

# Initial Study Report Meeting

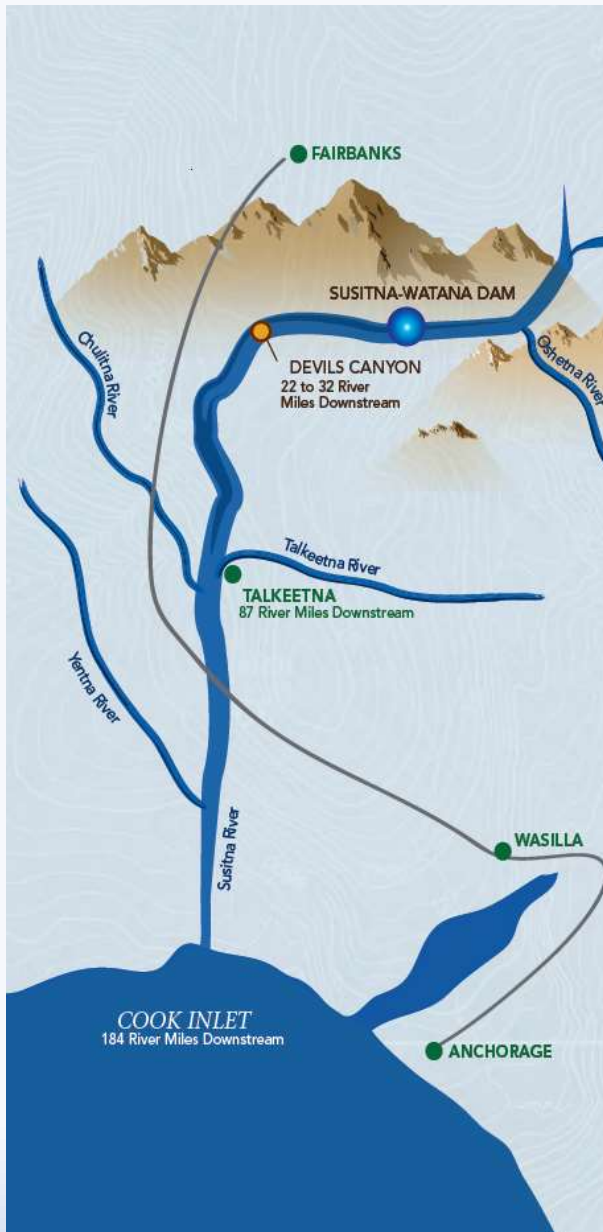
## Study 10.6 Caribou Distribution, Abundance, Movements, Productivity, and Survival

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## 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

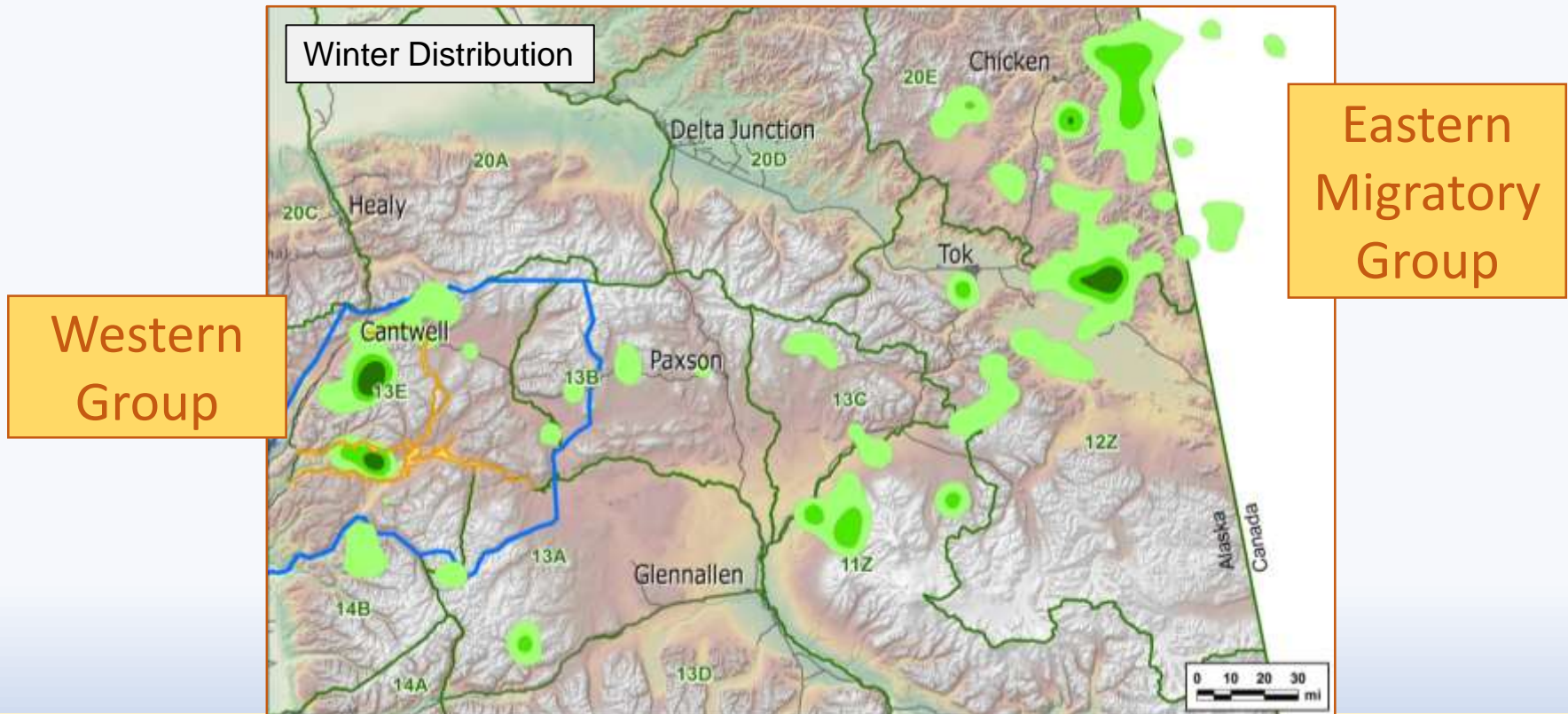
- Radio Collar Deployment (ISR Part A, Section 4.1, pg 2)
- VHF Telemetry Surveys (ISR Part A, Section 4.2, pg 3)
- GPS Collar Monitoring (ISR Part A, Section 4.3, pg 4)
- Data Analysis (ISR Part A, Section 4.4, pg 4)



# 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

Telemetry flights were conducted twice weekly during peak calving to better track calf production and calf survival.

## 2013 Caribou Cow Parturition

128 cows located

84 cows parturient

39 calves lost

66% of cows were parturient

46% of calves lost

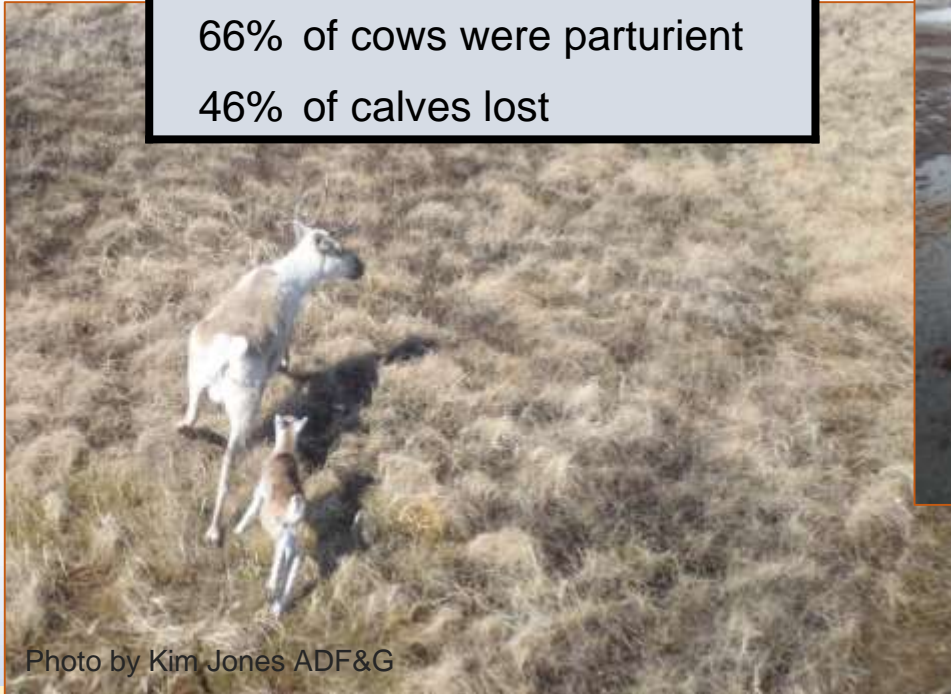


Photo by Kim Jones ADF&G



Photo by Kim Jones ADF&G

(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
<b>TOTAL</b>		<b>23</b>	<b>67</b>	<b>19</b>	<b>12</b>	<b>121</b>

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

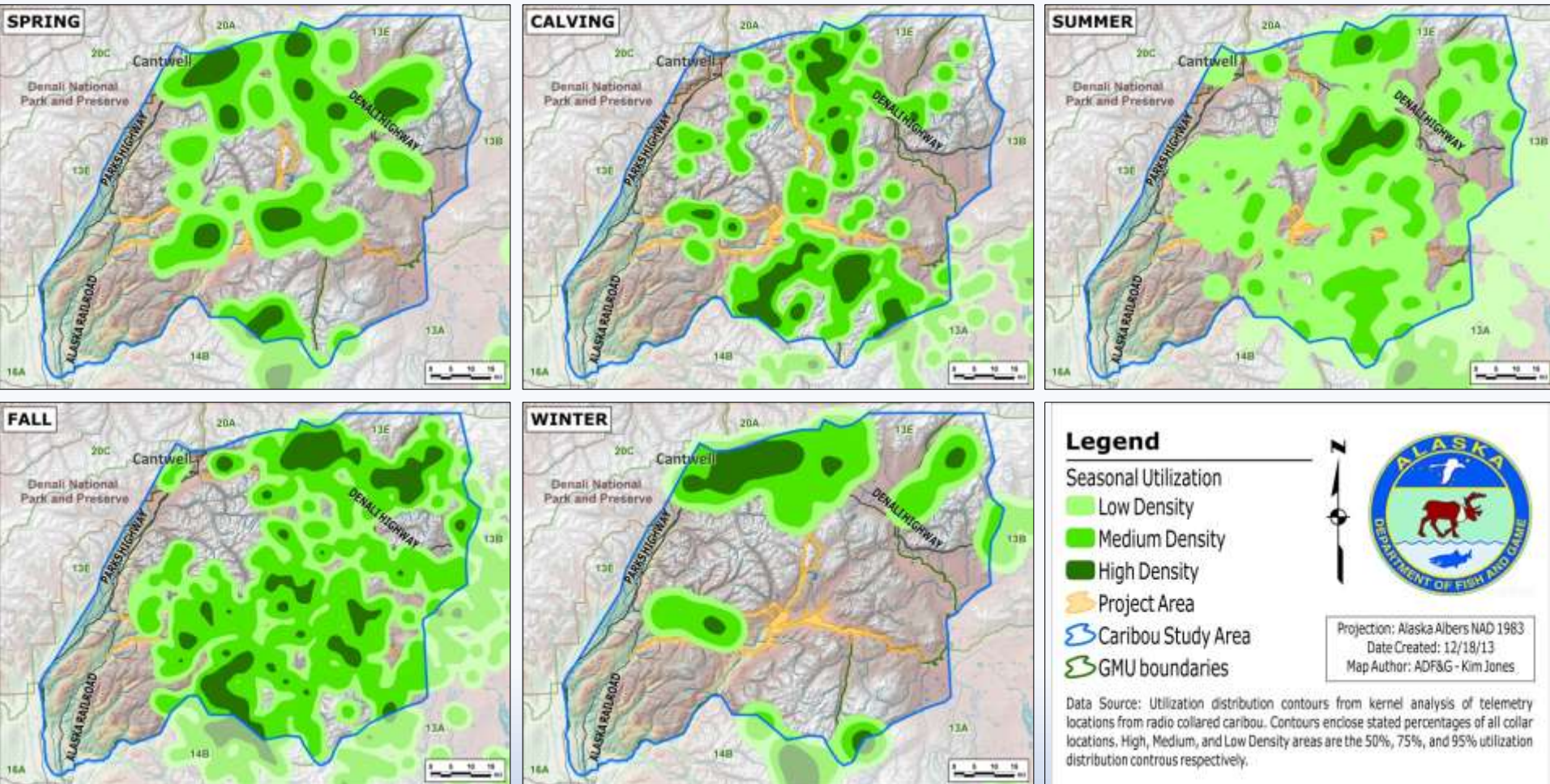


Photo by Kim Jones ADF&G



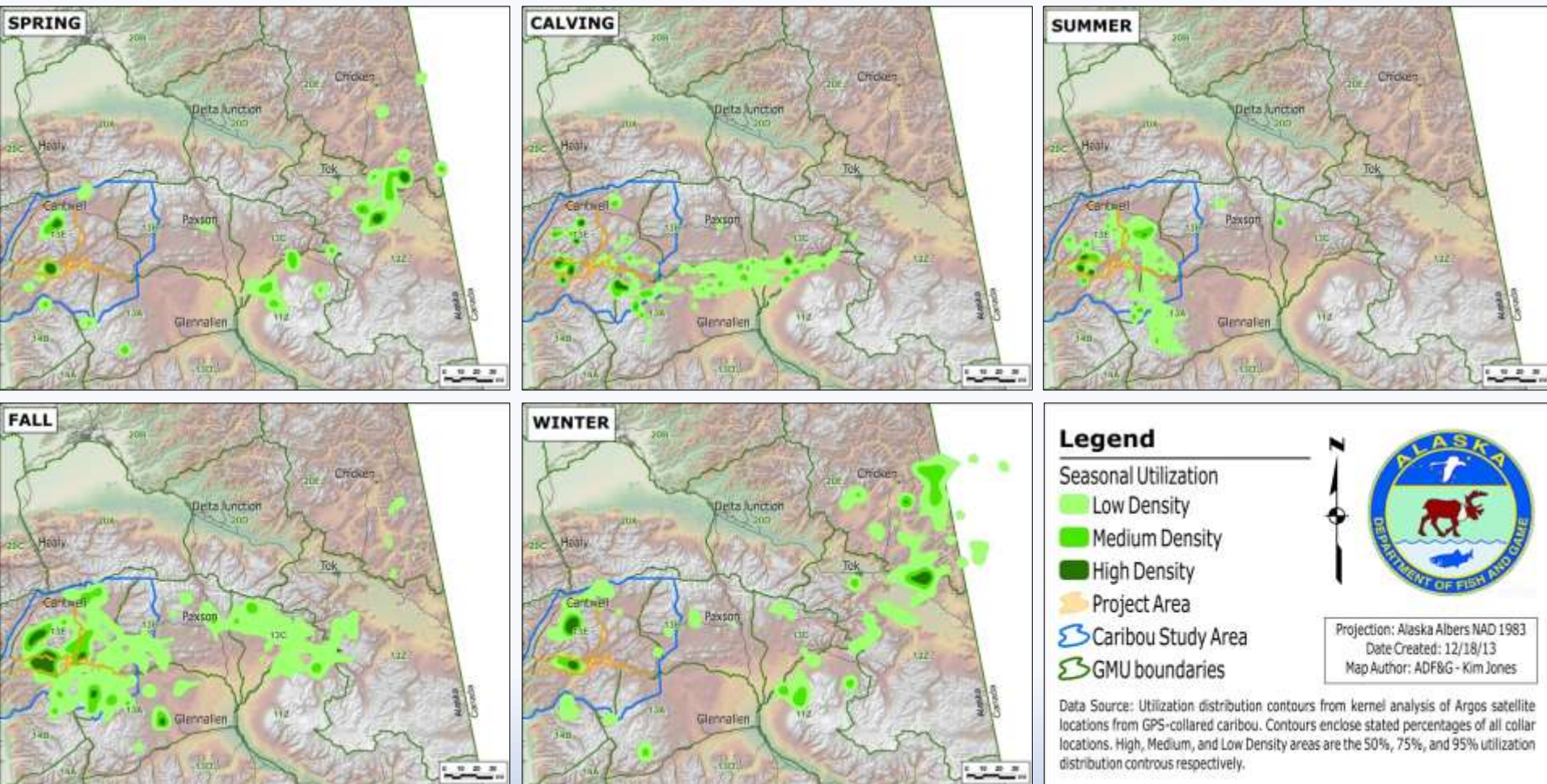
# Study 10.6 Summary of Results in ISR (ISR Part A – Section 5)

## 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 Proposed Modifications to Study 10.6 in ISR (ISR Part C – Section 7.1.2)

Variations implemented in 2013 to be carried forward in 2014:

- Differentiation between the Eastern Migratory Group and the Western Group (ISR Part A, Section 4.1.1).
- Increased frequency of telemetry flights to twice weekly during peak calving (ISR Part B).



Photo by Nick Demma ADF&G

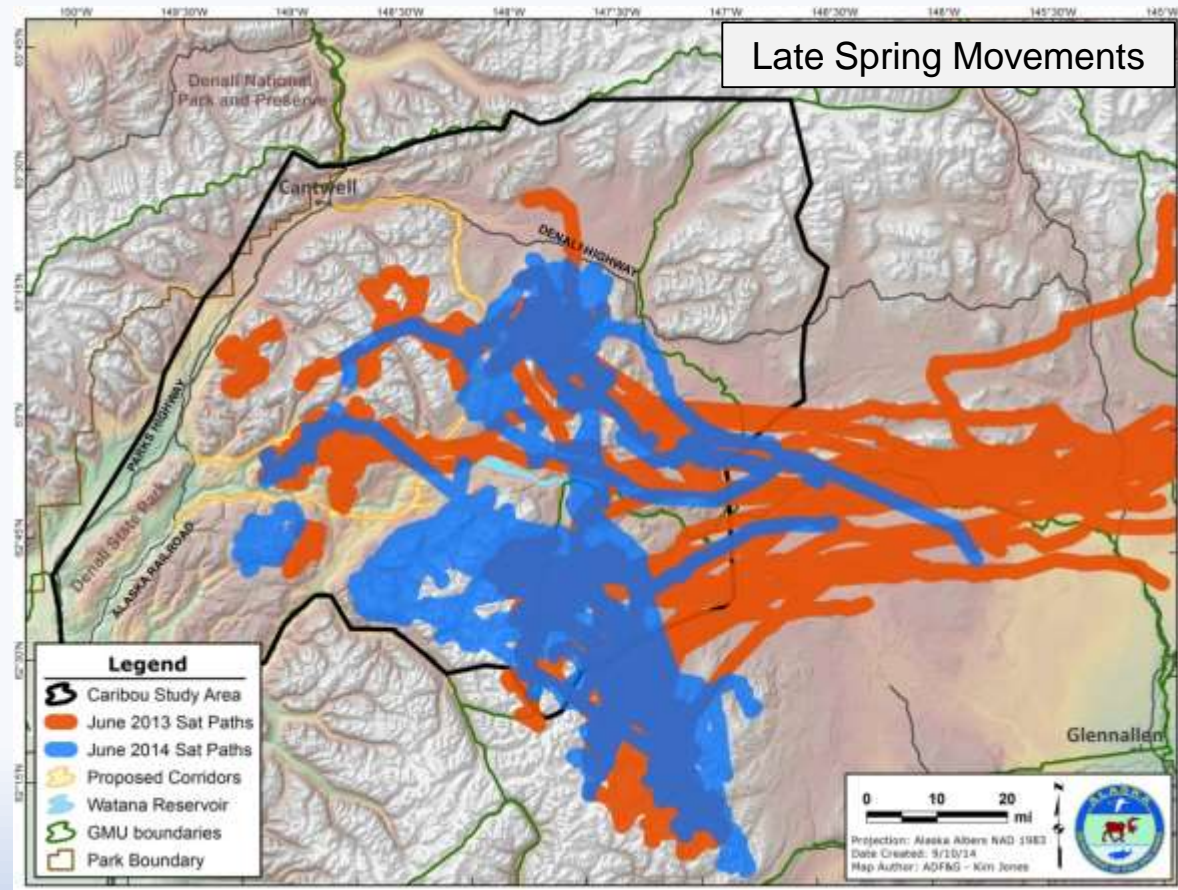


Photo by Lem Butler ADF&G

# New Modifications to Study 10.6 since ISR

ADF&G proposes and AEA supports the following modifications:

- GPS collars retrieved in 2014 will be refurbished and redeployed in 2015.
- Radio-tracking flights will continue in 2015.



# Steps to Complete Study 10.6 (ISR Part C – Section 7.1)

To complete this study, AEA will implement the methods in the Study Plan, with the modifications outlined.

These activities include the following:

- Continue telemetry flights and remove, refurbish, and redeploy GPS collars (RSP Section 10.6.4).
- 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



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# Licensing Participants' Proposed Modifications to Study 10.6?

- Agencies
- CIRWG members and Ahtna
- Public

