

Big Game Aerial Survey Results – 2016

In 2016, the following big game aerial surveys (see attached map) were flown:

- Game Hunting Area 35 – white-tailed deer
- Game Hunting Area 35A (Vita area) – elk
- Game Hunting Areas 8, 11, and 26 – moose and gray wolf
- Game Hunting Areas 13, 13A – gray wolf

Because of insufficient snow, the moose surveys planned for Game Hunting Areas 13, 13A (Porcupine Mountain area), 18, 18A, 18B, 18C (Duck Mountain area) were cancelled.

Survey Summaries

White-tailed deer, Game Hunting Area 35

An aerial survey was conducted in Game Hunting Area 35 in southeast Manitoba from 20-29 February 2016 to estimate white-tailed deer population abundance. The timing of the survey coincided with two consecutive (2014/15 and 2015/16) relatively mild winters which were preceded by two consecutive severe winters (2012/13 and 2013/14). A stratified random block survey method was used. Stratification transects were flown throughout the entire Game Hunting Area over 4.5 days during which number of deer and signs of deer (tracks, beds and craters) were documented. Using results from the stratification survey, sample units (areas) within Game Hunting Area 35 were classified into five sample unit categories (strata) to describe the expected relative density of deer in each unit category. Randomly selected sample units within each unit category (stratum) were intensively surveyed, during which an attempt to count every deer in the sample unit was made. Intensive surveys were conducted over a five day period on 22% of the total area of Game Hunting Area 35. The survey produced a point estimate of 4,084 (90% Confidence Intervals (CI): 3,492 – 4,677) animals and an average density of 0.56 white-tailed deer/km² for the Game Hunting Area.

Elk, Game Hunting Area 35A (Vita area)

The information obtained from this survey is being analyzed. Survey results will be posted as soon as the report becomes available.

Moose, Game Hunting Area 8

Previous aerial survey results indicated the moose population in Game Hunting Area 8 had declined. Local communities are concerned with the small size of the population. An aerial survey was conducted in this Game Hunting Area from 12-21 January 2016 to obtain updated information on the moose population to better inform possible conservation actions. A stratified random block survey method was used and sample units were identified as low, medium and high moose density units. Intensive sampling was conducted on 26% of the total Game Hunting Area. The survey produced a point estimate of 339 (90% CI: 287 – 391) moose in the Game Hunting Area for an average density of 0.11 moose/km². The calf/cow and bull/cow ratios were 47 calves/100 cows and 64 bulls/100 cows respectively. Survey results suggest there were similar numbers of moose in 2016 compared to 2012 (317; 90% CI: 234 – 401 moose).

Moose, Game Hunting Area 11

The information obtained from this survey is being analyzed. Survey results will be posted as soon as the report becomes available.

Moose, Game Hunting Area 26

Aerial survey results suggested the moose population in Game Hunting Area 26 was declining and as a result a suite of conservation actions were implemented beginning in 2010. These actions included the suspension of licensed hunting in 2010 and, in 2012, the establishment of a conservation closure, which closed portions of the Game Hunting Area to rights-based hunting. An aerial survey was conducted in Game Hunting Area 26 from 9-21 January 2016 to obtain information on the moose population, including whether conservation efforts had been effective in the recovery of the population. A stratified random block survey method was used and sample units were identified as low, medium and high moose density units. Intensive sampling was conducted on 23% of the total area of Game Hunting Area 26. The

survey produced a point estimate of 936 (90% CI: 795 – 1076) moose and an average density of 0.12 moose/km². The calf/cow and bull/cow ratios were 44 calves/100 cows and 59 bulls/100 cows respectively. Survey results suggest there were fewer moose in 2016 than in 2013 (1307; 90% CI: 1118 – 1495 moose).

Gray Wolf, Game Hunting Area 8

An aerial survey to estimate the minimum population and distribution of wolves in Game Hunting Area 8 was conducted February 2 and 3, 2016. The results of this survey produced a population estimate of 65-67 wolves based on direct observation and tracks. This results in a density of 18-19 wolves per 1000 km². Results will help to develop moose management strategies with the local communities.

Gray Wolf, Game Hunting Area 11

An aerial survey to estimate the minimum population and distribution of wolves in Game Hunting Area 11 was conducted February 4, 2016. The results of this survey produced a minimum count of 18 wolves based on observations and tracks. This results in a density of 7 wolves per 1000 km². Results will help to develop moose management strategies with the affected communities.

Gray Wolf, Game Hunting Area 13 and 13A

An aerial survey to determine wolf populations in Game Hunting Areas 13 and 13A (Porcupine Mountain Provincial Forest) was conducted on February 24, 2016. The total survey area was 2,256 km². The total estimated population was 55 animals as compared to 60 animals in 2012.

Gray Wolf, Game Hunting Area 26

Survey results will be posted as soon as the report becomes available.

PROVINCIAL BIG GAME AERIAL SURVEYS 2015 - 2016

