

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

**Summary of Monitoring Results for
Arctostaphylos glandulosa ssp. *crassifolia***

May 2002

Introduction

Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*) is listed as endangered by the federal government. This rare plant species is typically found in coastal chaparral areas within southern San Diego County. It is a large, typically upright shrub that blooms between December and April and can be confused with other types of manzanita, such as eastwood manzanita (*Arctostaphylos glandulosa* ssp. *glandulosa*).

Monitoring for this plant was conducted in February and May 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 Del Mar manzanita under the Multiple Species Conservation Program (MSCP).

Del Mar Manzanita Surveys, 2002		
Location	Date	Surveyors
Carmel Mountain	February 14, 2002	Holly Cheong, Brett Williams, Keith Greer
Crest Canyon	February 28, 2002	Holly Cheong, Brett Williams, Jim Harry
Peñasquitos Canyon	May 7, 2002	Holly Cheong, Jim Harry Chad Kane, Brett Williams

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 1,210 plants. A description of each site and the number of individuals found at each site is given below.

Carmel Mountain

The Del Mar manzanita population in Carmel Mountain is located in the northeast portion of the site (see attached figure). During the 2002 monitoring season, 96 Del Mar manzanita were located within the site and were mapped using a sub-meter GPS.

Crest Canyon

The Crest Canyon population is located throughout the canyon just east of Del Mar (see attached figure). In the 2002 monitoring season, 1,020 individuals were counted and mapped using a

sub-meter GPS. This is by far the largest population of Del Mar manzanita surveyed within the City limits this year.

Peñasquitos Canyon

The Peñasquitos Canyon population is located in the central portion of the canyon near Park Village Road (see attached figure). During the 2002 monitoring season, 94 Del Mar manzanita were located and mapped using a sub meter GPS.

Recommendations

If additional populations of Del Mar manzanita are found within City of San Diego limits, surveys should be conducted in those areas. San Dieguito would be an ideal place to conduct additional surveys for these species. Del Mar manzanita also occurs in Torrey Pines State Park. Coordination with State Parks may help determine the regional status of this plant species.

All three populations appear to be stable. Some Del Mar manzanita on Carmel Mountain were cut away to create volunteer trails. In accordance with the biological monitoring plan, monitoring for Del Mar manzanita will be conducted every three years. If it appears that trail activities or volunteer trails are affecting the population, funding should be acquired to purchase educational signs and/or fencing to be placed along the trails that are adjacent to the habitat areas.

References:

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

Carmel Mountain

Arctostaphylos glandulosa
ssp. crassifolia



Arctostaphylos
glandulosa
ssp. crassifolia



MHPA



0 400 800 1200 Feet

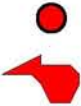
Sources: H. Cheong, K. Greer,
B. Williams

2/14/02



Crest Canyon

Arctostaphylos glandulosa
ssp. crassifolia

 *Arctostaphylos*
glandulosa
ssp. crassifolia

 MHPA



0 400 800 1200 Feet

Sources: H. Cheong, J. Harry
B. Williams

2/28/02



Peñasquitos Canyon

Arctostaphylos glandulosa
ssp. crassifolia

● *Arctostaphylos*
glandulosa
▲ *ssp. crassifolia*

■ MHPA



0 400 800 1200 Feet



Sources: H. Cheong, J. Harry,
B. Williams, C. Kane

5/07/02

