

City of San Diego  
Multiple Species Conservation Program

Summary of Monitoring Results for  
*Acanthomintha ilicifolia*

May 2000

## **Introduction**

San Diego thornmint (*Acanthomintha ilicifolia*) is an endangered plant species that is found in clay soils within the County of San Diego. It is an annual herb that blooms between April and June.

Monitoring for this plant in Penasquitos Canyon, Black Mountain Ranch, and Sabre Springs was conducted on May 3, 2000 by Holly Boessow, Keith Greer, Cindy Burrascano, Mike Kelly, and Pat Watkins. The surveys within Sabre Springs were completed by Mike Kelly on May 6, 2000. 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 San Diego thornmint under the Multiple Species Conservation Program (MSCP). Previous surveys in Penasquitos Canyon and Black Mountain Ranch have been completed by Mike Kelly (see attached). Additional surveys in Penasquitos Canyon and Sabre Springs were also conducted by Ogden Environmental (1993).

## **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 were determined by field level surveys and then depicted on aerial photographs. These areas were first photographed and then all plants present were counted. Flowering adult plants were counted separately from non-flowering adult plants. Large patches were separated into sections by string in order to avoid double counting.

## **Results**

Surveyors counted a total of 5454 flowering adults, and 572 non-flowering adults. A description of each site and the number of individuals found at each site is given below.

### Penasquitos Canyon

The Penasquitos Canyon population is located along a trail north of Penasquitos Creek (Figure 1). The plant species are protected by a wooden rail fence on both sides of the trail. Some exotic plant species, such as tocalote (*Centaurea melitensis*), are growing on-site. In the year 2000 surveys, 790 flowering adults and 263 non-flowering adults were counted on-site.

### Black Mountain Ranch

The Black Mountain Ranch population is located in the northwest portion of the Black Mountain Ranch open space area on the north side of Luzardi Creek (Figure 2). A few non-native grass species, such as wild oat (*Avena* spp.) were found on-site. In the year 2000 surveys, 977 flowering adults and 138 non-flowering adults were counted on-site.

## Sabre Springs

The Sabre Springs population is located south of Sabre Springs Parkway and Penasquitos Creek (Figure 3). There are many exotics at this site including some artichoke thistle (*Cynara cardunculus*), tocalote, and wild oat. In the year 2000 surveys, 3687 flowering adults and 171 non-flowering adults were counted on-site.

### Recommendations

In general, site should be surveyed in using a Geographic Positioning System (GPS) to help relocate sites during future survey efforts. Also, if additional populations of San Diego thornmint are found within City of San Diego limits, surveys should be conducted in those areas. The Monitoring Plan identifies populations of San Diego thornmint in Lake Hodges. Surveys should be conducted to determine presence or absence of the plant. If the plant is found, comprehensive surveys should be completed. San Diego thornmint has also been identified outside of the City of San Diego jurisdiction on McGinty Mountain, Jamul Mountains, and within Sycamore Canyon. Coordination with other jurisdictions may help determine the regional status of this plant species.

Over 6,000 total plants were counted during this survey effort. Counting every single plant was very time consuming and labor intensive. In order to facilitate counting the plants on-site in the future, permanent transects should probably be installed on all the sites and surveyed using a GPS. 1 m<sup>2</sup> quadrats would then be placed along the transect and all individuals within the quadrat could be counted. The population size could then be estimated from number of individuals counted within the quadrats.

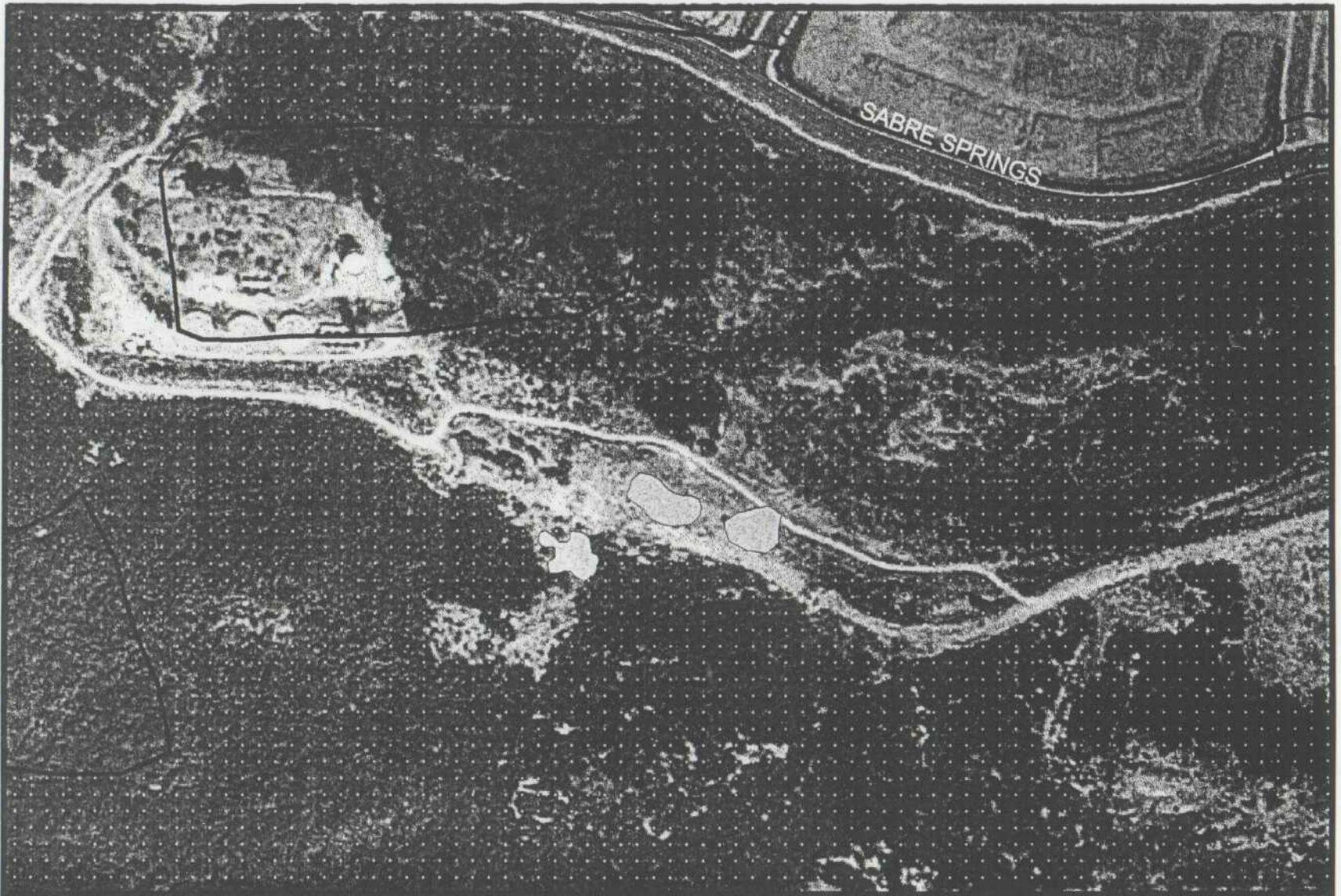
Exotic plant species in the San Diego thornmint population areas may be a big issue for the species, especially in the Sabre Springs population where the exotic plant species are more prevalent. These exotic plant species may *outcompete* the San Diego thornmint. Although it does not appear that the San Diego thornmint populations are declined based on previous surveys conducted by Mike Kelly and Ogden Environmental in previous years, techniques should be developed to remove the exotic plant species without harming the adjacent San Diego thornmint plants.

The Black Mountain Ranch and Sabre Springs populations do not occur along trails or access areas, therefore, trampling should not be an issue. No trampling was observed in the Penasquitos Canyon populations which occurs along a highly traveled trail. The existing fence is keeping people on the trail and out of the San Diego thornmint area. If trampling is observed in future surveys, the fence along the trail should probably be improved.

## References

Ogden Environmental. September 1993. Fourth Annual Report for the Westview Planned Residential Development San Diego Thornmint (*Acanthomintha ilicifolia*) Biological Mitigation Plan.

SURVEY LOCATION  
FIGURES



 Survey Area  
 MHPA

## Sabre Springs Survey

*Acanthomintha ilicifolia*

Survey Dates: 5-3-00 and 5-6-00

Source: C. Burrascano, K. Greer,  
P. Watkins, H. Boessow

