

Study Completion Report Meeting

Study 10.17 Population Ecology of Willow Ptarmigan in Game Management Unit 13

March 29, 2016

Prepared by
Alaska Department of
Fish and Game



Study 10.17 Status

ISR Documents (ISR Part D Overview):

- Initial Study Report: Parts A, B, and C (June 3, 2014)

Status:

- Completed mist net captures at 2 locations in 2013 and 5 locations in 2014/2015.
- Conducted aerial transect flights in January and March 2014.
- Captured and collared birds in May and August 2015.
- Monthly aerial telemetry surveys are being conducted through May 2016 to record habitat use, movements, and mortality.

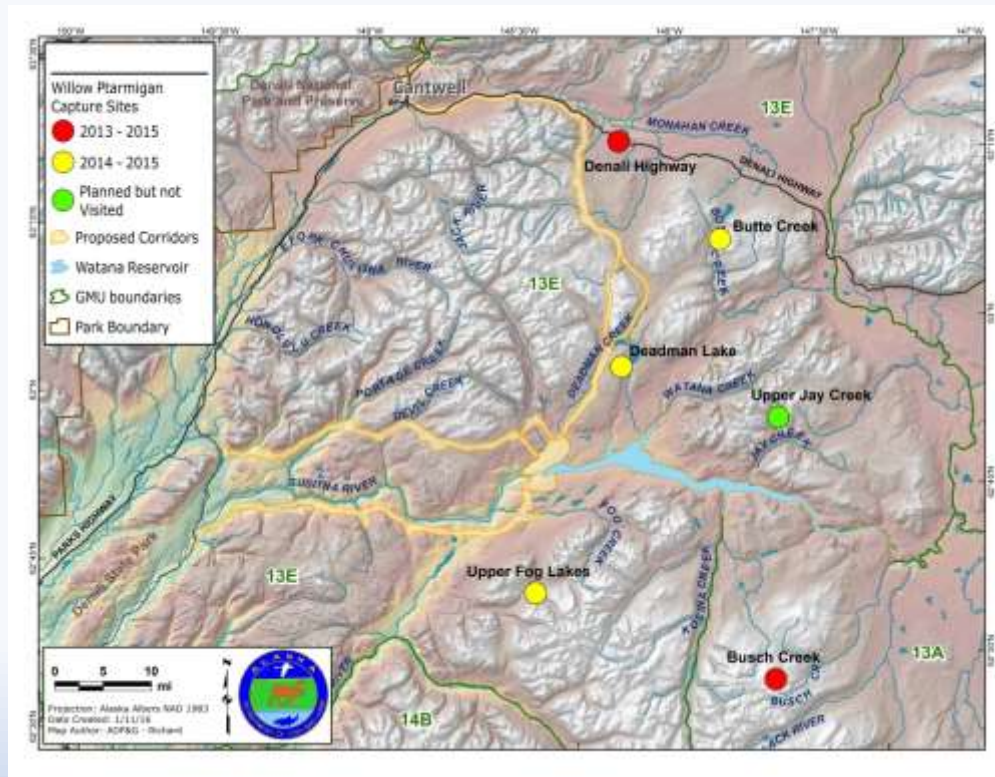
Study 10.17 Objectives

- Determine the seasonal distribution of Willow Ptarmigan in the Project area.
- Determine the seasonal migratory patterns of Willow Ptarmigan that occur in the Project area.
- Estimate the abundance of Willow Ptarmigan in the Project area during the breeding season and during the fall.
- Estimate seasonal survival of Willow Ptarmigan.

Study 10.17 Variances

Due to the late spring, delayed snow melt, inclement weather, and subsequent transportation difficulties in 2013:

- Fewer radio tags were deployed than planned (RSP Section 10.17.4.1).
- Upper Fog Lakes and Jay Creek were not visited (RSP Section 10.17.3).
- Denali Highway capture location was added (ISR Part A, Section 4.1.1, pg 3).



Study 10.17 Variances (continued)

The study team used mist nets to capture birds under some circumstances (ISR Part A, Section 4.1.1, pp. 3,4)



Net Gun



Mist Net



Noose Carpets

Study 10.17 Variances (continued)

Aerial transect flights were not conducted as proposed:

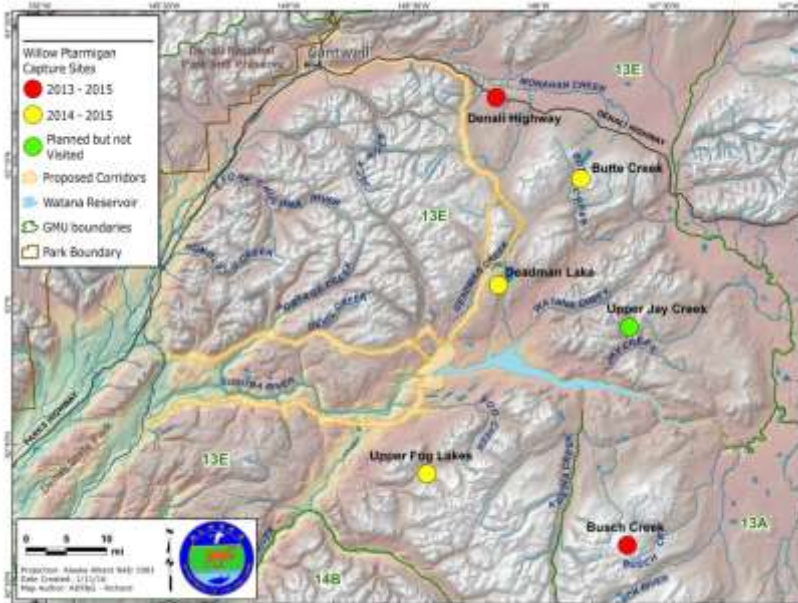
- Did not complete March 2013 transect flight.
- Moved September 2013 transect flight to mid-November to mid-December 2013 (ISR Part A, Section 4.3.1, pg 5).



Study 10.17: Summary of Results

(ISR Part A, Section 5 updated with 2014/2015 capture)

- Completed captures at 2 locations in 2013 and 5 locations in 2014/2015.
- Sites in **red**: 2013–2015; sites in **yellow**: 2014/2015 only.



Ptarmigan Captures 2013 - 2015							
Capture Location	May 2013	August 2013	May 2014	August 2014	May 2015	August 2015	Total
Busch Creek	12	10	19	12	16	11	80
Denali Highway	17	2	14	5	10	3	51
Butte Creek	-	-	6	1	11	8	26
Upper Fog Lakes	-	-	6	8	10	13	37
Deadman Lake	-	-	7	7	16	19	49
TOTAL	29	12	52	38	63	54	243

Study 10.17: Summary of Results

(ISR Part C, Section 7.1.2, pg. 2)

- January 2014 transect flight resulted in 6 flushing events in 6 hours.
- March 2014 transect flight resulted in 4 flushing events in 4 hours.



AEA's Modifications to Study 10.17

Clarification to ISR Part D, Section 7:

- **AEA proposes the modifications to the Study Plan presented in ISR Part C, Section 7.1.2.**

AEA's Modifications to Study 10.17

(ISR Part C, Section 7.1.2)

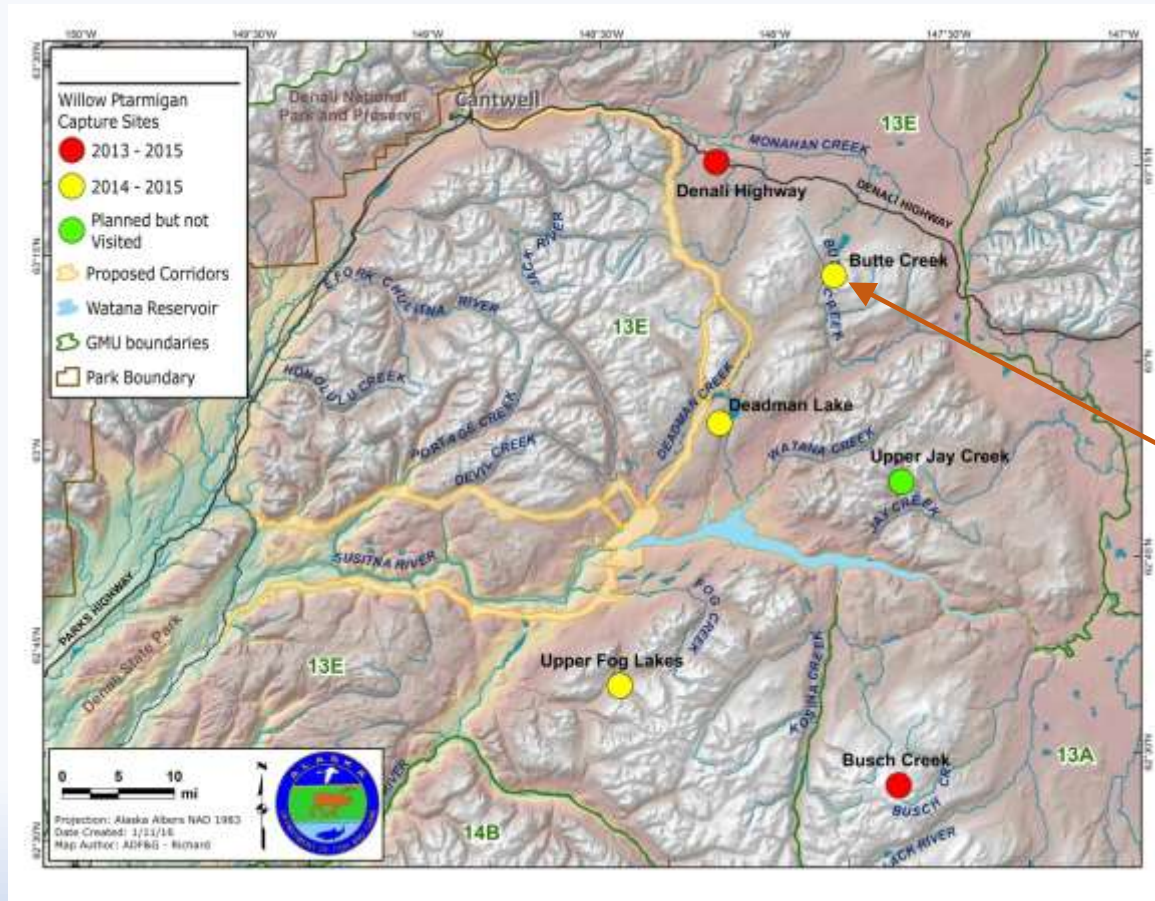
Aerial transect flights canceled, but more telemetry flights added to

- Improve the precision of space-use inferences.
- Allow better predictions about distribution of ptarmigan across the study area.



AEA's Modifications to Study 10.17 (ISR Part C, Section 7.1.2)

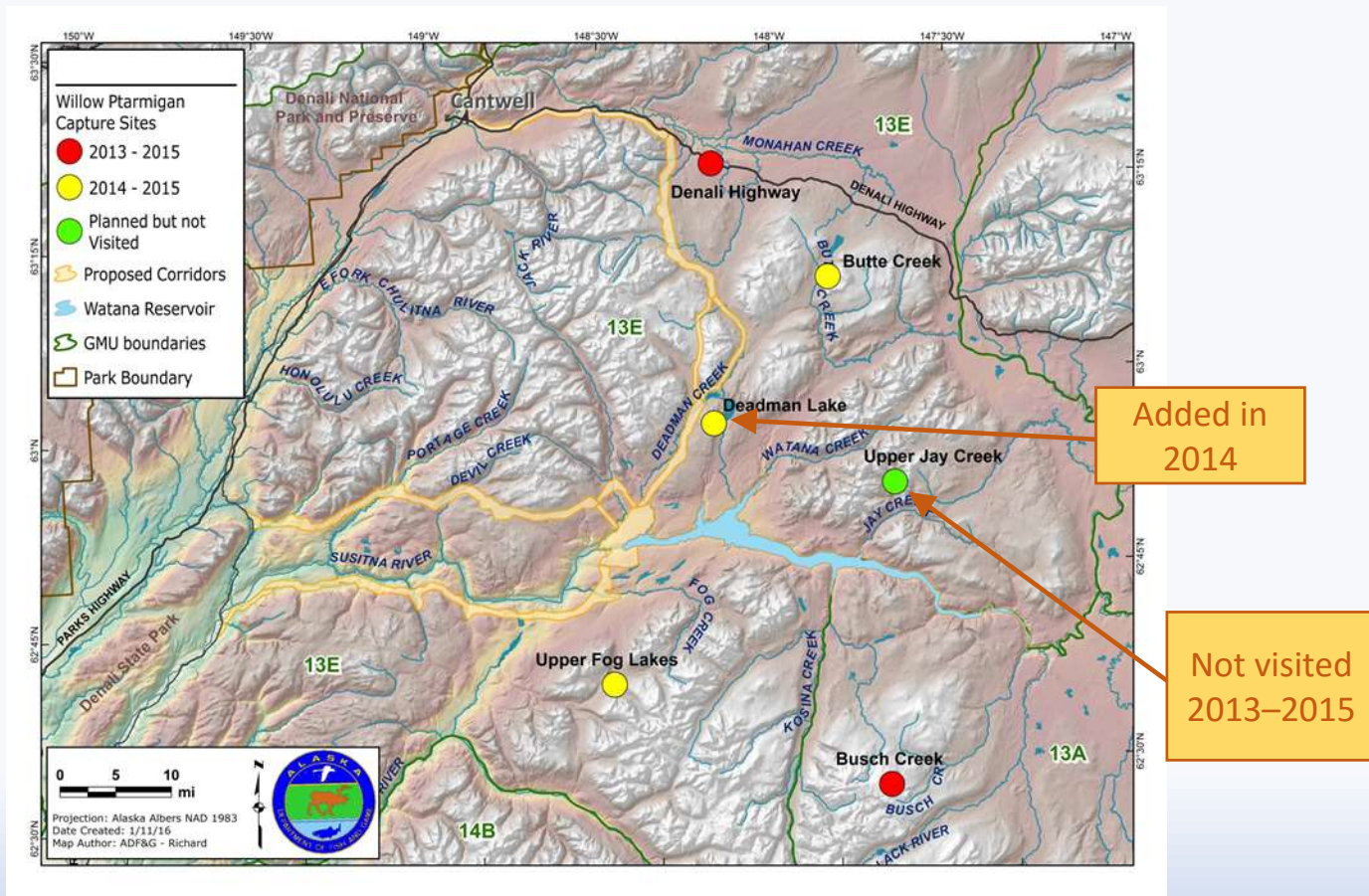
Butte Creek site was added in 2014 as an alternative capture site.
(ISR Part A, Figure 4.1-1, and ISR Part C, Section 7.1.2)



Added in 2014

AEA's Modifications to Study 10.17

Deadman Lake site was added in 2014 as another alternative capture site (Upper Jay Creek site was not accessible).



Progress on Study 10.17 since ISR

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

- Captured and collared additional birds in spring and fall (August) 2015.
- Recaptured and re-collared existing collared birds in May and August 2015.
- This additional capture effort will allow us to reach the collaring objective of 50–100 collars/year (RSP Section 10.17.4.1).



Ptarmigan Captures 2013–2015							
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Steps to Complete Study 10.17

(ISR Part D, Section 8)

- Conduct monthly aerial telemetry surveys to record habitat use, movements, and mortality through May 2016.
- Complete analysis of radio-telemetry data.



Licensing Participants' Comments and Proposed Modifications to Study 10.17?

- Agencies
- CIRWG members and Ahtna
- Public

