

Large Mammal Advisory Committee

Approved Project

QUARTERLY PROGRESS REPORT

Project Name: Big game data analysis to model factors that affect wildlife population abundance and change.

Quarter Time Periods: April - June 2015; FY2014/15

Work Performed: Three-month progress report is attached. Miscoded transactions were corrected on April 6, 2015, in order to use PCA 31466/Index 4120 from FY2013/14 funding source. A 6-month contract extension (of time only) was approved (the initial contract start date was delayed by 6 months) and end date of contract is now June 2015.

Funds Expended: See below for FY2014/15 budget worksheet.

Work Anticipated for Next Quarter:

For the next 3 months, the focus will be on:

- The desert mule deer study: additional field time in July; help determine subsampling scheme for selecting samples for DNA analysis (we have far more samples than we have money to analyze) and hopefully work on the first round of data analysis.
- Survival analysis for the Eastern Sierra multiple data source mule deer studies.
- Submitting the bear manuscript to *Ursus*.
- Getting a draft of the SNBS survival manuscript completed.
- Re-evaluate the number of marked deer required for precise estimates of population abundance for the Eastern Sierra multiple data source study.
- Work on study design to compare precision and costs of estimating mule deer abundance via fecal DNA mark resight versus capture and collar mark resight.
- Edit and re-submit the White Mountain desert bighorn disease paper.

2 September 2015

California Department of Fish and Wildlife
Region 6, Inland Desert Region
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764

RE: Big Game Data Analysis to Model Factors Affecting Wildlife Population Abundance and Change – 3 month progress report for April – June 2015

Dear Jane:

Below is a list of the main tasks I have worked on over the past 3 months. Some hours were covered from the last invoice due accounting issues. In addition, after this list, there is a list of what I am presently working as well as what I plan on working on July – September 2015). Please let me know if you need additional information or have any questions.

- 1) Continue work of incorporating reviewer comments on submitted ms “Population demographic rates of White Mountain desert bighorn sheep in relation to disease” for resubmission (sigh).
 - a) Status – underway (sigh – wish it were further)
Time spent – 0.25 week
- 2) Finish up writing and literature search help to convert Jonathan Fusao’s thesis on black bear density in urban and Wildland areas into a manuscript that can be submitted. A final draft has been completed for final review; it will be submitted by mid-September.
 - a) Status – underway (almost done!)
 - b) Time spent – 0.75 weeks
- 3) Continue survival analysis for Sierra Nevada bighorn sheep based on a 12-year data set. I continued to work on the discussion (and introduction a little). I am still waiting on some NDVI covariates to complete the analysis. I have all I can do done until the final covariates arrive (Kevin Monteith is working on this and says they should be done by July).
 - a) Status – underway.

- b) Time spent – 0.25 weeks
- 4) Work out details of study design field protocol, help train field staff, and participate in field work for a pilot study to estimate abundance (using closed-capture models) of desert mule deer using DNA from fecal pellets. I did 3 field work weeks as part of this task.
 - a) Status – completed
 - b) Time spent – 3 weeks

For the next 3 months I plan on focusing on:

- The desert mule deer study; help determine subsampling scheme for selecting samples for DNA analysis (we have far more samples than we have money to analyze) and hopefully work on the first round of data analysis.
- Survival analysis for the eastern Sierra multiple data source mule deer studies.
- Submitting the bear manuscript to *Ursus*.
- Getting a draft of the SNBS survival manuscript completed.
- Re-evaluating the number of marked deer required for precise estimates of population abundance for the eastern Sierra multiple data source study.
- Work on study design to compare precision and costs of estimating mule deer abundance via fecal DNA mark resight versus capture and collar mark resight.
- Motivating myself to edit and re-submit the White Mountain desert bighorn disease paper.

Sincerely,

Mary M. Conner

Budget for FY2014/15

YEAR 2 (FY2014/15) LMAC PROJECT CODE NC 8001-26; BGMA Fund#0200.33	As of 1 July 2014 (4120, 23352) Funding Remaining	2014						2015						FISCAL YEAR
		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	14/15 Totals
Personal Services														
Principle Investigator (PI)	\$110,786.65	1,533.34			7,475.50			10,350.21			15,320.16			34,679.21
Research Scientist (RS)	\$28,432.37				5,940.00									5,940.00
														0.00
Benefits														
PI	\$48,629.53	644.70			3,311.50			4,662.77						8,618.97
RS	\$2,547.87				493.00									493.00
														0.00
Subtotal Personal Services	\$190,396.42	2,178.04			17,220.00	0.00	0.00	15,012.98	0.00	0.00	15,320.16	0.00	0.00	49,731.18
Operating Expenses & Equipment														
Travel	\$6,607.22	0.00			461.61			1,133.66					2,079.20	3,674.47
Subtotal Personal Services and OE&E	\$197,003.64	2,178.04	0.00	0.00	17,681.61	0.00	0.00	16,146.64	0.00	0.00	15,320.16	0.00	2,079.20	53,405.65
PI and RS Indirect Costs (IDC)	\$34,475.67	381.14			3,094.26			2,825.64					363.85	6,664.89
Total Expenses	\$231,479.31	\$2,559.18	\$0.00	\$0.00	\$20,775.87	\$0.00	\$0.00	\$18,972.28	\$0.00	\$0.00	\$15,320.16	\$0.00	\$2,443.05	\$60,070.54
Paid (Minus 10% withheld)		\$2,303.26			\$18,698.28			\$17,075.05		\$0.00	\$13,788.14			\$51,864.74
Total Personal Services Expenses + IDC in FY2014/15		\$56,396.07			Total invoiced in FY2014/15			\$60,070.54						
Total OE&E Expenses in FY2014/15		\$3,674.47			Withholding 10%			\$6,007.05						
Total Personal Services Expense + IDC Remaining to date		\$168,476.02			Total Paid in FY2014/15			\$54,063.49						
Total OE&E Remaining to date		\$2,932.75			Total Remaining to be invoiced			\$171,408.77						

April to June 2015 invoice received/processed in August, but noted here. ↑

Notes

Budget tracking based on invoices received.

Contract # P126003; Actual Start Date July 1, 2013; Contract original end date was December 2015; extended end date to June 2016 due to late start of project. No additional funds.

Dr. Mary Conner, USU

Project Title: Big game data analysis to model factors that affect wildlife population abundance and change.

The Contractor shall be paid quarterly, in arrears, upon submission of an original and two copies of the invoice, which properly details all charges, expenses, direct and indirect costs.

California Department of Fish and Wildlife shall retain from the Contractor's earnings for each period for which payment is made, an amount equal to ten percent (10%) of such earnings, pending satisfactory completion of the task or Agreement.

Per ASB, for this contract, leftover funds from previous FY, roll into current FY.