

Submitted January 1, 2017

From:
Samantha Cordova
312 Kaylyn Dr. SE
Albuquerque, NM 87123

To:
Chiricahua Desert Museum
NM 80 & Portal Road
Rodeo, NM 88056

Update on Project: Charles W. Painter Grant 2016

CONFERENCE

The Joint Meeting of Ichthyologist and Herpetologists (JMIH) was my first herpetology meeting. I presented a poster on July 8th, 2016 on Environmental DNA of *Aneides hardii*. Presenting a poster and networking at a large meeting is invaluable experience. I have attached the final poster for the meeting.

FIELD SEASON

I began sampling for Jemez Mountains salamander (*Plethodon neomexicanus*) and Sacramento Mountain salamander (*Aneides hardii*) immediately following the JMIH conference. Precipitation and weather were sufficient to sample from mid-July to September. The 2016 field season was exceptional for *A. hardii*, and I took two trips to the Lincoln National Forest. *Aneides hardii* is locally abundant in the southern range (the Sacramento Mountains) with abundance decreasing in the northern Capitan Mountains (Table 1). We were able to capture a total of 204 salamanders from July 2015 to September 2016.

Table 1. Total Sacramento Mountain salamander tail clips from July 2015-September 2016

Site Name	Mountain Range	Samples Collected
Timberon	Sacramento	30
Rio Penasco	Sacramento	33
Russia Canyon	Sacramento	30
Ski Apache	White	45
Big Bear	White	27
West Mountain	Capitan	8
East Mountain	Capitan	31
Total		204

As expected, *P. neomexicanus* is more difficult to find, even in historically abundant areas. Michelle Christman and I spent a week surveying for *P. neomexicanus*. We found an emergence of *P. neomexicanus* on Redondo Borders and found a total of 25 *P. neomexicanus* individuals that included mostly juveniles (> 45 millimeters) too small for tissue sampling (Table 2).

Table 2. Total Jemez Mountains salamander tissue collection tail clips from July 2016-September 2016

Site Name	Date	Samples Collected
Twin Cabins	18 August 2016	1
Redondo Borders	19 August 2016	3
Mirror Pond	21 August 2016	1
Total		4

LAB WORK

I have spent the majority of fall 2016 semester working on genetics lab work. We have been working on environmental DNA, mitochondrial DNA, and microsatellites. We are planning to have this work completed by April 2017.

GRADUATE SCHOOL

I am planning my Master's thesis defense in early May 2017.

Table 3. Budgetary expenditures to date

Items	Quantity	Expenditure	Store	Description
GPS Unit	1	\$313.98	Amazon.com	Garmin GPSMAP 64st
Travel	1	\$300	Southwest Airlines	Approx. ½ cost of an airplane ticket to New Orleans, LA for JMIH (total flight cost: \$601.96)
Conference Registration Fee	1	\$180	Asih.org	Student member registration fee for JMIH conference 2016
Disinfectant	1	\$99	www.wchemical.com	Virkon Aquatic - 10 lb
Society Member Fee	1	\$85	Asih.org	American Society of Ichthyologists and Herpetologists
Field Supplies	1	Remainder (~22)	Amazon	Plastic bags and spray bottles
Total		\$1,000 USD		