

Initial Study Report Meeting

Study 10.6 Caribou Distribution, Abundance, Movements, Productivity, and Survival

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Prepared by

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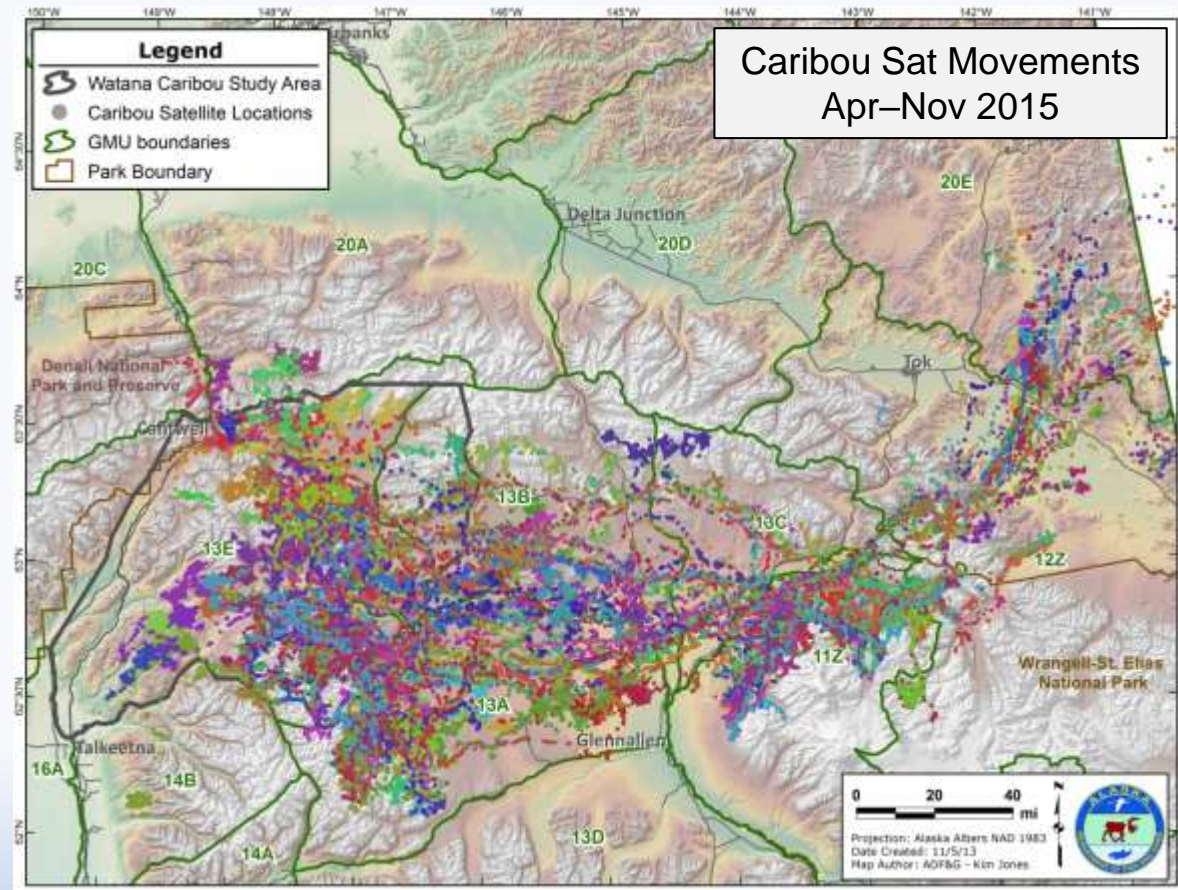
Study 10.6 Status

- **ISR Documents** (ISR Part D Overview)
 - Initial Study Report (Jun 3, 2014)
- **STATUS**
 - Collared bull and cow caribou with VHF (30) and GPS (60) collars in 2012.
 - Redeployed 36 collars from mortality pickups and hunter-harvested caribou in 2013.
 - Deployed additional collars in April 2015.
 - Documented caribou distribution, group size, movements, productivity and survival and monitored population 2012 through October 2015.

Study 10.6 Progress since ISR

ADF&G completed the following since the ISR meeting (Oct 2014):

- Deployment of 60 GPS collars during March–April 2015
- Completed telemetry and GPS collar monitoring in Nov. 2015



Study 10.6 Objectives

(ISR Part A, Section 2)

- Document seasonal use of and movement through the Project area by both females and males of the Nelchina caribou herd (NCH) and the Delta caribou herd (DCH)
- Assess the relative importance of the Project area to both the NCH and DCH
- Document productivity and survival of caribou using the Project area
- Analyze data from historical caribou studies and synthesize with recent data for the NCH and DCH, as a continuation of the caribou task of the 2012 study

Study 10.6 Components

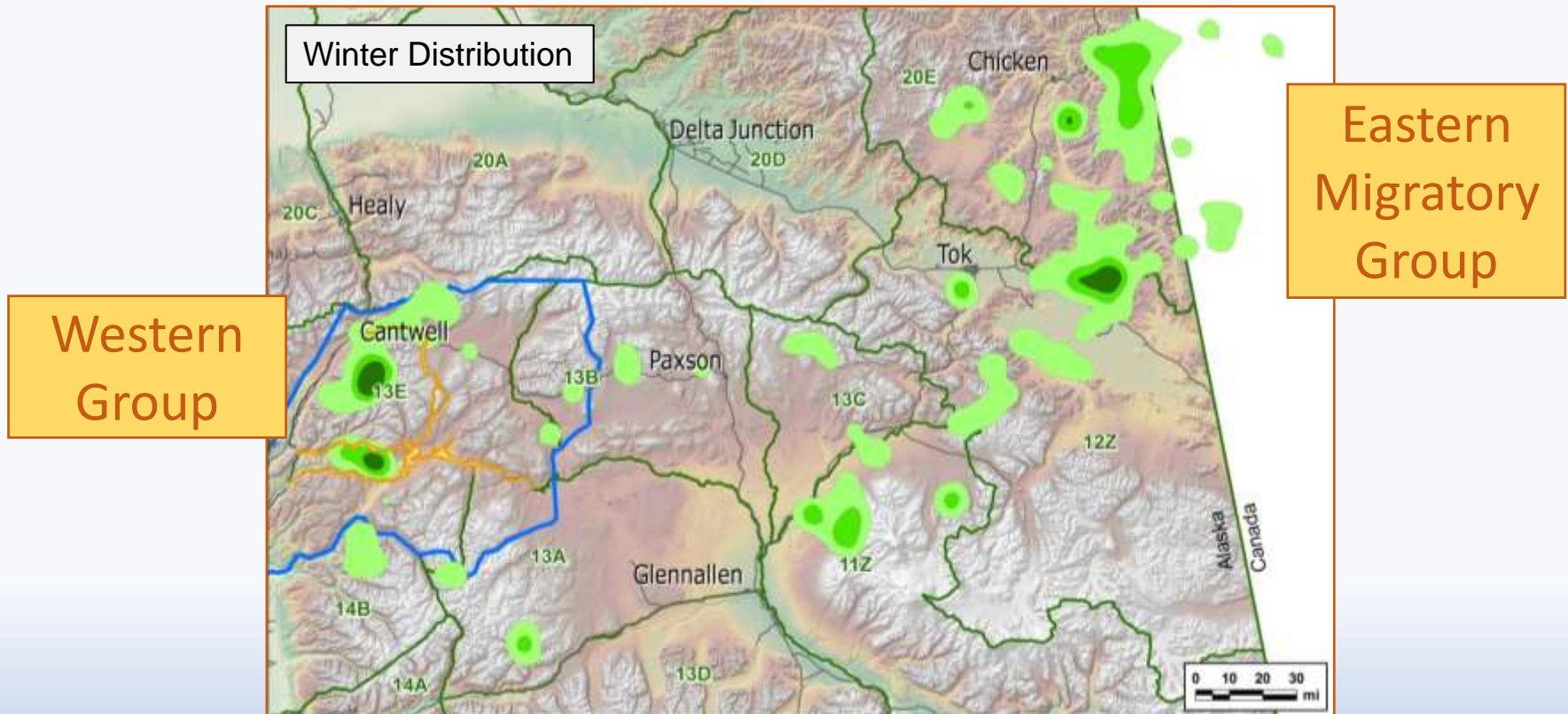
- Radio Collar Deployment (ISR Part A, Section 4.1, pg 2)
- VHF Telemetry Surveys (ISR Part A, Section 4.2, pg 3)
- GPS Collar Monitoring (ISR Part A, Section 4.3, pg 4)
- Data Analysis (ISR Part A, Section 4.4, pg 4)



Study 10.6 Variances

The study plan (RSP Section 10.6.4) proposed that 2/3 of radio collars be deployed on Nelchina Herd caribou and 1/3 on Delta Herd caribou.

- Herd designation is not clear based solely on capture location.
- **Caribou have been classified into two groups based on wintering strategies and capture locations** (ISR Part A, Section 4.1.1, pg 2).



Study 10.6 Variances

Increased frequency of surveys; telemetry flights were conducted twice weekly during peak calving and weekly during June to better track calf production and calf survival.



(ISR Part A, Section 5.2.1, pg 5)

Study 10.6: Summary of Results in ISR

(ISR Part A, Section 5)

Caribou Captures 2012–2013

Collar Type	Sex	Apr 2012	Oct 2012	Apr 2013	Oct 2013	Total
VHF	Bulls	15	15	9	1	40
	Cows	0	0	0	4	4
GPS	Bulls	8	10	9	2	29
	Cows	0	42	1	5	48
TOTAL		23	67	19	12	121

(ISR Part A, Section 5.1, pg 4; Table 5.1-1)



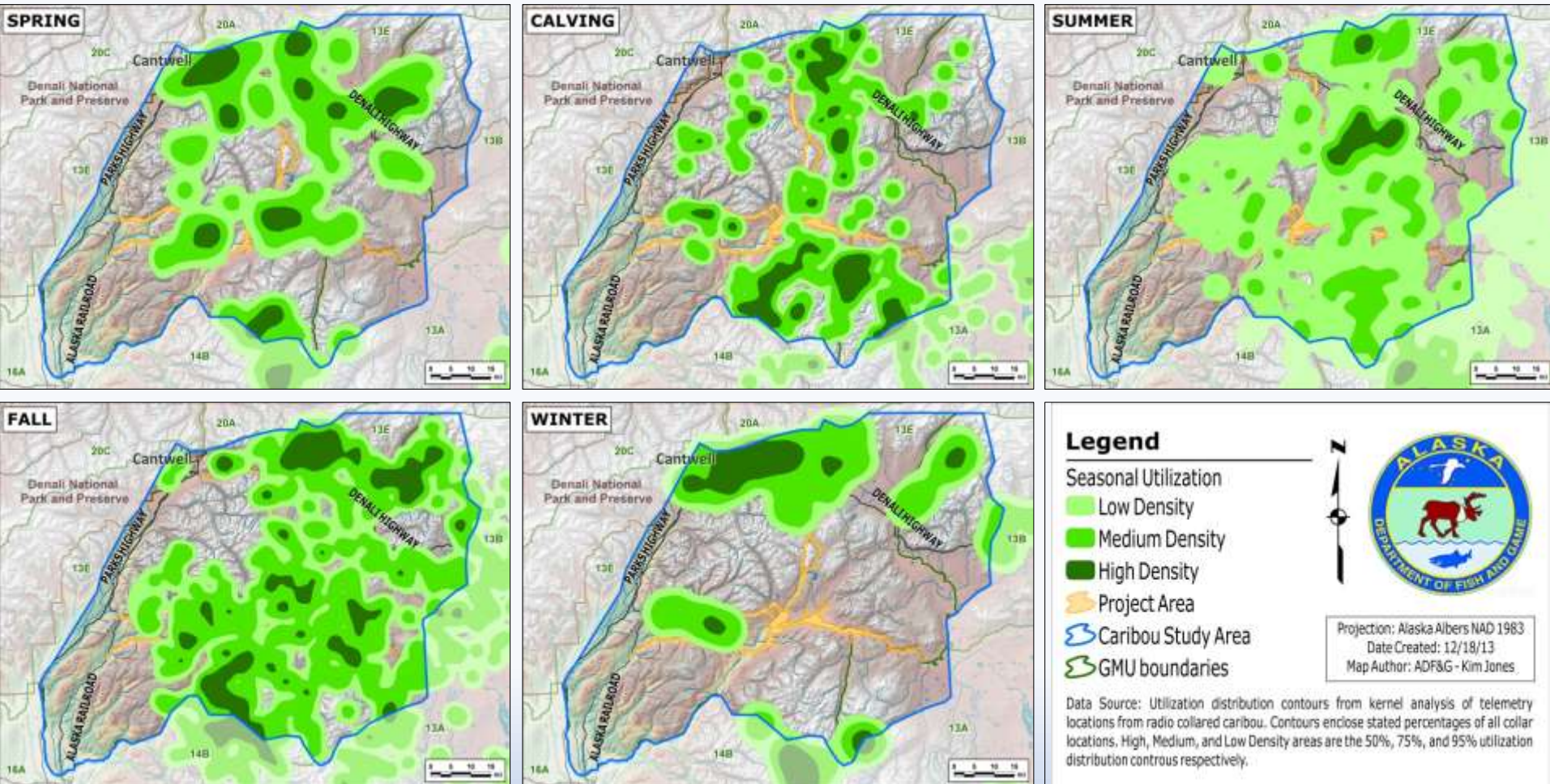
Photo by Kim Jones ADF&G

Study 10.6: Summary of Results in ISR

(ISR Part A, Section 5)

VHF-Collared Caribou Locations, May 2012–September 2013

(ISR Part A, Section 5.3, pg 6; Fig 5.1-1)

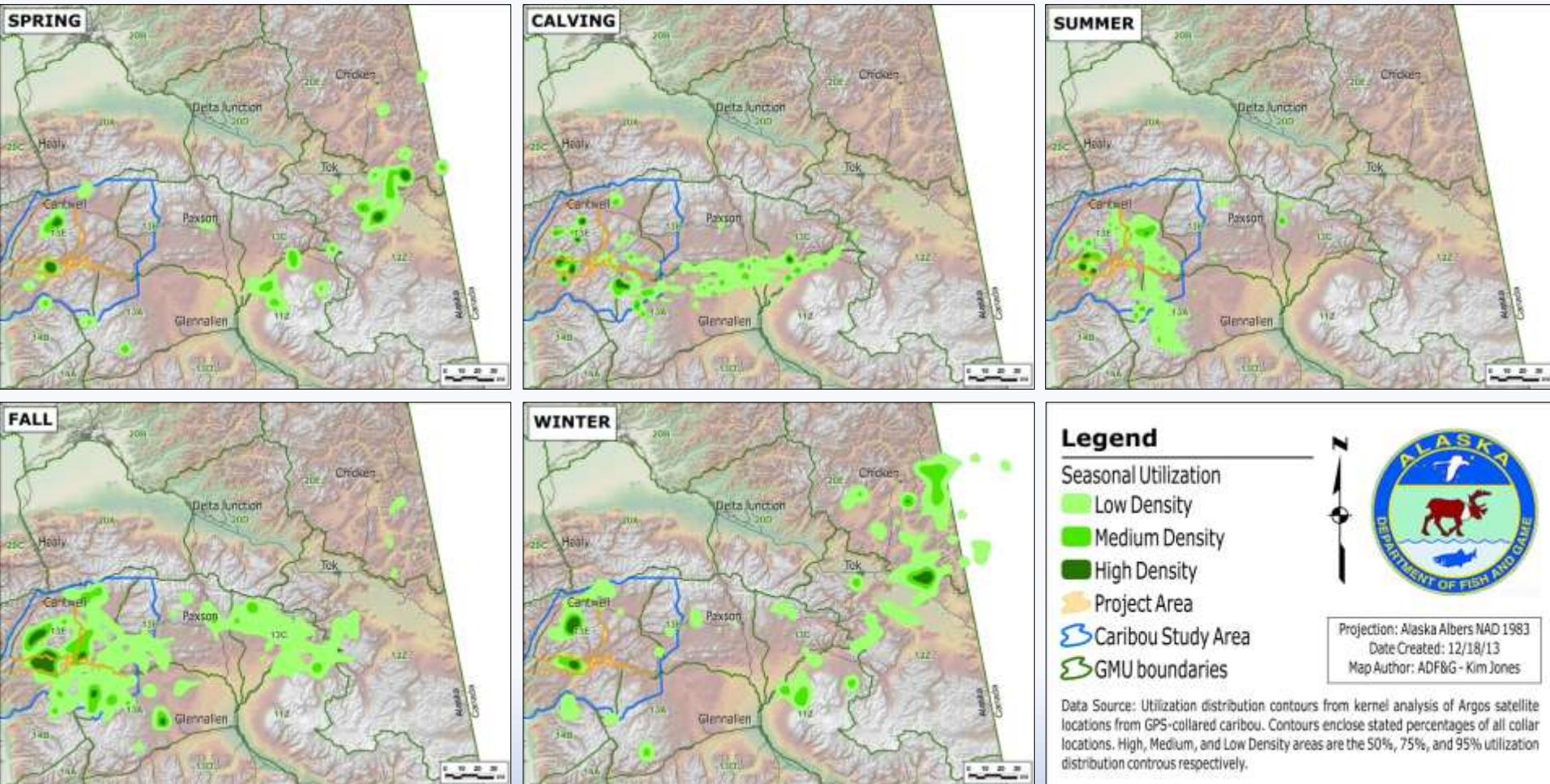


Study 10.6 Summary of Results in ISR

(ISR Part A, Section 5)

GPS-Collared Caribou Locations, May 2012–September 2013

(ISR Part A, Section 5.3, pg 6; Fig 5.1-2)



AEA's Proposed Modifications to Study 10.6

(ISR Part D, Section 7)

- Continue differentiation between the Eastern Migratory Group and the Western Group (ISR Part A, Section 4.1.1; ISR Part C, Section 7.1.2).
- Continue increased frequency of telemetry flights to twice weekly during peak calving (ISR Part B; ISR Part C, Section 7.1.2).



Photo by Nick Demma ADF&G

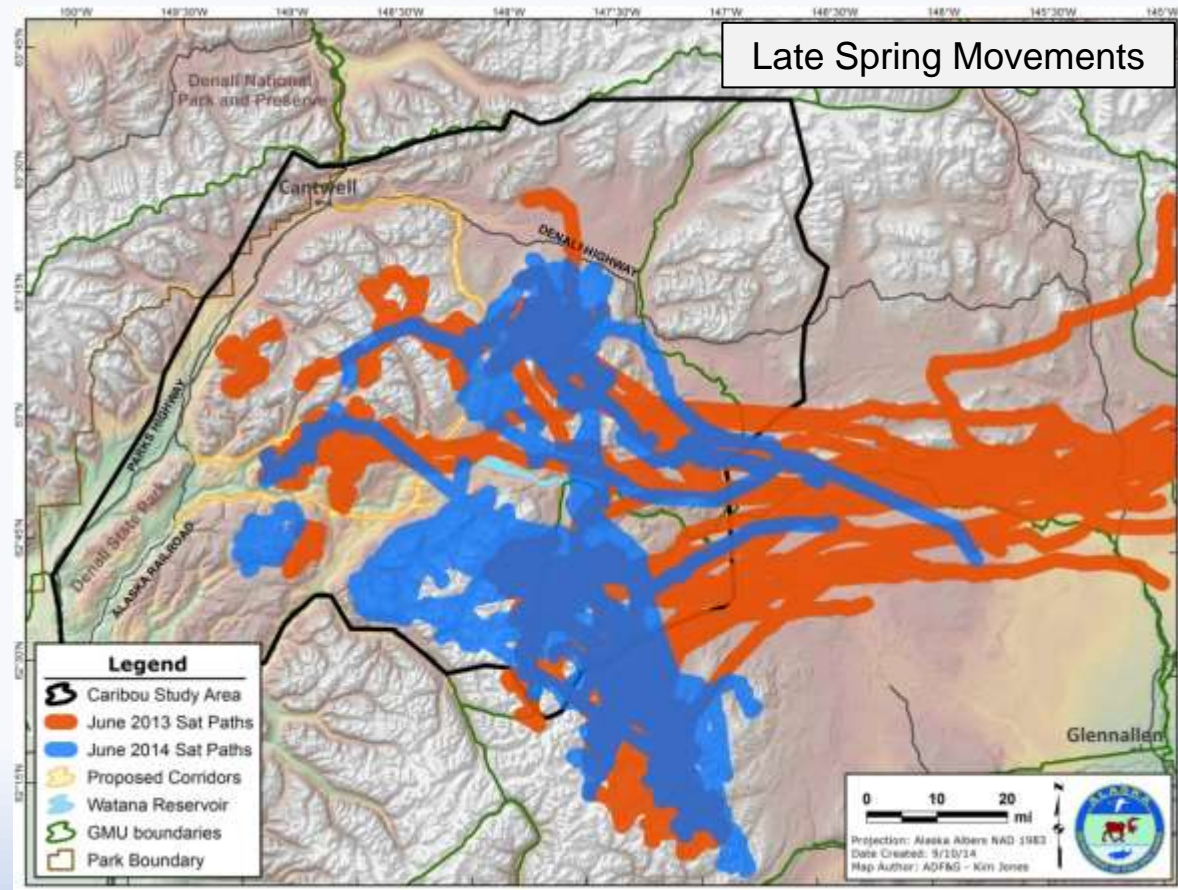


Photo by Lem Butler ADF&G

AEA's Proposed Modifications to Study 10.6

ADF&G proposed and AEA supported the following modifications:

- Retrieve GPS collars in 2014, refurbish and redeploy spring 2015.
- Continue radio-tracking flights through October 2015.



Study 10.6 Steps to Complete the Study

(ISR Part D, Section 8)

- Data analysis and evaluation of the distribution and movements of cows and bulls from each herd using GIS spatial analysis (RSP Section 10.6.4).



Photo by Kim Jones ADF&G



Photo by Kim Jones ADF&G

Licensing Participants' Comments and Proposed Modifications to Study 10.6?

- Agencies
- CIRWG members and Ahtna
- Public