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 – September 2014; FY2013/14 and 2014/15

Work Performed: Three-month progress reports (April – June, July – September) are attached.

Funds Expended: See below for FY2013/14 and FY2014/15 budget worksheet.

Work Anticipated for Next Quarter: Refine survey protocol for newly proposed DNA project in Deer Zone D12. Site visit of desert study area and staff meeting scheduled for December. Continue to explore sources for funding outside of DFW/USU. Design random ground survey methodology to be tested in January or March, with pilot field test and meeting scheduled for December. Continue SNBS survival analysis of male/female and environmental covariates using interactive model.

UtahStateUniversity

13 August 2014

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 2014

Dear Jane:

Below is a list of the main tasks I have worked on over the past 3 months. I did not bill many hours these past 3 months (~1.5 weeks) so I don't have much to report. Please let me know if you need additional information or have any questions.

1) Continue survival analysis for Sierra Nevada bighorn sheep based on a 12-year data set. I received the environmental data from CDFW and complete a preliminary analysis. However, I worked at an intermediate/advanced MARK workshop in Fort Collins in June and discovered there is a new way to code the age data that will greatly simplify the analysis. After talking with the group, we re-coded the input data file in accordance with the new approach; I'm almost done with re-running the new files.

    a) Status – underway.

    b) Time spent – 1 week

2) Work on a study proposal to determine whether composition counts from roads have similar results as counts from random routes. To goal of this study is to ensure there are no major biases in buck:doe or fawn:doe ratios, which can arise from due to methodological issues A rough draft is about 50% done.

    a) Status – underway.

    b) Time spent – 3 days

5230 Old Main Hill Logan, UT 84322-5230 PH: (435) 797-3219 FAX: (435) 797-3796 www.cnr.usu.edu/wild

UtahStateUniversity

October 22, 2014

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 July–Sept 2014

Dear Jane:

Below is a list of the main tasks I have worked on over the past 3 months. I did not work as many hours as I hoped these past 3 months (~5.25 weeks) so I don't have much to report as I hoped (I will pick it up these next 3 months!). Please let me know if you need additional information or have any questions.

1) Continue work on a study proposal to determine whether composition counts from roads have similar results as counts from random routes. To goal of this study is to ensure there are no major biases in buck:doe or fawn:doe ratios, which can arise from due to methodological issues A rough draft is about 85–90% done.

    a) Status – underway.

    b) Time spent – 3 weeks

2) Incorporate comments from co-authors (Tom Stephenson and Joy Erlenbach), fully format for the journal *California Fish and Game*, and submit manuscript titled "Population demographic rates of White Mountain desert bighorn sheep in relation to disease".

    a) Time spent – 0.4 week

3) Check over various distance analyses and other density analysis as part of statewide mule deer monitoring plan analysis.

    a) Time spent – 0.2 week

4) Field training for desert mule deer fecal DNA study to estimate abundance

    a) Time spent – 0.4 week (includes 1 travel day and some preparation time)

5) Give presentation on the main mule deer monitoring methods used by other state agencies and attend meeting in Sacramento on statewide mule deer monitoring

   a) Time spent – 0.8 week (includes presentation preparation and 1 travel day)

6) Continue survival analysis for Sierra Nevada bighorn sheep based on a 12-year data set. I received the environmental data from CDFW and complete a preliminary analysis. However, I worked at an intermediate/advanced MARK workshop in Fort Collins in June and discovered there is a new way to code the age data that will greatly simplify the analysis. After talking with the group, we re-coded the input data file in accordance with the new approach; I'm almost done with re-running the new files.

   a) Status – underway.

   b) Time spent – 0.45 week

Sincerely,

Mary M. Conner

5230 Old Main Hill Logan, UT 84322-5230 PH: (435) 797-3219 FAX: (435) 797-3796 www.cnr.usu.edu/wild

Budget for FY2013/14

YEAR 1 (FY2013/14) LMAC PROJECT CODE NC 8001-26; BGMA Fund#0200.33	START DATE: 1 JULY 2013 (4120, 23352) Funding Amount	2013 July	Aug	Sept	Oct	Nov	Dec	2014 Jan	Feb	Mar	Apr	May	June	FISCAL YEAR 13/14 Totals
Personal Services														
Principle Investigator (PI)	$138,505.02				12,266.66			9,200.00			6,251.71			27,718.37
Research Scientist (RS)	$30,872.37									2,440.00				2,440.00
														0.00
Benefits														
PI	$61,311.11				5,568.20			4,176.15			2,937.23			12,681.58
RS	$2,547.87													0.00
														0.00
Subtotal Personal Services	$233,236.37				17,834.86			13,376.15		2,440.00	9,188.94			42,839.95
Operating Expenses & Equipment														
Travel	$7,409.99							397.99			404.78			802.77
Subtotal Personal Services and OE&E	$240,646.36				17,834.86			13,774.14		2,440.00	9,593.72			43,642.72
PI and RS Indirect Costs (IDC)	$42,113.12				3,121.08			2,437.15			2,079.22			7,637.45
Total Expenses	**$282,759.48**				**$20,955.94**			**$16,211.29**		**$2,440.00**	**$11,672.94**			**$51,280.17**
Paid (Minus 10% withheld)					**$18,860.35**			**$14,590.16**		**$2,196.00**	**$10,505.65**	**$0.00**		**$46,152.15**

Total Personal Services Expenses + IDC in FY2013/14	**$50,477.40**	**Total invoiced in FY2013/14**	**$51,280.17**
Total OE&E Expenses in FY2013/14	**$802.77**	**Withholding 10%**	**$5,128.02**
Total Personal Services Expense + IDC Remaining to date	**$224,872.09**	**Total Paid in FY2013/14**	**$46,152.15**
Total OE&E Remaining to date	**$6,607.22**	**Total Remaining to be invoiced**	**$231,479.31**

Notes

Budget tracking based on invoices received.

Contract # P126003; Actual Start Date July 1, 2013; Contract end date (as contract is currently written) is December 2015. Will be extended to include total of 2 year as allowed for original contract.

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.

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 July	Aug	Sept	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May	June	FISCAL YEAR 14/15 Totals
Personal Services														
Principle Investigator (PI)	$110,786.65	1,533.34			7,475.50									9,008.84
Research Scientist (RS)	$28,432.37				5,940.00									5,940.00
														0.00
Benefits														
PI	$48,629.53	644.70			3,311.50									3,956.20
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	0.00	0.00	0.00	0.00	0.00	0.00	19,398.04
Operating Expenses & Equipment														
Travel	$6,607.22	0.00			461.61									461.61
Subtotal Personal Services and OE&E	$197,003.64	2,178.04	0.00	0.00	17,681.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19,859.65
PI and RS Indirect Costs (IDC)	$34,475.67	381.14			3,094.26									3,475.40
Total Expenses	**$231,479.31**	**$2,559.18**	**$0.00**	**$0.00**	**$20,775.87**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$23,335.05**
Paid (Minus 10% withheld)		$2,303.26			**$18,698.28**			**$0.00**		**$0.00**	**$0.00**			**$21,001.55**

Total Personal Services Expenses + IDC in FY2014/15	**$22,873.44**	**Total invoiced in FY2014/15**	**$23,335.05**
Total OE&E Expenses in FY2014/15	**$461.61**	**Withholding 10%**	**$2,333.51**
Total Personal Services Expense + IDC Remaining to date	**$201,998.65**	**Total Paid in FY2014/15**	**$21,001.55**
Total OE&E Remaining to date	**$6,145.61**	**Total Remaining to be invoiced**	**$208,144.26**

Notes

Budget tracking based on invoices received.
Contract # P126003; Actual Start Date July 1, 2013; Contract end date (as contract is currently written) is December 2015. Will be extended to include total of 2 year as allowed for original contract.
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.