

2019 Big Game Surveys

Manitoba Sustainable Development conducted aerial surveys in three areas of the province during the winter of 2018/19.

Moose Survey Results

Moose, Game Hunting Area 17B (*Eastern Region*)

An aerial survey was conducted in Game Hunting Area 17B from January 17 to February 6, 2019, to obtain information on the area moose population. This was the first time that a moose population survey had been conducted for this Game Hunting Area. A stratified random block survey method was used and sample units were grouped into three sample unit categories (strata). Intensive sampling was conducted on 26% of the total survey area. The survey produced a point estimate of 387 (90% Confidence Interval: 307 – 467) moose and an average density of 0.05 (90% Confidence Interval: 0.04 – 0.06) moose/km². The calf/cow and bull/cow ratios were 36 (90% Confidence Interval: 25 – 46) calves/100 cows and 65 (90% Confidence Interval: 44 – 86) bulls/100 cows, respectively.

Moose, Game Hunting Area 15 (*Central Region*)

An aerial survey was conducted in Game Hunting Area 15 from January 17 to February 3, 2019, to obtain current information on the area moose population. A stratified random block survey method was used and sample units were grouped into two categories (strata). Intensive sampling was conducted on 32% of the total survey area. The survey produced a point estimate of 111 (90% Confidence Interval: 78 - 145) moose and an average density of 0.03 (90% Confidence Interval: 0.02 - 0.04) moose/km². The calf/cow and bull/cow ratios were 36 calves/100 cows (90% Confidence Interval: 0.14 - 0.57) and 39 bulls/100 cows (90% Confidence Interval: 0.19 - 0.59), respectively. Survey results confirm that GHA 15 is a low-density moose area and suggest the population has likely declined somewhat since the previous survey in 1994. The 1994 survey included Game Hunting Areas 15 as well as 15A and produced a combined population estimate of 287 moose. Survey methods used in 1994 (unequal sized habitat blocks) were similar to 2019 (equal sized blocks) but not identical, and therefore survey results cannot be directly compared.

Elk/Moose Survey Results

Elk/Moose, Game Hunting Areas 29 and 29A (*Western Region – Turtle Mountain*)

An aerial survey for elk and moose was conducted in Game Hunting Areas 29 and 29A in southwest Manitoba from February 25 to March 1, 2019. The relatively small size and habitat characteristics of this area allowed for a multi-species survey. A minimum count method was used whereby all areas of the Game Hunting Areas where elk and moose were likely to occur were flown (total coverage). Local knowledge of recent elk and

moose activity and habitat cover were used to identify areas of elk and moose use. Transects were flown where elk and moose were counted (and aged/sexed). Aerial photos were taken of large groups of elk to aide in identifying total numbers. The survey produced a minimum count of 605 elk (117 antlered and 488 antlerless), an increase from the 2015 minimum count of 312 elk. A direct comparison of survey results between 2019 and 2015 should be undertaken with caution, as the 2019 survey area was somewhat larger than the area flown in 2015 (One herd of 158 elk was counted in an area that was not covered in the 2015 survey). Overall, elk density increased to 0.64 elk/km² from 0.43 elk/km² in 2015.

The survey produced a minimum count of 112 moose. The bull to cow ratio was 127 bulls/100 cows and the calf to cow ratio was 27 calves/100 cows. The overall estimated density was 0.11 moose/km². The previous survey (2015), estimated a density of 0.08 moose/km², suggesting there has been no significant change of the moose population in the area.