Quarterly Progress Report to CDFA Vertebrate Pest Control Research Advisory Committee

Date	October 3, 2006
Title	A FIELD TEST OF JACKRABBIT BAIT STATION STRATEGIES

Principal Investigator:

Name (P.I.)	Terrell P. Salmon		
Institution	University of California	Department	Wildlife, Fish &
			Conservation Biology
Address	One Shields Ave	Phone	858 694-2864
	Davis, CA 95616	Email	tpsalmon@ucdavis.edu
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Project Duration	07/06	to 11/06	
Contract Number	05-0277		

Objective for the Quarter

- 1. Initiate pre-treatment rabbit counts in July or August.
- 2. Begin baiting in September.

Results

The amendment for funding to continue this project from July 1, 2006 through June 30, 2007 was approved by VPCRAC at the April 2006 meeting in Santa Rosa. However, initiation of the baiting trial was delayed until the contract paperwork was completed. Funding to purchase diphacinone bait and clean oat groats became available on September 15.

We initiated pre-treatment rabbit counts on August 15, and conducted 1 or 2 counts per week through September 19 (Table 1). The counts were conducted in the early evening from a vehicle along fixed routes. After 8 counts rabbit numbers on Plant Pathology averaged 36.0 + 3.5SD and 128.9 + 23.5SD on Pomology.

We deployed 5 open A-frame bait stations with clean grain at Plant Pathology on September 18. We deployed 6 A-frame stations with curtains and 0.005% diphacinone bait at Pomology on September 19. Consumption from each bait station was measured for 1 night per week thereafter. We assume nighttime consumption is primarily from jackrabbits. Measuring consumption over an evening eliminates most if not all consumption by ground squirrels, which are abundant on some areas of Pomology. As of September 29, nighttime consumption at all of the stations was negligible.

Objectives for the next Quarter

- 1. Continue counting rabbits along fixed routes once per week.
- 2. Monitor bait stations and measure nighttime consumption once per week.
- 3. Switch clean grain out for diphacinone at Plant Pathology when regular consumption by rabbits occurs.



Figure 1: Jackrabbit in a field.



Figure 2: Close up of jackrabbit.

Table 1: Number of jackrabbits seen on daytime and nighttime surveys of 2 locations on the University of California Davis campus. The period from 15 August - 19 September represents the pre-treatment period. The treatment period began on 19 September with the deployment of bait stations filled with clean oat groats at Plant Pathology and 0.005% diphacinone grain bait at Pomology.

		Location	
Date	Time (hr)	Plant Pathology	Pomology
15 Aug 06	1815 - 2000	33	114
17 Aug 06	1800 - 2000	33	143
21 Aug 06	1750 – 1945	34	116
28 Aug 06	1740 – 1935	40	114
31 Aug 06	1735 – 1935	34	136
7 Sep 06	1715 – 1930	38	105
11 Sep 06	1720 – 1930	34	125
19 Sep 06	1710 – 1915	42	178
26 Sep 06	1700 – 1900	36	180