

2008 Canmore area elk

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In 1974, a systematic winter aerial survey for elk within individual WMUs was initiated in the Canmore and Calgary areas. Since that time, evident winter elk range has been described. The main objectives of these surveys are to determine the winter spatial distribution of elk, the post-hunt herd composition, and the number of elk within the area. Consistent data have been collected over the years, allowing trend comparisons of areas well known as elk winter range within each WMU surveyed. This information is used by ASRD to make wildlife management decisions within defined areas, including land-use decisions and the allocation of hunting permits. This section describes the methods and results of the survey conducted in winter 2008.

Study area

The survey area integrated the Bow River, continued south of the Highwood River, and covered mountainous areas of Kananaskis Country and foothills just west of Calgary (Figure 7). More specifically, known elk wintering areas within WMUs 310, 312, 314, 406, 408 and 410 were surveyed, including the area of Bow Valley Provincial Park (BVPP).

Survey methods

Aerial observations were conducted on January 18, 20, 21, 23, and 24, and February 1, 2008. A Bell 206 Jet Ranger helicopter was used for this study, employing a navigator/observer in the front seat complete with two observers in the back seat. Elk sightings were recorded on a 1:250 000 topographic scale map and a hand-held GPS unit was used to log observation points and record geographic coordinates. All pertinent data were recorded onto survey sheets and condensed into table format. Elk

groups were tallied and classed as cows or calves (where possible), spike bull, branch bull, or trophy bull (≥ 5 points). Canon Image Stabilizer binoculars were used for class identification and photographs were taken of large elk groups to later serve in total counts.

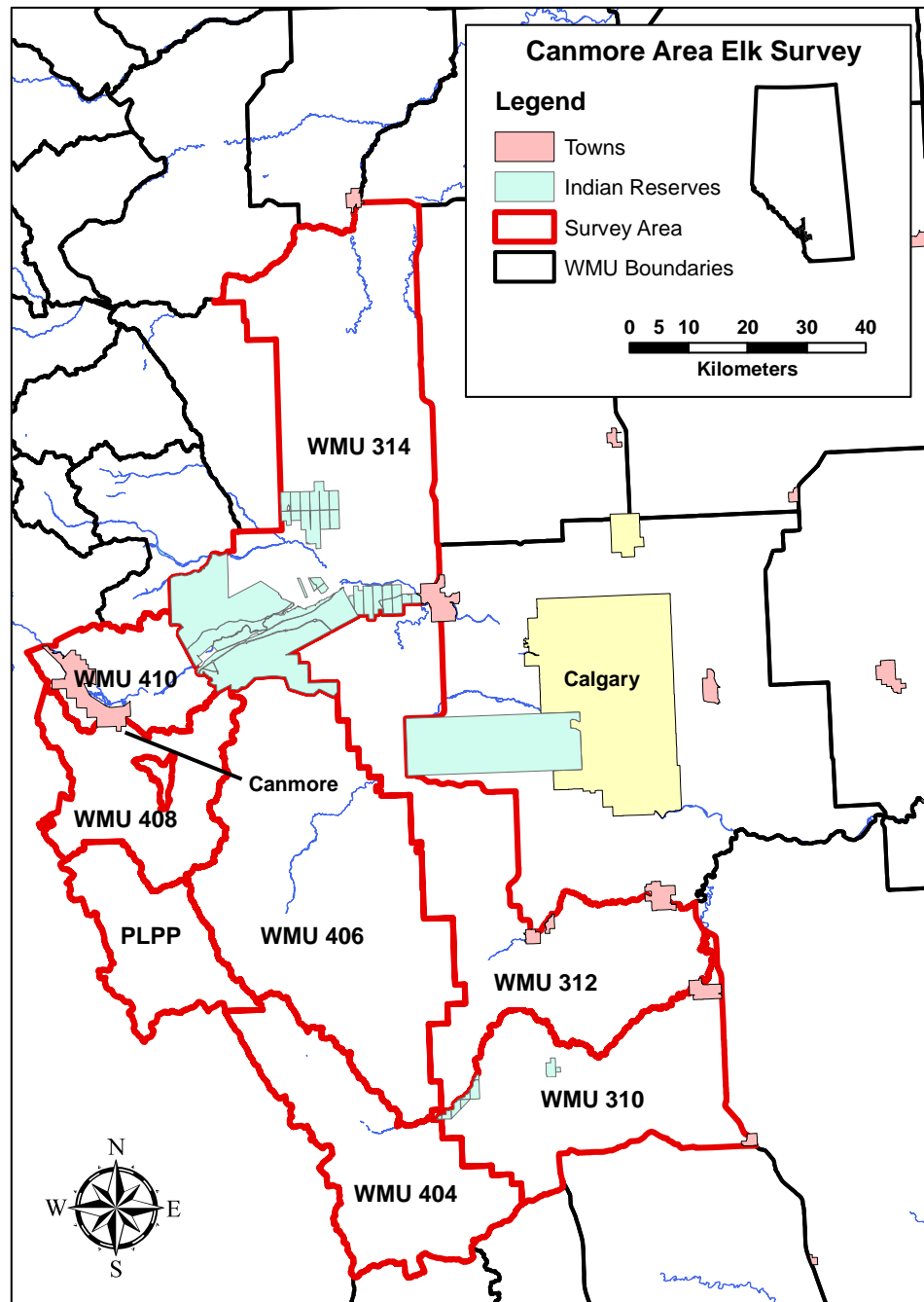


Figure 7. Location of the Canmore area elk survey in Alberta.

The flight path followed a predetermined trajectory designed to cover traditional winter elk ranges. Parallel transects were flown in some foothill ranges in order to cover the area more thoroughly because the elk tend to be more widely dispersed and more difficult to find in these areas. Search efforts were mostly concentrated in areas where elk tracks were visible in the snow.

Results

Survey conditions were considered good to excellent with complete snow cover and cold temperatures, except for January 23 when the temperature rose to 0°C and snow cover disappeared from some south-facing slopes. A total of 2,441 elk were observed on all the winter ranges (Table 5). All traditional winter ranges were flown during the 2008 surveys. The highest number of elk were observed in WMU 312 at just less than 1,000 (minimum count). The least elk were observed in Peter Lougheed Provincial Park. However, this park was only superficially surveyed, and therefore it was not considered a total count.

Table 5. Summary of winter elk observations by wildlife management unit (WMU) in the Canmore Area in 2008. Abbreviations: Bow Valley Provincial Park = BVPP, Peter Lougheed Provincial Park = PLPP.

WMU	Total	Cows	Calves	Unclassified				Unclassified Bulls	Unclassified Elk	Ratio to 100 antlerless	
				Antlerless	Spike	Branch	Trophy			Males	Juveniles
310	324	98	13	0	11	6	6	0	190	21	13
312	979	149	44	164	52	34	24	0	512	31	29
314	293	34	0	227	19	9	4	0	0	12	N/A
404	254	114	18	28	9	11	19	5	50	28	16
406	171	101	15	0	12	11	17	0	15	34	15
408	187	133	15	0	11	9	9	0	10	20	11
410	160	16	-	-	0	9	15	12	108	N/A	N/A
BVPP	67	-	-	-	-	-	-	-	67	N/A	N/A
PLPP	6	6	0	0	0	0	0	0	0	N/A	N/A
Total	2441	651	105	419	114	89	94	17	952	26	16