

Pronghorn Monitoring in the Pinedale Anticline Project Area

2011 Annual Report



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Overview

- WMMM:
 - Monitoring: Change in PAPA pronghorn numbers in any year, or a cumulative change over all years compared to first year (2009-10 winter)
 - Mitigation: 15% decline in any year, or cumulatively over all years, compared to the Sublette antelope herd unit

Monitoring Pronghorn Abundance

- Focus on winter months (Jan, Feb, Mar)
- 2009 – 2010 was first winter of monitoring under the WMMM
- Conducted aerial surveys (near census) to monitor abundance



Monitoring Pronghorn Abundance

- Fixed-wing flights (~400 ft. AGL) along transects spaced at ½-mile intervals
- GPS pronghorn groups
- Count groups
 - if >50 then film



Monitoring Pronghorn Abundance



Monitoring Pronghorn Abundance

Count = 165



Monitoring Pronghorn Abundance

- Each image/video was viewed by 2 independent observers
- When counts were not equal
 - we consulted until an agreement was reached (still images), or
 - averaged 2 counts (video)
- 90% CIs via bootstrap

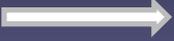
Monitoring Pronghorn Abundance

- Key assumptions
 - Few if any groups missed
 - No groups were double-counted
 - Group size counted accurately
- Multiple surveys each winter provide estimates of variation

Results

	Winter			
	2009-10		2010-11	
Month	Estimate	90% CI	Estimate	90% CI
January	775	782	1,420	1,425
		767		1,415
February	2,290	2,323	505	NA
		2,256		NA
March	NA	NA	1,184	NA
		NA		NA
Average	1,533	2,305	1,036	1,344
		772		731

Results

2009-10  2010-11

PAPA: 32% Decline (Not Significant)

Sublette: 36% Decline



Threshold was not exceeded