
CHAPTER 1: MOOSE MANAGEMENT REPORT

From: 1 July 2011

To: 30 June 2013

LOCATION

GAME MANAGEMENT UNITS: 1A (5,300 mi²)

GEOGRAPHIC DESCRIPTION: That portion of Unit 1 lying south of Lemesurier Point, including all drainages into Behm Canal and excluding all drainages into Ernest Sound.

BACKGROUND

The status and state management of moose in these units has been relatively unchanged for the past decade. The introduction of a federally managed subsistence hunt in 2003 changed harvest and effort between those hunting under the state permit and those hunting under federal permits. When the federal permit information is available we include the additional harvest with this report.

Most of the Unit 1A moose population is localized in the Unuk River drainage on the mainland and moose numbers appear stable. Heavy timber along a narrow valley with braided river channels makes moose surveys difficult. Consequently, population estimates are based on a combination of aerial survey counts and track distribution after recent snowfalls. Good habitat is limited and moose densities are low. The harvest is variable, ranging 0–5 per year. Unit 1A moose are believed to be entirely subspecies *Alces alces andersonii*, and likely emigrated from interior British Columbia via the Unuk River valley. Moose sightings are occasionally reported from other parts of Unit 1A including the lower mainland, Revillagigedo Island, the Cleveland Peninsula, and on Prince of Wales Island in Unit 2.

MANAGEMENT DIRECTION

MANAGEMENT OBJECTIVES

- Maintain a Unit 1A post-hunting population of 50 moose, and an annual state harvest of at least 2 bulls.
- Provide maximum moose hunting opportunity.
- Provide opportunities for non-consumptive users by maintaining a healthy moose population.

METHODS

Moose surveys are flown during winter (December–February) if or when weather and snow conditions become favorable. A registration hunt harvest report provides all the important

information regarding hunter effort, hunt timing, mode of transport, and hunter success. Effort is also made to obtain federal registration permit hunt information prior to compiling this report. Harvest data are organized by regulatory year (RY). A regulatory year runs from 1 July through 30 June (e.g., RY11 = 1 July 2011–30 June 2012).

RESULTS AND DISCUSSION

POPULATION STATUS AND TREND

Population Size

Data are insufficient to make a quantitative determination of Unit 1A moose population trends during the past 5 years. However, Unit 1A moose populations appear to be stable at a low density and carrying capacity is estimated to be low. Healthy brown bear, black bear, and wolf populations likely account for substantial mortality in this area, particularly on moose calves.

After more than 2 decades of no moose observations along the mainland Chickamin River located south of the Unuk River, the Alaska Fish and Game sport fish tagging crew observed fresh moose tracks and pellets in this area representing at least 1 adult moose during the summers of 2010 and 2011. This area once held a small, introduced moose population during the 1970s and we will watch for more signs of moose in the future.

Population Composition

Current population estimates for the Unuk River within the Alaska portion of the drainage are between 35–50 moose. We try each year to complete aerial survey counts after a fresh snowfall with calm wind conditions. However, thick timber canopy cover along most of the river and frequent inclement weather make accurate and complete counts during aerial surveys difficult and infrequent. No aerial surveys were completed during this reporting period.

Distribution and Movements

Moose are not restricted from moving between Canada and the U.S. along mainland drainages. However, moose have never been marked or radiocollared in this area, and consequently we know little about their seasonal movement along the Unuk drainage. Some of the best habitat along the Unuk River occurs at the upper reaches of the river on the U.S. side and in Canada, and likely supports a significant number of moose outside of Unit 1A. It is also likely those moose move back and forth across the border.

MORTALITY

Harvest

Season and bag limit

Resident and nonresident hunters

Unit 1A

15 September–15 October

One bull by registration permit only RM022

(General hunt only)

Unit 2

No open season.

Board of Game Actions and Emergency Orders. The Alaska Board of Game made no regulatory changes during this report period, nor did we issue any emergency orders in relation to Unit 1A moose management.

Hunter Harvest. The Unit 1A 10-year mean annual harvest (RY03–RY12) is 2 bulls. During RY11 hunters reported 4 bulls taken under state registration permit and no additional harvest was reported from the federal permit. During RY12, 2 bulls were taken by state permit and 1 bull was reported under the federal permit (Table 1).

Permit Hunts. During RY11, 22 individuals obtained a Unit 1A state moose registration permit for RM022 and 11 hunted. During the RY12 season 45 hunters registered and 31 reported hunting. This is the highest level of participation in this hunt over the past decade (Table 1).

Hunter Residency and Success. Unit 1A moose hunters are primarily from Ketchikan, Metlakatla, and Prince of Wales Island. All successful hunters during the past 10 years were residents of 1 of these 3 communities. The success rate for hunters who participate has averaged 13% over the last 10 years. During RY11 36% of hunters were successful, and in RY12 6% were successful (Table 2). The higher level of success during the 2011 season is likely a function of fewer hunters in the field and focused effort by the few active hunters during that season. Weather during the 2011 hunting season was extremely poor and consequently fewer hunters were able to reach the remote hunt area.

Harvest Chronology. Under the state registration permit most Unit 1A moose were harvested during the late portion of the season (Table 3). Moose were harvested during the early (September 5–October 15) federal season in 6 of the last 10 years. Of the 9 additional moose reported under the Federal permit over the past 10 years, 6 were harvested prior to the opening of the State hunt, 2 during the state season, and 1 harvest date is unknown. Most hunters using federal permits continue to hunt under federal regulations after the state season opens. A few hunters who were federally qualified obtained both state and the federal permits that allowed them to hunt on state and private lands near the Unuk River. When hunters obtain both permits we make an effort to cross reference harvest report data and avoid counting the same hunter twice.

Transport Methods. Most hunters use boats to access the Unuk River. Occasionally hunters access this area by airplane but then most use a boat to travel upstream to hunt (Table 4). Currently there are no roads in this hunt area and no suitable places to use off-road vehicles.

Other Mortality

The extent of wolf, black bear, and brown bear predation on adult and calf moose in Unit 1A is unknown, but predators likely play a key role in limiting this moose population. Deep and persistent snow in this area is also likely a limiting factor in growth, distribution and expansion of this small semi-isolated moose population.

CONCLUSIONS AND RECOMMENDATIONS

Access to this hunt area is difficult and consequently attracts only a few hunters. Historically most moose hunters are from Ketchikan. Most of the local residents either own cabins along the

lower end of the Unuk River, or have access to them. Most moose harvested are young bulls with relatively small antlers that have historically averaged about 20 to 30 inches in width. Winter weather, snow conditions, and abundant predators are likely limiting the moose population, and consequently we do not expect moose numbers or harvest to exceed current levels.

The Unit 1A registration permit provides accurate hunt-based data although the Federal permit is making it difficult to account for all the hunting effort and activity. We will continue to gather information about this moose population and continue to document moose sightings in other areas of Unit 1A. We do not recommend any changes to the Unit 1A moose hunting regulations at this time.

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Table 1. Unit 1A moose harvest data for permit hunt (RM022) for regulatory years 2003 through 2012.

Year	Permits issued	Did not hunt	Unsuccessful hunters	Successful hunters	Males	(%)	Females	(%)	Total harvest
2003	30	20	8	2	2 ^a	(100)	0	(0)	2 ^a
2004	38	12	23	3	3 ^b	(100)	0	(0)	3 ^b
2005	41	24	17	0	0	(100)	0	(0)	0
2006	23	13	9	1	1 ^c	(100)	0	(0)	1 ^c
2007	33	16	15	2	2	(100)	0	(0)	2
2008	20	5	13	2	2 ^b	(100)	0	(0)	2 ^b
2009	33	16	14	3	3	(100)	0	(0)	3
2010	24	11	12	1	1 ^b	(100)	0	(0)	1 ^b
2011	22	11	7	4	4	(100)	0	(0)	4
2012	45	14	29	2	2 ^b	(100)	0	(0)	2 ^b
Average	30.9	14.3	14.6	2.0	2.0	(100)	0	(0)	2.0

^aThree additional bulls harvested under federal regulations.

^bOne additional bull harvested under federal regulations.

^cTwo additional bulls harvested under federal regulations.

Table 2. Unit 1A moose hunter residency and success for regulatory years 2003 through 2012.

Year	Successful					Unsuccessful					Total hunters
	Local resident	Nonlocal resident	Nonresident	Total	(%)	Local resident	Nonlocal resident	Nonresident	Total	(%)	
2003	2	0	0	2 ^a	(20)	8	0	0	8	(80)	10
2004	2	1	0	3 ^b	(12)	23	0	0	23	(88)	26
2005	0	0	0	0	(0)	16	1	0	17	(100)	17
2006	1	0	0	1 ^c	(10)	6	3	0	9	(90)	10
2007	2	0	0	2	(12)	14	1	0	15	(88)	17
2008	2	0	0	2 ^b	(13)	13	0	0	13	(87)	15
2009	3	0	0	3	(18)	13	1	0	14	(82)	17
2010	1	0	0	1 ^b	(8)	11	0	1	12	(92)	13
2011	4	0	0	4	(36)	6	0	1	7	(64)	11
2012	2	0	0	2 ^b	(6)	26	2	1	29	(94)	31
Average	2.0	0.1	0	2.0	(13)	12	1.0	0.3	14	(87)	16

^a Three additional bulls harvested under federal regulations.

^b One additional bull harvested under federal regulations.

^c Two additional bulls harvested under federal regulations.

Table 3. Unit 1A moose harvest chronology for regulatory years 2003 through 2012.

Year	15–21 Sep	(%)	22–28 Sep	(%)	29 Sep–5 Oct	(%)	6–15 Oct	(%)	<i>n</i>
2003	0	(0)	1	(50)	1	(50)	0	(0)	2 ^a
2004	1	(33)	0	(0)	1	(33)	1	(33)	3 ^b
2005	0	(0)	0	(0)	0	(0)	0	(0)	0
2006	0	(0)	0	(0)	0	(0)	1	(100)	1 ^c
2007	0	(0)	0	(0)	0	(0)	2	(100)	2
2008	0	(0)	0	(0)	2	(100)	0	(0)	2 ^b
2009	0	(0)	0	(0)	1	(33)	2	(66)	3
2010	0	(0)	0	(0)	1	(100)	0	(0)	1 ^b
2011	0	(0)	0	(0)	1	(25)	3	(75)	4
2012	1	(50)	1	(50)	0	(0)	0	(0)	2 ^b
Average	0.2	(10)	0.2	(10)	0.7	(35)	0.9	(45)	

^a Three additional bulls harvested under federal regulations.

^b One additional bull harvested under federal regulations.

^c Two additional bulls harvested during early federal season.

Table 4. Unit 1A moose harvest percent by transport method for regulatory years 2003 through 2012.

Year	Harvest percent by transport method										
	Airplane	(%)	Boat	(%)	Highway vehicle	(%)	Off-road vehicle	(%)	Unk	(%)	<i>n</i>
2003	0	(0)	2	(100)	0	(0)	0	(0)	0	(0)	2 ^a
2004	0	(0)	3	(100)	0	(0)	0	(0)	0	(0)	3 ^b
2005	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0
2006	1	(100)	0	(0)	0	(0)	0	(0)	0	(0)	1 ^c
2007	0	(0)	2	(100)	0	(0)	0	(0)	0	(0)	2
2008	0	(0)	2	(100)	0	(0)	0	(0)	0	(0)	2 ^b
2009	0	(0)	3	(100)	0	(0)	0	(0)	0	(0)	3
2010	0	(0)	1	(100)	0	(0)	0	(0)	0	(0)	1 ^b
2011	0	(0)	4	(100)	0	(0)	0	(0)	0	(0)	4
2012	0	(0)	2	(100)	0	(0)	0	(0)	0	(0)	2 ^b
Average	0.1	(5)	1.9	(95)	0	(0)	0	(0)	0	(0)	

^a Three additional bulls harvested under federal regulations.

^b One additional bull harvested under federal regulations.

^c Two additional bull harvested under federal regulations.