

**City of San Diego
Multiple Species Conservation Program**

**Summary of Monitoring Results for
*Cordylanthus orcuttianus***

May 2004

Introduction

Orcutt's bird's beak (*Cordylanthus orcuttianus*) is a rare annual plant species that is associated with riverine habitat. Monitoring for this plant was conducted on May 26, 2004 within the Otay River Valley (see attached map) by City of San Diego staff Betsy Miller and Khalil Martinez. Monitoring for this species began in 2001 and has been conducted annually (McMillan Biological Consulting and Conservation Biology Institute, 2001; Wildlife Research Institute, 2002; City of San Diego, 2003). The methodology and results of the monitoring are detailed below. The goal of this effort was to continue the annual collection of data for long-term monitoring of Orcutt's bird's beak under the Multiple Species Conservation Program (MSCP).

Methodology

In prior years, monitoring for this species was conducted in accordance with the Biological Monitoring Plan for the MSCP (Monitoring Plan), dated January 25, 1996. The location of each sampling site was determined by field level surveys and then depicted on aerial photographs. The irregular size of the populations did not lend itself to a transect sampling method. Therefore, a one-meter quadrat sampling method was used to estimate the size of each population. However, this species tends to co-occur with poison oak (*Toxicodendron radicans*) and sampling of this species resulted in exposure to poison oak. Therefore, in 2004, presence/absence surveys were conducted for each of the population areas documented in 2003. New population areas of Orcutt's bird's beak that were not documented in 2003 were mapped using a submeter GPS.

Results

Thirty-eight different population areas with Orcutt's bird's beak were mapped in 2003. Orcutt's bird's beak was found in 29 of the population areas in 2004. Six new population areas were found in 2004 for a total of 35 separate population areas of Orcutt's bird's beak.

Recommendations

As mentioned above, sampling of this site is problematic due to the potential for exposure to poison oak. Additional individuals may be located in areas visually inaccessible to surveyors. Also, the sampling methodology used to avoid exposure to poison oak did not provide an estimated size of the population. However, sampling of this species may result in an overestimation of population numbers since the quadrats could not be randomly placed without risking exposure to poison oak. Quadrats would be placed in areas without poison oak and areas without poison oak probably have more individuals than areas with poison oak due to lack of cover. This presence/absence method of survey will allow staff to continue to evaluate the status of the population and document any overall increase or decline in the number of population areas within Otay River over time.

References

- City of San Diego. Summary of Monitoring Results for *Cordulanthus orcuttianus*. 2003.
- McMillan Biological Consulting and Conservation Biology Institute. 2001 MSCP Rare Plant Survey and Monitoring Report. 2001.
- Ogden Environmental. Biological Monitoring Plan for the Multiple Species Conservation Program. 1996.
- Wildlife Research Institute. 2002 MSCP Rare Plant Survey and Monitoring Report. 2002.