

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

**Summary of Monitoring Results for  
*Lessingia filaginifolia***

**July 2003**

## Introduction

Del Mar sand aster (*Lessingia filiginifolia*) is a purple-flowered aster found in sandy soils in coastal areas. Monitoring for this plant was conducted at various locations throughout July. The locations, dates, and survey personnel for each survey are given in the table below. The methodology and results of the monitoring are detailed below. The goal of the effort was to continue the annual collection of data for long-term monitoring of Del Mar sand aster under the MSCP.

<b>Del Mar Sand Aster Surveys, 2003</b>		
Location	Date	Surveyors
Torrey Highlands	July 7, 2003	Holly Cheong, Khalil Martinez, Betsy Miller
Overland Park, Carmel Mountain	July 9, 2003	Holly Cheong, Eden Nguyen, Melanie Johnson, Khalil Martinez, Betsy Miller, Chad Kane, Jan Atha

## 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 then depicted on aerial photographs. A census of all species was conducted at all sites.

## Results

Surveyors counted a total of 2,136 plants, which includes 1,636 flowering individuals and 500 non-flowering individuals. A description of each site and the number of individuals found at each site is given below.

### Torrey Highlands

The Torrey Highlands area is located behind Torrey Highlands Park via Lansdale Avenue. A total of 120 individuals were documented on-site including 62 flowering individuals and 58 non-flowering individuals. A total of 200 individuals were documented on-site in 2001, while only 2 individuals were documented in 2002.

Additional clearing for San Diego Gas and Electric access appears to have taken place on-site. It is unclear if this work resulted in any impacts to Del Mar sand aster.

### Overland Park

The Overland Park area is City-owned open space in the eastern extension of Crest Canyon. The survey area is just east of Interstate 5 and north of High Bluff Drive. A total of 1,384 individuals

were counted within Overland Park including 1,126 flowering individuals and 258 non-flowering individuals. In 2002, 125 plants were documented on-site. Counts were not conducted in 2001, but the density was estimated at 18 plants per 10 square meters.

Many single family homes abut the open space and the Del Mar sand aster population. Disturbance to the species from adjacent homeowners was documented on-site.

### Carmel Mountain East

The Carmel Mountain East population is located off of Carmel Country Road in Carmel Valley. A total of 181 plants were counted on-site including 153 flowering plants and 28 non-flowering plants. In 2002, 5 plants were documented on-site. Counts were not conducted in 2001, but the density was estimated at 33 plants per 10 square meters.

Del Mar sand aster individuals were observed growing around and on trails in the Carmel Mountain area.

### Carmel Mountain West

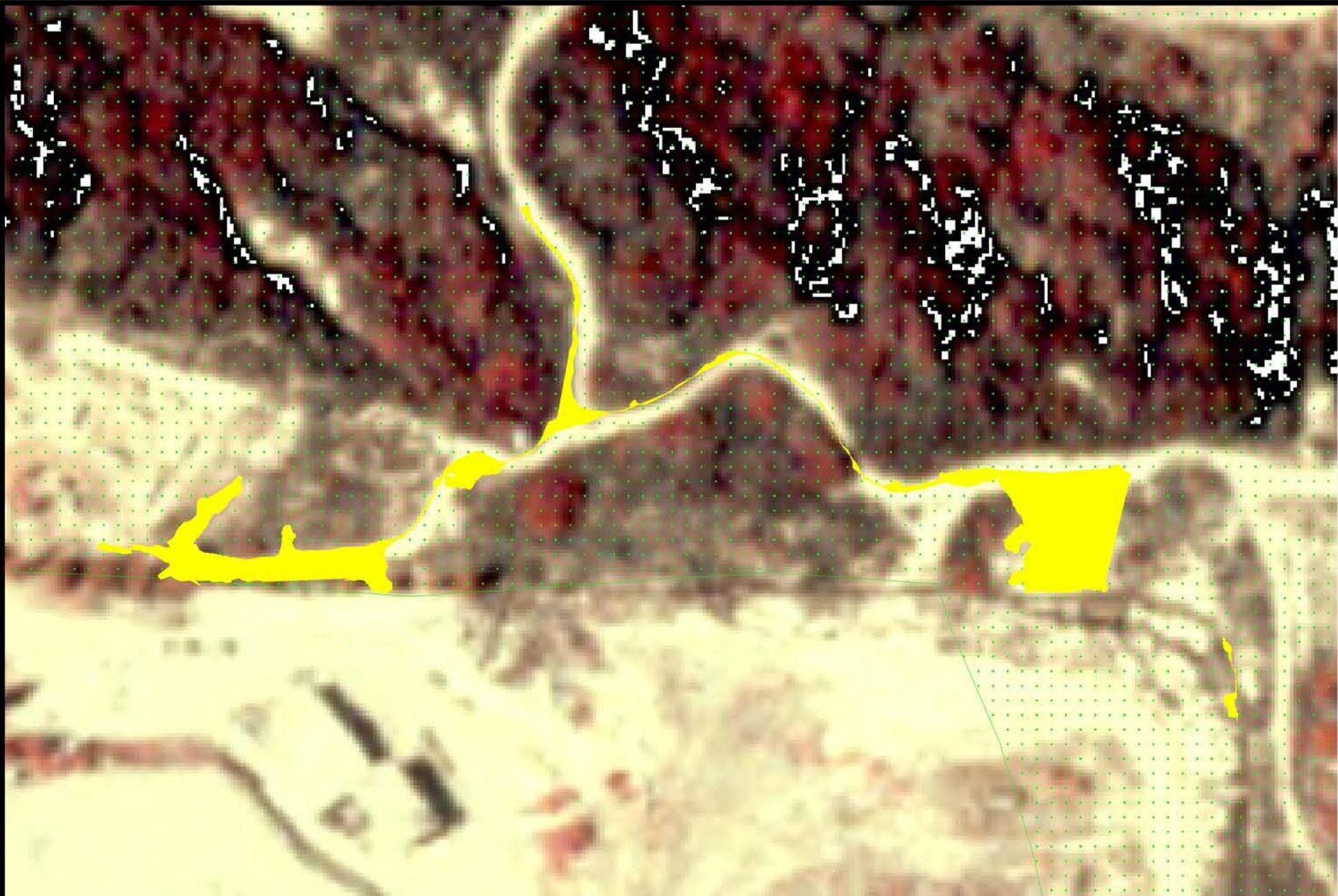
The Carmel Mountain West population is located off of El Camino Real in Carmel Valley. A total of 451 plants were counted on-site including 295 flowering plants and 156 non-flowering plants. In 2002, no plants were observed on-site. Counts were not conducted in 2001, but the density was estimated at 21 plants per 10 square meters.

## **Recommendations**

In terms of future sampling methodology, a census of this species should be taken once every two years in accordance with the MSCP Biological Monitoring Plan (Ogden, 1996). If a census is not possible due to large numbers of the species being present, alternative methodologies should be explored. The quadrat sampling method seems to be the most appropriate sampling methodology for this species since the irregular nature of the populations do not lend themselves to belt transects. However, additional research is needed in order to determine the appropriate size of the quadrat.

Del Mar sand aster tends to occur in slightly disturbed sandy soils along trails and other open area habitats. Del Mar sand aster occurs in fairly urbanized areas and impacts associated with human use do occur. However, it is unclear if Del Mar sand aster would continue to persist without some disturbance due to its requirement for open, sandy areas.

MSCP staff will continue to evaluate Del Mar sand aster populations. Action has been taken to remove encroachments from adjacent land owners within the Overlook Park area. Volunteer trails should also be discouraged within the open space areas where Del Mar sand aster occurs. Existing trails adjacent to Del Mar sand aster populations should be evaluated on a case-by-case basis.



-  Population Area
-  MHPA

# Carmel Mountain

*Lessingia filaginifolia*

Survey Date: 7/9/03



Source: H. Cheong, B. Miller, J. Atha,  
K. Martinez, M. Johnson,  
C. Kane, E. Nguyen



 Population Area

 MHPA

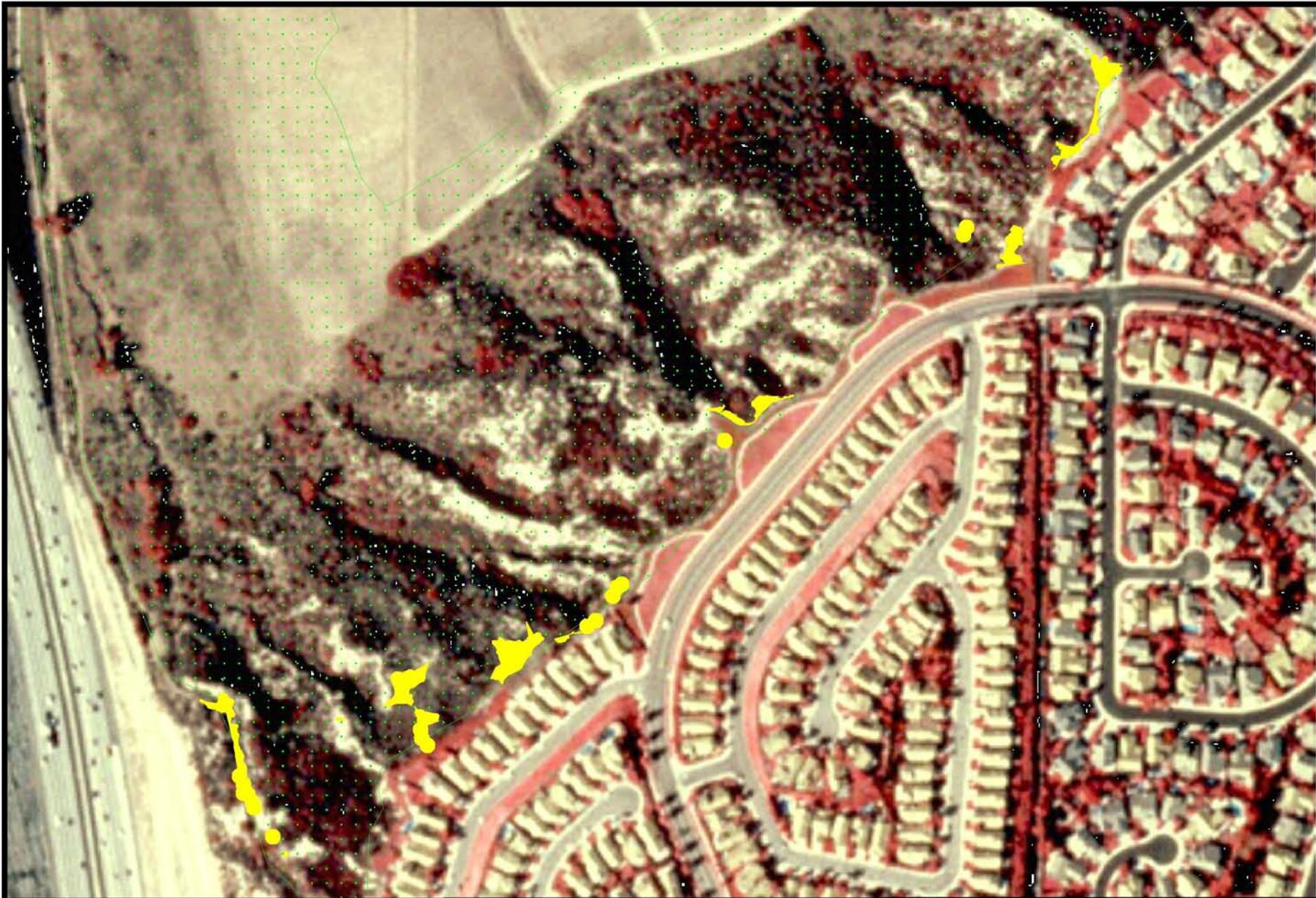
# Carmel Mountain West

*Lessingia filaginifolia*

Survey Date: 7/9/03



Source: H. Cheong, B. Miller, J. Atha,  
K. Martinez, M. Johnson,  
C. Kane, E. Nguyen



-  Population Area
-  MHPA

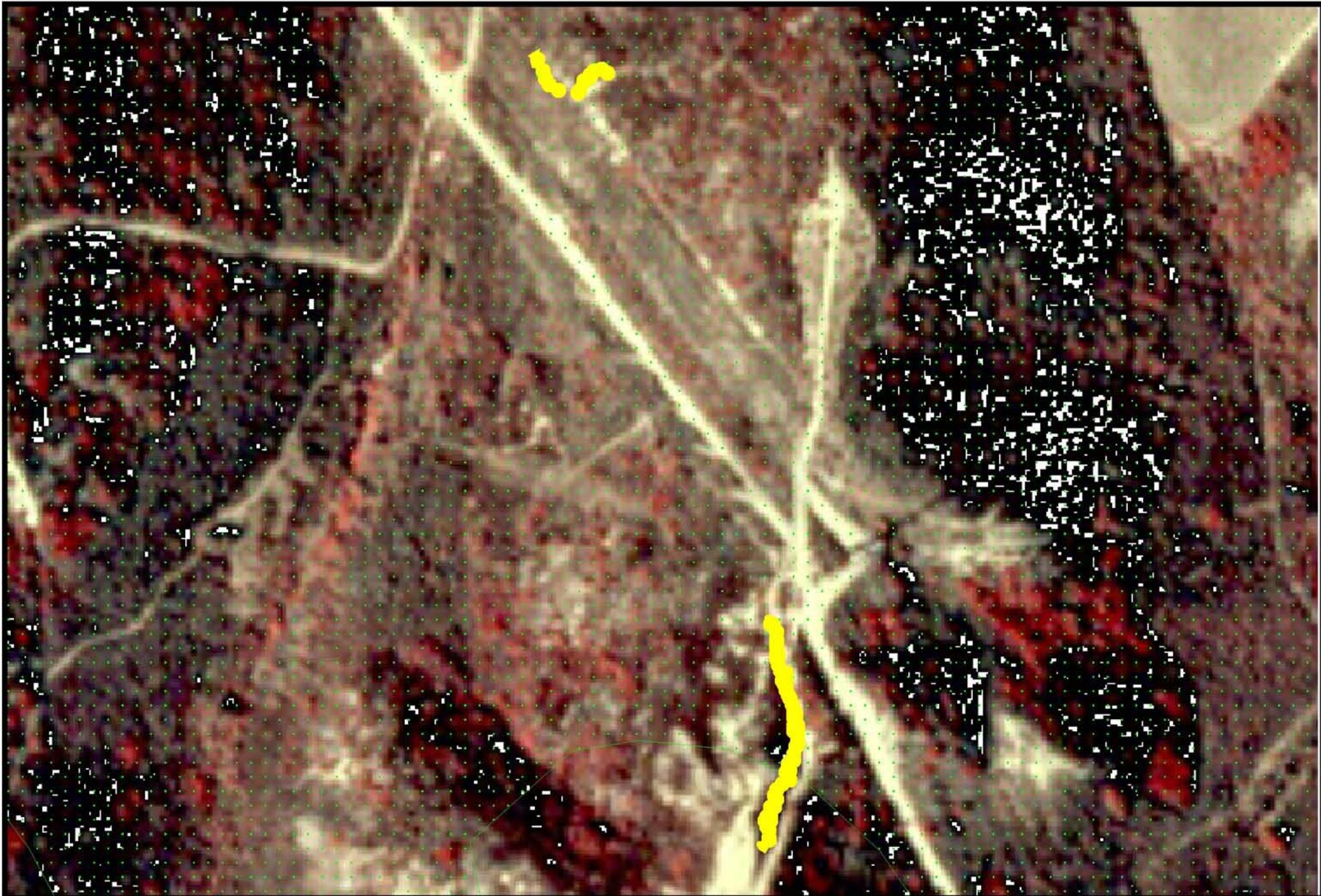
# Overland Park

## *Lessingia filaginifolia*

Survey Date: 7/9/03



Source: H. Cheong, B. Miller, J. Atha,  
K. Martinez, M. Johnson,  
C. Kane, E. Nguyen



Population Area



MHPA

# Torrey Highlands

*Lessingia filaginifolia*

Survey Date: 7/7/03



Source: H. Cheong, B. Miller,  
K. Martinez