

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

**Summary of Monitoring Results for**  
*Cylindropuntia californica* var. *californica*  
(Formerly: *Opuntia parryi* var. *serpentina*)

**April 2002**

## Introduction

Snake Cholla (*Cylindropuntia californica* var. *californica*) is a federally listed Species of Concern that is found on arid coastal slopes in southern San Diego County. It is a prostrate succulent scrub that blooms between April and May and can be confused with *Opuntia prolifera*. Formerly known as *Opuntia parryi* var. *serpentina*, this species has recently undergone a nomenclature change and is now known as *Cylindropuntia californica* var. *californica*.

Monitoring for this plant was conducted during April 2002 at various locations. The locations, dates, and survey personnel for each survey is given in the table below. The methodology and results of the monitoring are detailed below. The goal of the effort was to establish baseline data for long-term monitoring of snake cholla under the Multiple Species Conservation Program (MSCP).

Snake Cholla Surveys, 2002		
Location	Date	Surveyors
Otay Mesa	April 15, 2002	Holly Cheong, Brett Williams, Keith Greer, Jim Harry, Randy Rodriguez
Balboa Park	April 15, 2002	Holly Cheong, Brett Williams, Jim Harry, Randy Rodriguez
Spring Canyon	April 19, 2002	Holly Cheong, Randy Rodriguez, Chad Kane, Keith Greer

## Methodology

Monitoring for this species was conducted in accordance with the Biological Monitoring Plan for the Multiple Species Conservation Program (Monitoring Plan), dated January 25, 1996. The location of each sampling site was determined by field level surveys and individual plants were mapped with a sub-meter Global Positioning System (GPS) and then depicted on aerial photographs. Photographs were taken at each of the survey sites.

## Results

Surveyors counted a total of 241 plants. A description of each site and the number of individuals found at each site is given below.

### Balboa Park

The Balboa Park snake cholla population is located within the Balboa Park Golf Course and is surrounded on all sides by the golf course (see attached figure). During the 2002 monitoring season, 21 snake cholla were located within the golf course and were mapped using a sub-meter GPS. Potential harm could result from stray golf balls or golfers looking for golf balls that landed out of bounds.

### Spring Canyon

The Spring Canyon population is located in the Otay Mesa Area (see attached figure). In the 2002 monitoring season, 47 individuals were counted and mapped using a sub-meter GPS. Spring Canyon is a highly disturbed area due to illegal off road vehicle activity, illegal dumping and illegal immigration and border patrol activities.

### Otay Mesa

The Otay Mesa population is located immediately east of Interstate 5 and just north of the United States/Mexico border (see attached figure). During the 2002 monitoring season, 173 snake cholla were located and mapped using a sub meter GPS. The Otay Mesa population is subject to the same threats as the Spring Canyon population, but may be more subject to disturbance from illegal immigration and border patrol activities due to the proximity to the border.

### **Recommendations**

If additional populations of snake cholla are found within City of San Diego limits, surveys should be conducted in those areas. Snake cholla also occurs in Chula Vista and Baja California. Coordination with other jurisdictions may help determine the regional status of this plant species.

### Balboa Park

The Balboa Park population appears to be stable and annual presence/absence surveys may be warranted to ensure that golf activities are not adversely affecting the population. If it appears that golf activities are affecting the population, funding should be acquired to purchase educational signs to be placed along the holes that are adjacent to the habitat areas.

### Spring Canyon

The Spring Canyon population is adjacent to habitat that is frequently disturbed and this may warrant annual surveys to ensure the population is not declining. When funding becomes available, MSCP Subarea Plan, Management Policies and Directives for Otay Mesa should be implemented to provide a greater level of protection for this species.

### Otay Mesa

The Otay Mesa Population is adjacent to habitat that is frequently disturbed and this may warrant annual surveys to ensure the population is not declining. When funding becomes available, MSCP Subarea Plan, Management Policies and Directives for Otay Mesa should be implemented to provide a greater level of protection for this species.

### **References:**

Ogden Environmental. Biological Monitoring Plan for the Multiple Species Conservation Program. 1996.

# Balboa Park

*Opuntia parryi*  
*var. serpentina*

● *Opuntia parryi*  
*var. serpentina*

■ MHPA



0 400 800 Feet

Sources: H. Cheong, K. Greer  
J. Harry, R. Rodriguez  
B. Williams

4/15/02



# Spring Canyon

*Opuntia parryi*  
*var. serpentina*



*Opuntia parryi*  
*var. serpentina*



MHPA



0 800 1600 Feet



Sources: H. Cheong, K. Greer  
C. Kane, R. Rodriguez

4/19/02

# Otay Mesa

*Opuntia parryi*  
*var. serpentina*

● *Opuntia parryi*  
*var. serpentina*

■ MHPA



0 200 400 600 Feet

Sources: H. Cheong, K. Greer  
J. Harry, R. Rodriguez  
B. Williams

4/15/02

