

The Status of Mountain Goats in Alberta, Canada.

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Abstract: Following a decline in many hunted herds of mountain goats, the hunting season in Alberta was closed in 1988 (Smith 1988). At that time the population on provincial lands (outside of National Parks) was estimated to be 1560 (Fig. 1). While populations recovered, a kid mortality study was completed (Festa-Bianchet et al. 1994) and a provincial management plan was developed (Glasgow et al. 2003). By 2000, the provincial estimate had increased to 1650 and in 2001 a limited hunting season was re-established in 3 management units in southern Alberta. A single tag is issued for each unit and to date the number of units (1 tag/unit) has increased to 8. Harvest has ranged from 1 – 7 goats annually. Hunters are encouraged to harvest only billies and an identification course is offered to each permit holder. If a nanny is harvested, the unit is closed to hunting for a year. However, since 2001, 39% (11/28) goats harvested have been nannies. The current population estimate on provincial lands is 1963 (Fig. 1; Table 1) and in the National Parks is 1430 for an Alberta total of 3393 (Table 1). There have been no mountain goat transplants since 1996 (Smith et al. 1996). Management research has focused on the Caw Ridge study area in west central Alberta including kid mortality (Festa-Bianchet et al. 1994), helicopter harassment (Cote 1996), reproductive success (Cote and Festa-Bianchet 2001) aerial survey efficiency (Gonzalez-Voyer et al. 2001), population response following hunting closure (Gonzalez-Voyer et al. 2003) and population dynamics and hunting strategies (Hamel et al. 2006). A summary of all Caw Ridge research activities has been reported in a recent book (Festa-Bianchet and Cote 2008). Management challenges in Alberta include resourcing systematic surveys, minimizing heli-seismic activity in mountain goat range and the encroachment of mining activity onto the Caw Ridge study area.

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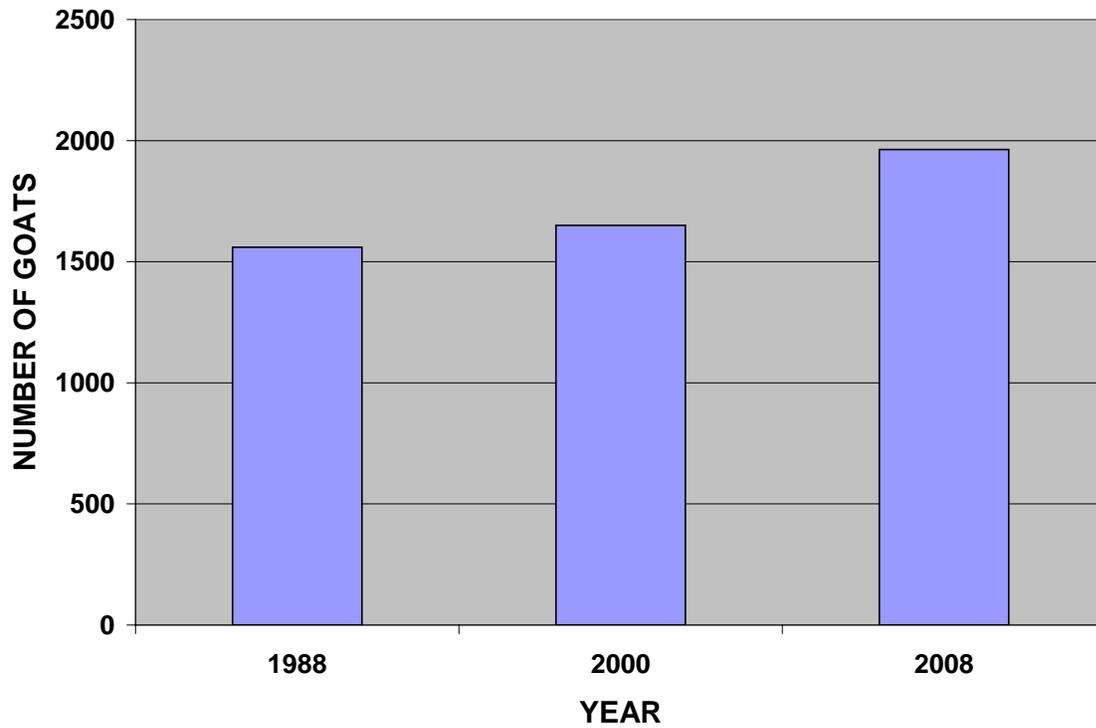


Fig. 1. Population estimates for mountain goats in Alberta (outside of National Parks), 1988 – 2008.

Table 1. 2008 mountain goat population estimates for Alberta, Canada.

GMA ^a	WMU	Area	Observed ^b	Source
A	400	Waterton , Carbondale and Castle	248	Bergman (2005)
	402	Crowsnest Pass to Mount Gass (Continental Divide)	93	Bergman (2006)
	306/402	Livingstone Range	14	Bergman (2006)
	402	Crowsnest Mountain	35	Bergman (2006)
	GMA Total	All Areas	390	
B	408/648	Area M, Kent Ridge and Opal Range West	100	J. Jorgenson (PC)
	404/406/408	Elk, Fisher, Elbow, Opal, Highwood, and Kananaskis Ranges	120*	J. Jorgenson (PC)
	410/412/734	Canmore, Devils Head and Ghost Wilderness Area	75	J. Jorgenson (PC)
	GMA Total	All Areas	295	
C	328	Shunda	12	Allen (1998)
	414/416	Burnt Timber Creek and Bruns Ridge	25*	E. Bruns (PC)
	417	Wilson Creek	4*	J. Allen (PC)
	418	Eagle Creek	10*	E. Bruns (PC)
	420	Peters Creek	5*	E. Bruns (PC)
	422	South Ram	18	Allen (1998)
	426/430/432	First Range and Cline Creek	39	Allen (1998)
	428	Kiska Creek	2*	J. Allen (PC)
	432	Whitegoat Peaks	45	Allen (1998)
	434	Blackstone-Wapiabi	2*	J. Allen (PC)
	736	Siffleur Wilderness	31	Allen (1998)
	738	White Goat Wilderness	2	Smith and Edmonds (1988)
	GMA Total	All Areas	195	
	D	344	Pinto Creek	33
356		Kakwa/Smoky confluence	0	D. Hervieux (PC)
436		Cardinal-Brazeau	5*	K. Smith (PC)
437		Red Cap Range	0	K. Smith (PC)
438		Whitehorse Creek	1	Sorensen (1999)
439		Moosehorn	5	Hobson and Kneteman (2007)
440		Berland-Hoff Range	40	Hobson and Kneteman (2007)
440		Daybreak Peak	4	Hobson and Kneteman (2007)
440		South Persimmon	51	Hobson (2002)
440		North Persimmon	66	Hobson and Kneteman (2007)
GMA ^a	WMU	Area	Observed ^b	Source

D	441	Goat Cliffs-Grande Mt.	30	Hobson and Kneteman (2007)
	442	Sunset Peak	39	Kneteman PC
	442	Rockslide Creek	58	Hobson and Kneteman (2007)
	442	Monaghan Creek	45	Hobson and Kneteman (2007)
	442	Ptarmigan Lake	63	Sorensen (1999)
	442	The Triangle	8	Hobson and Kneteman (2007)
	442	Mount Deveber	61	Hobson and Kneteman (2007)
	442	Kvass	6	Hobson and Kneteman (2007)
	442	Cote/Trench/Bear Creek	12*	K. Smith (PC)
	442	Mount May/Francis Peak/La Creche Mtn	15*	D. Hervieux (PC)
	444	Llama/Turret	86	Hobson and Kneteman (2007)
	444	Mount Hamell	79	Sorensen (1999)
	445	Dinosaur Ridge	10*	D. Hervieux (PC)
	445	Narraway Valley	15*	D. Hervieux (PC)
	445	Sulphur Mountain	15*	D. Hervieux (PC)
	446	Caw Ridge	150	Steeve Cote (PC)
	GMA Total	All Areas	1100	
Total on Provincial Lands			1963	
		Waterton National Park	80	R. Watt (PC)
		Banff National Park	1000*	A. Dibb and J. Whittington (PC)
		Jasper National Park	350*	M. Bradley (PC)
Total on Federal Lands			1430	
Alberta Total			3393	

^a A = Southern Rockies Area – Pincher Creek B = Southern Rockies Area - Canmore
C = Clearwater Area D = Foothills and Smoky Areas

^b These are the numbers of goats observed during the most recent aerial survey, except * (see below).

* These areas have not been surveyed recently so numbers represent estimates and are based on observations from the ground, information supplied by others and/or estimates by local wildlife managers.

PC = personal communication

Note: Many herds are shared with British Columbia or National Parks, but the numbers (other than those numbers beside the three National Parks) represent only those goats observed on Alberta provincial lands.

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