

Large Mammal Advisory Committee

Approved Project

QUARTERLY PROGRESS REPORT

**Project Name:** Multiple Data Source Approach to Monitoring and Management of Mule Deer: application in Deer Zones X9a and X9b (Mono and Inyo Counties)

Quarter: Time Period: January – March 2015; FY2014/15

**Work Performed:**

Fixed wing flights were conducted January 2 (winter survival), February 26 (monthly GPS collar test), and March 18 (survival and monthly GPS in Casa Diablo only, prior to capture date.) As of March 18, we estimate there are 21 collared does remaining in Casa Diablo, 22 collared does in Round Valley, and 26 collared does in Goodale. Based on the first nine months of data, preliminary analysis (table below) indicates survival is lower than we would expect.

Area	Annual Survival	SE	LCI	UCI	CV
Casa Diablo	0.79	0.07	0.65	0.93	9%
Round Valley	0.71	0.10	0.52	0.90	13%
Goodale	0.79	0.07	0.65	0.94	9%

On January 13, we completed our traditional composition ground surveys; then on January 15 -16 we completed our random route composition ground surveys. The composition ratios obtained from these two surveys will be used to evaluate whether there are differences in age and sex ratios when classification counts are done from roads and walking loops (our current design) versus randomly determined routes. Draft results indicate that the buck to doe ratio was significantly higher from the random routes; fawn to doe ratio was not significant. Once final results are available, they will be included in Quarterly Report. Draft summarized results of composition survey were submitted to Deer Program. Spring composition counts were conducted in March and April. Draft summarized results have been sent to Deer Program.

The spring 2015 deer capture occurred over 5 days from March 23 – April 1. A total of 112 deer were captured (38 in Round Valley, 39 in Casa Diablo, 35 in Goodale). In Goodale, one deer had to be euthanized due to a broken front leg. Besides, the biological sampling listed in the capture plan, samples were taken for possible signs of

hair loss syndrome - only in the Goodale herd. Samples will be sent to UC Davis for analysis.

**Funds Expended:** See budget worksheet below. Helicopter costs from capture have not been finalized.

**Work Anticipated for Next Quarter:** Continue progress to finalize all ground composition data and comparison of two techniques. Report detailing the results of the comparison is forthcoming, and will include recommendation to conduct same comparison again next January. Fixed wing flight (DFW Air Services/ local pilot) in late April will determine survival of all deer, and determine post-capture mortalities. Run analysis on adult female survival based on a year of data. Tooth samples from the capture will be submitted to Matson's Lab. All 2015 capture data will be entered into database.

Budget for FY2014/15

YEAR 2 (FY 2014/15) LMAC PROJECT CODE NC 8001-12; BGMA Fund #0200.33	(4120, 23352) Funding Amount	2014						2015						FISCAL YEAR
		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	14/15 Totals
		<b>Personal Services</b>												
Temp Help (9 months)	\$18,000.00				no temp help \$ used this FY									0.00
<b>Subtotal Personal Services</b>	\$18,000.00													0.00
<b>Operating Expenses &amp; Equipment</b>														
Helicopter Survey (March 2015; 21 hours)	\$25,200.00									no helicopter survey contract in place; moved to next FY				0.00
Helicopter Capture (March 2015; 35 hours)	\$25,200.00													0.00
Ground Survey (January)	\$300.00													0.00
Ground Survey (March)	\$300.00									costs not finalized				0.00
Radio Collars	\$18,750.00				(Diff. covered by temp help \$\$)									23,515.00
Radio Collars (Refurbish)	\$1,000.00			0.00	0.00									0.00
Fixed wing flight w/ AirServices	\$13,770.00	no flight	CDA (notes)	no flight	yes (CDFW)	none	none	CDA(5.2hr)	CDA(1.7hrs)	CDA(2.7hrs)				0.00
Travel	\$1,000.00													0.00
<b>Subtotal OE&amp;E</b>	\$85,520.00								0.00		0.00	0.00	0.00	0.00
<b>Subtotal Personal Services and OE&amp;E</b>	\$103,520.00								0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Expenses</b>	<b>\$103,520.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$23,515.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$23,515.00</b>
<b>Total Personal Services Expenses/IDC to date</b>		<b>\$0.00</b>							<b>\$0.00</b>					
<b>Total O+E Expenses to date</b>		<b>\$0.00</b>												
<b>Total Personal Serviced Expense / IDC Remaining to date</b>		<b>\$103,520.00</b>							<b>\$0.00</b>					
<b>Total O+E Remaining to date</b>		<b>\$85,520.00</b>							<b>\$103,520.00</b>					
<b>Notes</b>														
AKA "Eastern Sierra Deer" (ESD) and "Multiple Data Source" (MDS)														
Project Title: Multiple Data Source Approach to Monitoring and Management of Mule Deer: application in Deer Zones X9a and X9b (Mono and Inyo Counties)														
Project Start Date: July 1, 2013; Project End Date: June 2020														
Budget tracking based on invoices received.														
Helicopter Contract : Leading Edge Aviation														
Fixed wing flights performed by DFW or local pilot as of 1Aug2014 . CDA funded \$13,500 for flights. G. Pope charges \$270/hour, so 50 hours of flight time. CDA funds will be used when DFW not available to complete the flight request.														
All January and March ground comp data (GIS, database, summaries) have been submitted.														