

Translocation of the cactus wren (*Campylorhynchus brunneicapillus*): A tool for management?

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Project Overview

- In 2006, NROC relocated 10 cactus wrens from central Orange County to protected areas in the coastal reserve

Questions:

- Is translocation a tool that can be used for management?
 - Do we have the knowledge base required to safely capture and relocate cactus wrens?
 - Will cactus wrens tolerate their new surroundings following translocation?

Project Implementation

- Four stages
 - Selection of donor and receptor sites
 - Pre-capture monitoring
 - Capturing, color-banding, and translocation
 - Post-release monitoring

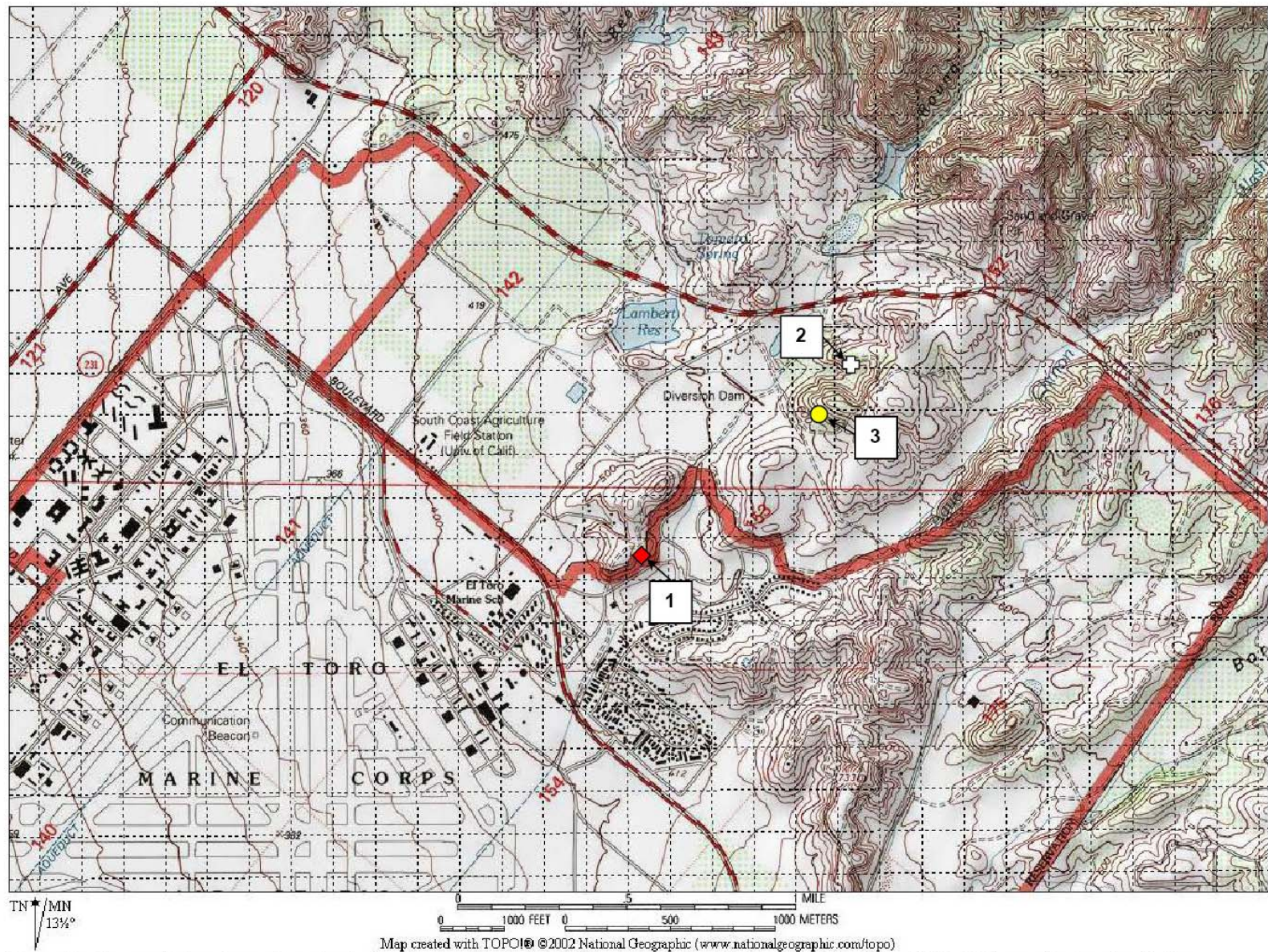


Figure 2: Source site locations of translocated cactus wrens in Irvine, CA between Irvine Blvd. and Portola Pkwy. UTM GPS coordinates of each site (NAD83): 1) 11S 434068mE, 3727316mN; 2) 11S 435072mE, 3728231mN; 3) 11S 434923mE, 3727975mN.



Figure 4: Cactus wren source site 1 coast prickly-pear series (Sawyer & Keeler-Wolf 1995) vegetative community type.



Figure 5: Cactus wren source site 2 coast prickly-pear series (Sawyer & Keeler-Wolf 1995) vegetative community type.



Figure 6: Cactus wren source site 3 prickly-pear series (Sawyer & Keeler-Wolf 1995) vegetative community type.























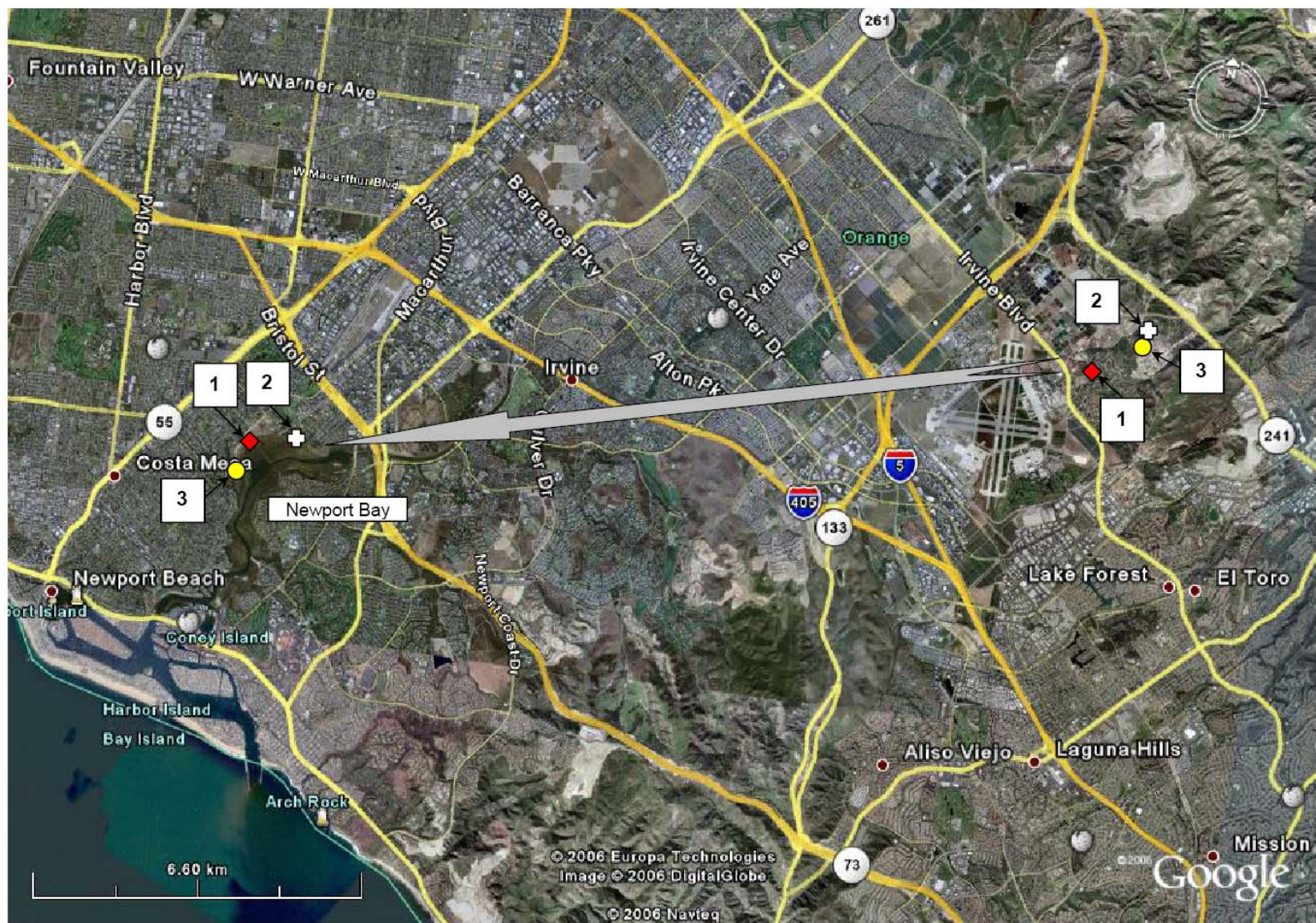


Figure 1: Vicinity of the cactus wren translocation project in Orange County, California. 1 – Pair with 2 fledglings, 2 – Single adult, and 3 – Pair with 3 fledglings were moved 17 km from eastern Irvine to cactus scrub in Upper Newport Bay.

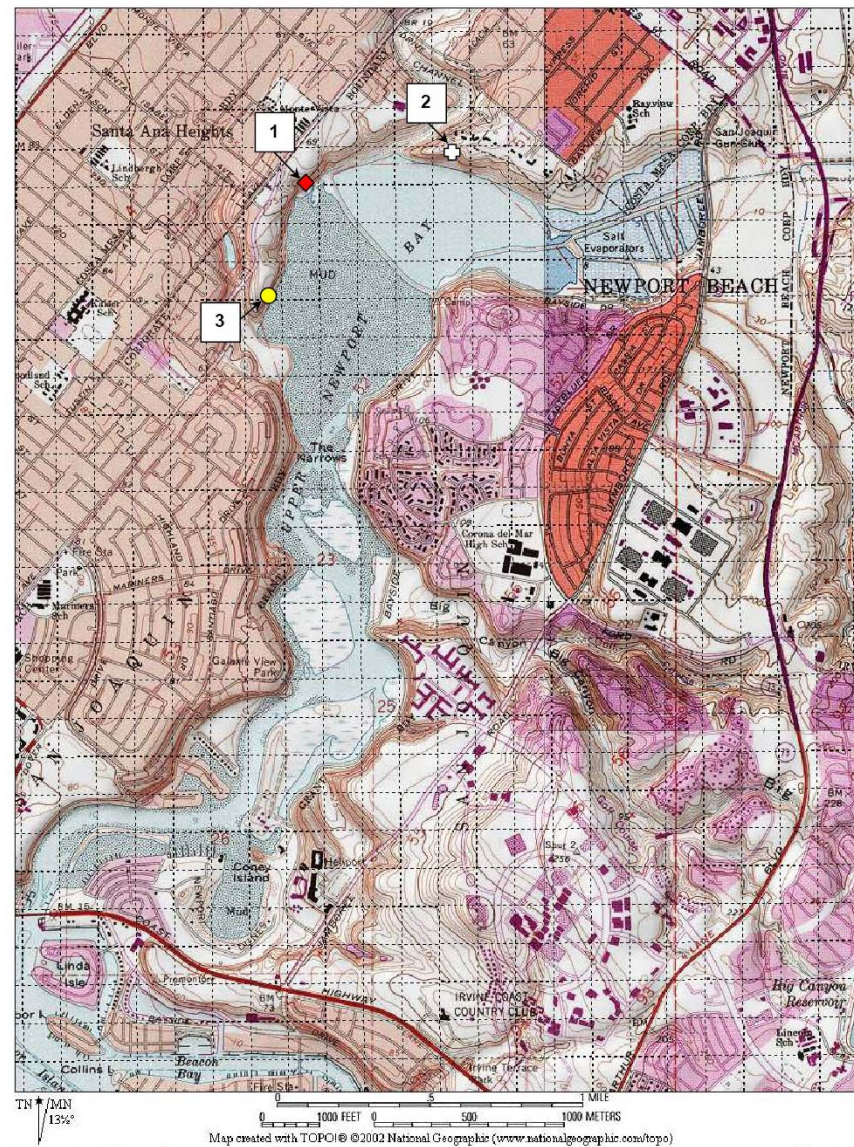


Figure 3: Release site locations of translocated cactus wrens at Upper Newport Bay, CA. UTM GPS coordinates of each site (NAD83): 1) 11S 417524mE, 3723817mN; 2) 11S 418294mE, 3723959mN; 3) 11S 417331mE, 3723223mN.



Figure 7: Upper Newport Bay cactus wren release site 1 coast prickly-pear series (Sawyer & Keeler-Wolf 1995) is mostly limited to the bluff slope with ruderal vegetation above and disturbed saltgrass series below.



(a)



(b)

Figure 8a and 8b: Upper Newport Bay cactus wren release site 2 coast prickly-pear series on the west (a) is primarily Cholla (*Opuntia prolifer*) in a matrix of *Encelia californica* and *Artemisia californica*. Most observations of the single wren were towards the east end of the habitat (b) where prickly pear (*Opuntia littoralis*) is in a matrix of *Artemisia californica*.



Figure 9: Upper Newport Bay cactus wren release site 3 coast prickly-pear series (Sawyer & Keeler-Wolf 1995) is limited to the bluff slope with ruderal vegetation above and pickleweed series below, which is regularly inundated by tidal flooding.

Cactus Wren Translocation Time Line

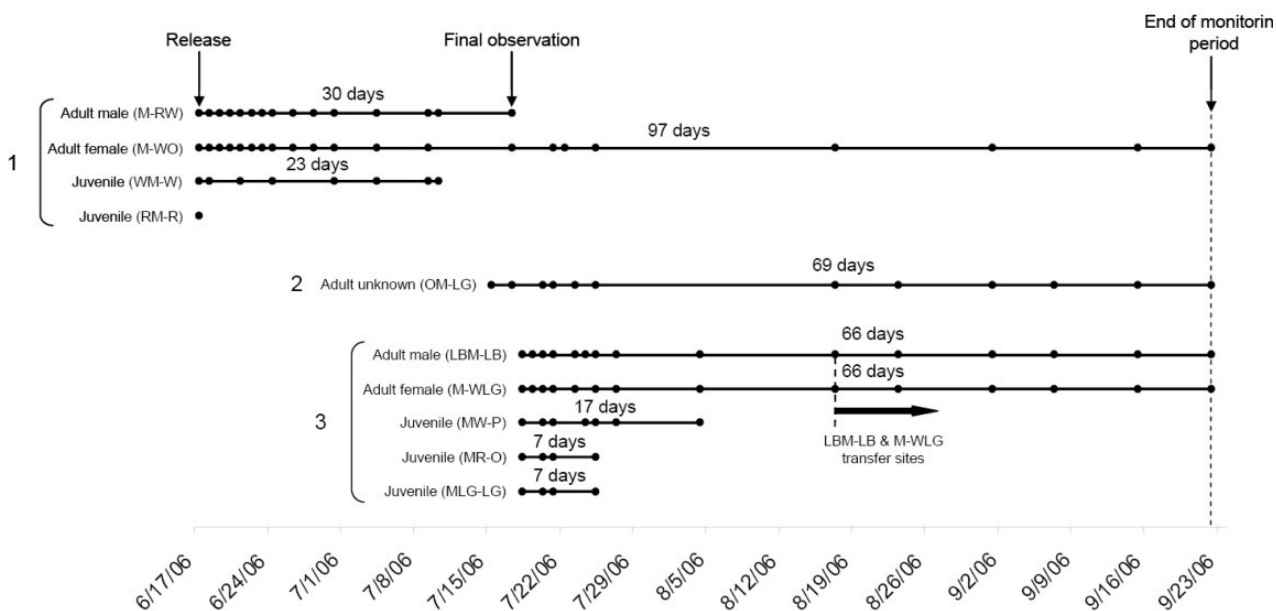


Figure 11: Cactus wren translocation time line grouped by the order each family group was translocated (vertical axis: groups 1, 2, & 3.) Horizontal lines with dots indicate amount of time birds were observed after release during the monitoring period (17 June 2006 to 22 September 2006) at Upper Newport Bay. The black dots indicate the dates wrens were observed. Number of days above each dark line indicates the total number of days the individual was seen on site. Dashed vertical lines represent end of monitoring period and date (17 August) the wren pair (male-LBM-LB & female-M-WLG) at site 3 was detected at site 1 with the remaining female (M-WO) at site 1. Refer to Table 1 for explanation of color band combinations.

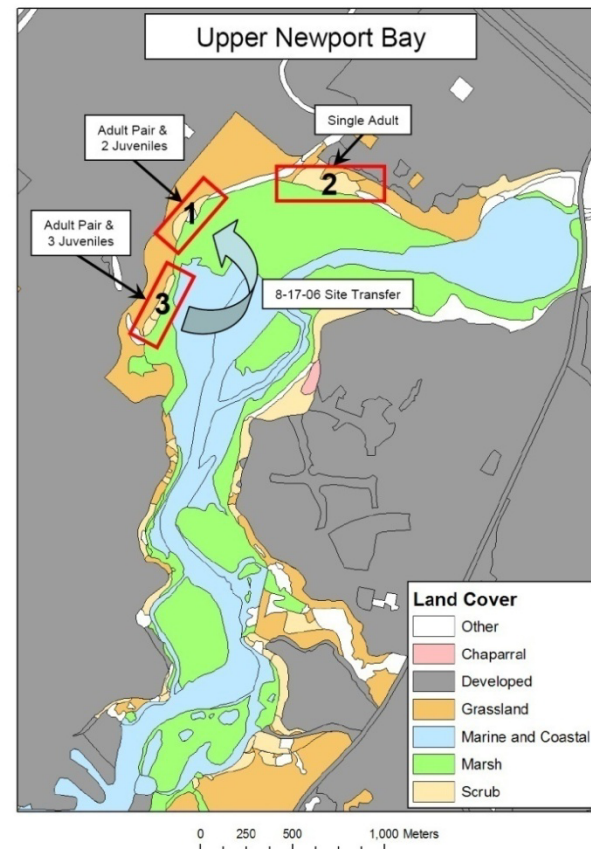


Figure 10: Plant community map of Upper Newport Bay with rectangles indicating the cactus scrub sites where cactus wren family groups were released. The curved arrow indicates that starting on 17 August, the site 3 wren pair was seen at site 1 with the remaining site 1 female.



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What did we learn?

- Translocation is possible
 - Safely capture, band, transport, and release cactus wrens
- Cactus wrens are able to adapt quickly to their new environments and show incredible site fidelity