zone should be reduced between February 15 and July 15.
- Ground-based movements within Key Wildlife and Biodiversity Zones should be reduced between January 15 and April 30.
- Ground-based detection activities will not be allowed within 3.2 km of sage-grouse critical habitat unless proposed activities have been reviewed and approved by the senior Wildlife Biologist in the Medicine Hat office.

### **Evaluation**

Running animals may be followed only once, for a period of time not to exceed 10 seconds.

### **Data Submission**

Alberta Environment and Sustainable Resource Development, Fish and Wildlife Policy Branch requires submission to the Fish and Wildlife Management Information System (FWMIS) of all data attained through wildlife surveys completed under the authority of a research permit. Information on FWMIS and electronic load forms that are needed for this database can be obtained from biologists at the Fish and Wildlife offices or online at <http://srd.alberta.ca/FishWildlife/FWMIS/Default.aspx>.

### **Communications**

Before the program commences, the Regional Wildlife Biologist must be contacted and the project discussed in detail. Multiple surveys over the same geographic area, especially in sensitive wildlife zones, may not be permitted.

## **Acknowledgements and References**

This protocol was drafted with key input from J. Allen, D. Hervieux, B. Maille, K. Morton and D. Moyles.

Alberta Environment and Sustainable Resource Development, Recommended Wildlife Land Use Guidelines, Mountain Goat and Bighorn Sheep Range.

<http://srd.alberta.ca/FishWildlife/WildlifeLandUseGuidelines/documents/WildlifeLandUse-MountainGoatBighornSheepRange-Oct30-2010.pdf>

Resources Inventory Branch for the Terrestrial Ecosystems Task Force. 2002. Aerial-based inventory methods for selected ungulates: bison, mountain goat, mountain sheep, moose, elk, deer and caribou. Standards for components of British Columbia's Biodiversity No. 32.

<http://www.ilmb.gov.bc.ca/risc/alphastand.htm>

Resources Inventory Branch for the Terrestrial Ecosystems Task Force. 1998. Ground-based inventory methods for selected ungulates: moose, elk and deer. Standards for components of British Columbia's Biodiversity No. 33. <http://www.ilmb.gov.bc.ca/risc/alphastand.htm>

Resources Inventory Branch for the Terrestrial Ecosystems Task Force. 2006. Ground-based inventory methods for ungulate snow-track surveys. Standards for components of British Columbia's Biodiversity No. 33a. (Addendum to ground-based inventory methods for selected ungulates: moose, elk and deer. Standards for components of British Columbia's Biodiversity No. 33a.) <http://www.ilmb.gov.bc.ca/risc/alphastand.htm>