Large Mammal Advisory Committee

Approved Project

QUARTERLY PROGRESS REPORT

Project Name: East Tehama Deer Abundance

Quarter: 3 (January-March FY15-16)

Work Performed:

We analyzed the genetic results identifying individuals by gender. We used a non-spatial capture recapture model. We only modeled females and got an average detection probability of approximately 25% per individual per visit. We combined these data with auxiliary information on home range sizes (GPS collars) and buck-to-doe and fawn-to-doe ratios (camera traps) to get derived estimates of density for the entire population. Our preliminary estimates of population size for a study area consisting of portions of hunt zones C3, C4, and X4 above 500 m elevation were as follows:

	Estimated Population Size	95% CI Lower	95% CI Lower
Total does	39,399	30,920	49,940
Total bucks	13,505	9,885	18,000
Total fawns	21,542	10,740	31,920
Total deer	74,446	60,160	91,410

All of these results are preliminary and should not be viewed as conclusive. They are especially sensitive to assumptions we made in our use of the auxiliary data. However, the credible intervals we report reflect uncertainty from the capture-recapture modeling and the auxiliary sources of information. Our next step will be to attempt spatial capture recapture modeling using the locations of recaptures along transects.

Funds Expended:

	This quarter	Total to date
Personnel:	$1784.00	$27,920.00
Operating Expense:	$0	$36,721.98
Total:	$1784.00	$64,641.98

Work Anticipated for Next Quarter:

Attempt to collar male deer. Randomly select 50 new plots for sampling in 2016.