

To: U. S. Fish and Wildlife Service

19 January 1989

From: Aryan I. Roest

MORRO BAY KANGAROO RAT CAPTIVE BREEDING PROGRAM

The Absolutely Ultimate Final Report

Period Covered:

This report covers the period from 30 July 1988 to 14 January 1989. The previous report, dated 30 July 1988, included a final summary of most of the biological information developed during the course of the breeding program, which began 25 May 1984. The breeding program officially ran until June of 1987, but was extended to continue until 30 September 1988; since then the breeding colony has been maintained without any official status. The entire breeding program was transferred to the U. S. Fish and Wildlife Service on 14 January 1989, for operation at their Piedras Blancas facility, under the care of Galen Rathbun.

Animals:

In the previous report (30 July 1988) 21 Morro Bay kangaroo rats were listed in the breeding program. Until July, the program was conducted much as it has been since its inception. However, it became necessary to hire a new caretaker during the summer of 1988, and the fact that the program would be terminated at Cal Poly was known, although no date had been set. It was assumed that transfer of the animals would occur about the end of September, since that is when the program officially ended. As a result, no effort was made to train the caretaker in recognizing estrous females, or in attempts at pairing males and females. In the short time remaining before the animals were to be moved it seemed rather pointless, and there seemed no reason to produce pregnant females just prior to a drastic change in their environment. The animals have therefore been maintained only since last July; no effort

at breeding the animals was made since then. Due to various delays in setting up and obtaining permission for the transfer, maintenance continued through the rest of 1988 and the first half of January, 1989. On 14 January 1989 all 21 Morro Bay kangaroo rats were transferred to Dr. Galen Rathbun of the U. S. Fish and Wildlife Service.

In addition, the remaining Lompoc kangaroo rats (14 animals) were also transferred; these animals have been used as surrogates for morroensis and have been extremely useful during various aspects of the breeding program. A list of both all the animals transferred, both morroensis and arenae, is presented below.

Table 1. List of animals transferred to U. S. Fish and Wildlife Service on 14 January 1989, listed by their eartag numbers.

<u>D. h. morroensis</u>	<u>D. h. arenae</u>
320 Female	334 Female
322 Male	335 Male
323 Female	336 Male
324 Male	343 Female
325 Male	344 Male
326 Female	345 Female
327 Female	350 Male
330 Male	363 Female
332 Female	381 Male
333 Female	382 Male
348 Female	385 Female
349 Male	386 Male
368 Female	388 Male
370 Male	391 Male
372 Male	
375 Female	(14 animals)
1391 Female	
1412 Female	
1540 Male	
1579 Male	
1584 Female	
(21 animals)	

The lists in Table 1 do not include the four additional morroensis which were released into enclosure at the Pecho site: 2601 (= 331.) Male,

2602 (= 316) Female, 2603 (= 2173) Female, and 2604 (= 329) Male.

Equipment:

All equipment that had been purchased for the breeding program was also turned over to the U. S. Fish and Wildlife Service on 14 January 1989. The list of items transferred is presented in Table 2.

Table 2. Inventory of items purchased for Morro Bay Kangaroo Rat Captive Breeding Project - USFWS, CDFG, Cal Poly, Cal Poly Foundation (Foundation Project #5361), and transferred to USFWS on 14 Jan 89.

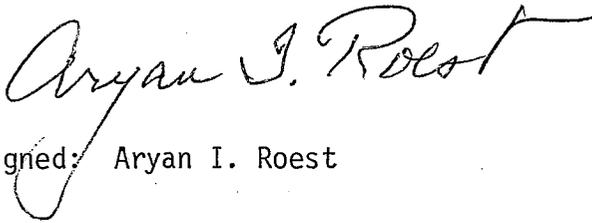
<u>Item</u>	<u>Number</u>
Ohaus Dial-0-Gram Scales (tag number 7069)	1
Sears Kenmore 3.6 cu. ft. refrigerator	1
10 gallon aquaria	54
Aquarium lids (masonite or wood/wire)	55+
Plastic Garbage Can	1
Plastic Waste Basket, tall	1
Plastic Waste Basket, with foot-lift lid (for food)	1
Maximum/minimum Thermometers	2
Aluminum Step-ladder, 5-6 ft.	1
Stepstool, 3 ft.	1
Broom, brush, dustpan (set)	1
Gloves, pair	1
Pipe Sections, plastic (for artificial burrows)	many
Empty Jars (for nest/young burrows)	Several
Pieces of Brick	many

Maintenance:

Since no effort was made to breed kangaroo rats after the 30 July 1988 report, there is nothing to report about breeding. Care of the rats was limited to regular feeding and cleaning of cages. Food was purchased from personal funds after September 1988, since the contract with the Cal Poly Foundation was over on the 30th of that month.

Summary:

1. Since preparation of the Final Summary Report, prepared 30 July 1988, the Morro Bay Kangaroo Rat Captive Breeding Program has not been active; there has been no change in the numbers of Morro Bay animals, and very little among the Lompoc group.
2. Since 30 July 1988, the animals were regularly fed and cleaned.
3. All animals and all equipment associated with the breeding program were transferred to Galen Rathbun, USFWS, at the Piedras Blancas facility.



Signed: Aryan I. Roest

cc: Calif. Dept. Fish & Game
Cal Poly Foundation
Biol. Sci. Dept.
Roger Gambs
Francis Villablanca
Galen Rathbun
Jim Lidberg

January 1989

Inventory of items purchased for Morro Bay Kangaroo Rat Captive Breeding Project - USFWS, CDFG, Cal Poly, CP Foundation (Project No. 5261).

Ohaus Dial-0-Gram Scales (tagged #7069)-----	1
Sears Kenmore 3.6 cu. ft. refrigerator-----	1
10 gallon aquaria-----	54
(4 are taped together as 'doubles')	
Aquarium lids: masonite, perforated-----	55+
Garbage can, plastic-----	1
Tall waste basket, plastic-----	1
Small food container, with foot-lift lid-----	1
Maximum/minimum thermometer-----	2
Ladder, 5/6 foot, aluminum-----	1
Stepstool, 3 foot-----	1
Broom, brush, dustpan (set)-----	1
Gloves, pair-----	1
Pipe sections, plastic (artificial burrows)-----	many

Received:

Galen Rathbun

date:

14 Jan 89