

City of San Diego MSCP Rare Plant Monitoring: 2006 Summary Results

Species	Site Name	Population				Native		Non-Native		Management Recommendation	Field Data Sht (pg. #)	Photo (pg. #)
		Area (m ²) ¹	Area (ft ²) ¹	# Individuals	% Cover	Number of Species ²	Percent Cover ^{2,3}	Number of Species	% Cover ³			
<i>Acanthomintha ilicifolia</i> (San Diego Thornmint)	Black Mountain	112 (Est)	1,200 (Est)	36	0.5%	20	20%	6	48%	Control invasives	8	9-10
	Mission Trails	112 (Est)	1,200 (Est)	107	0.5%	13	13%	9	21%	Control invasives	11	12
	Penasquitos Canyon - North	59	636	98	1%	1	1%	3	9%	Control invasives	13	14
	Penasquitos Canyon - South	1	16	49	2%	2	2%	2	7%	Control invasives	15	16-17
	Sabre Springs South	112 (Est)	1,200 (Est)	196	1%	3	4%	9	9%	Control invasives	18	19
	Sabre Springs East	55	590	21	1%	2	2%	8	23%	Control invasives	20	21
	Sabre Springs West	56 (Est)	600 (Est)	86	2%	3	12%	8	14%	Control invasives	22	23
		Note: Primary invasives at all <i>A. ilicifolia</i> sites are Mustard (<i>Brassica nigra</i>), Tocolote (<i>Centaurea melitensis</i>), and Non-Native Grasses.										
<i>Ambrosia pumila</i> (San Diego Ambrosia)	Mission Trails	10,801	116,266	150,000 (Est)	2%	11	13%	12	63%	Experiment with invasives control (esp. NNG); Monitor for type conversion	24	25

Multiple Species Conservation Program (MSCP) Rare Plant Field Survey Form

Scientific Name: *Ambrosia pumila* Common Name: San Diego Ambrosia
 Site Name: Mission Trails - Kumeyaay Lake Management Unit #:
 Date: June 8, 2006 Management Regime:
 Surveyors and Affiliation/Agency: Melvin Johnson Rocks, Lisa Markovchick-Nichols - City of San Diego MSCP

Species Found? ☒ Yes ☐ No If not, why (if reason known or suspected)?
 Total No. Individuals: 150,000 ☐ Exact ☒ Estimate (use orders of 10, 100 and 1000 for estimates)
 Population/Subpopulation Area: ☐ Exact (based on GPS mapping) ☐ Estimate
 Units
 Collection (if not collected previously)? ☐ Yes ☒ No ☐ Collected Previously
 If yes: Collector Collection Number Museum/Herbarium

I. OBSERVATION AREA/MANAGEMENT UNIT LOCATION
 Accuracy of Coordinates/GPS Error: +/- ☐ meters ☐ feet
 Observation Location: ☐ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT
 Vegetation Community: Non-Native Grassland / Native Grassland / Coastal Sage Scrub (Sparse)
 Landowner/Manager: City of San Diego Park & Recreation Open Space Div / MTRP
 Overall Site Quality** ☐ Very Good-Excellent ☐ Fair to Good ☒ Poor ☐ Very Poor
 Surrounding land use: Campground to west, trail & lake to north, parking lot to south & private (non-city) undeveloped to east
 Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible): High cover of non-native grasses and other non-natives
 Management Recommendation/s: Experiment w/ weed control and monitor for potential type conversion issues

III. ASSOCIATED SPECIES
 List dominant, subdominant and invasive species in/near target species observation area/management unit.
 Form: Tree=T, Shrub=S, Herb/Graminoid=H; 'Cover' = % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted); Use * to indicate non-native species

Form	Species	Cover	Coll.	Form	Species	Cover	Coll.
H	<i>Bromus hordeaceus</i> *	20		S	<i>Eriogonum fasciculatum</i>	2	
H	<i>Bromus diandrus</i> *	10		H	<i>Hypochaeris virgata</i>	2	
H	<i>Vulpia myuros</i> var. <i>myuros</i> *	10		H	<i>Nassella pulchra</i>	2	
H	<i>Bromus madrikanis</i> (cf. <i>ssp. medialis</i>)	10		H	<i>Avena barbata</i> *	1	
H	<i>Hypochaeris glabra</i> *	4		H	<i>Avena fatua</i> *	1	
H	<i>Centaurea melitensis</i> *	4		H	<i>Brassica nigra</i> *	1	
H	<i>Daucus pusillus</i>	3		H	<i>Distichlis spicata</i>	1	
H	<i>Ambrosia pumila</i>	2		H	<i>Erodium</i> sp.*	1	

IV. SITE PHOTOMONITORING
 Camera type: Canon Powershot A25 (Digital, Autofocus, no zoom used)
 Location [State Plane (ft)] Direction (facing) Height Camera Angle Photo # File location/s
 NW, NE, E 50" Down 1-5° 5-8
 Location [State Plane (ft)] Direction (facing) Height Camera Angle Photo # File location/s

V. OTHER FIELD NOTES
 Other Field Notes/Comments:

** Use Trudgen & Keighery Vegetation Condition Scale Descriptions (see back of form or instructions)

Continue on back if needed.

Modified Trudgen & Keighery Vegetation Condition Scale

Very Good-Excellent	80-100% Native Flora Composition Vegetation Structure intact or nearly so Cover /abundance of weeds < 5% No or minimal signs of disturbance
Fair to Good	50-80% Native Flora Composition Vegetation structure modified or somewhat modified Cover/abundance of weeds 5-20% any number of individuals Possible minor signs of disturbance
Poor	20-50% Native Flora Composition Vegetation structure modified Cover/abundance of weeds 20-60% any number of individuals Disturbance incidence high
Very Poor	0-20% Native Flora Composition Vegetation Structure disappeared Cover/abundance of weeds 60-80% any number of individuals Disturbance incidence very high

Form

Sp.

Cover %

H	<i>Corethrogyne filaginifolia</i> var <i>filaginifolia</i>	1
H	<i>Croton setigerus</i>	<1
H	<i>Hirschfeldia incana</i> *	<1
H	<i>Stephanomeria</i> sp.	<1
H	<i>Eriogonum</i> (c.f. <i>elongatum</i>)	<1
AS	<i>Artemisia californica</i>	<1
H	<i>Lotus purshianus</i>	<1
H	<i>Lactuca</i> (c.f. <i>serriola</i>)*	<1

Photo 10. *Ambrosia pumila* (San Diego Ambrosia) Mission Trails



Panorama from southwestern edge of population, facing northwest, north, northeast and east (photos merged using Canon PhotoStitch, v. 3.1).

Acknowledgments

The following staff assisted in the preparation of this report:

Melanie Johnson Rocks, Biologist III

Keith Greer, Deputy Planning Director

Lisa Markovchick-Nicholls, MSCP Intern

City of San Diego MSCP Rare Plant Monitoring: 2006 Field Dates and Staff

Species	Risk Group (SDSU 3/06)	Site	Survey Date	Field Staff	Methodology
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i> (Del Mar Manzanita)	First	Crest Canyon	14-Apr	MJR, JG	
			20-Apr	MJR, JG	Photo, Habitat Assessment
		Carmel Mountain	28-Apr	MJR, JG, KG	Photo, Habitat Assessment
<i>Navarretia fossalis</i> (Spreading Navarretia)	First	Carroll Canyon	18-May	MJR, JG, LMN	Photo, Habitat Assessment
		Nobel Drive	18-May	MJR, JG, LMN	Photo, Habitat Assessment
		Robinhood Ridge	16-May	MJR, BM, LMN	Photo, Habitat Assessment
<i>Orcuttia californica</i> (California Orcutt Grass)	First	Robinhood Ridge	16-May	MJR, BM, LMN	Photo, Habitat Assessment
<i>Pogogyne nudiuscula</i> (Otay Mesa Mint)	First	Robinhood Ridge	16-May	MJR, BM, LMN	Photo, Habitat Assessment
<i>Acanthomintha illicifolia</i> (San Diego Thorn-mint)		Black Mountain Pk W (BMR)	19-May	MJR, KG, MK	Census, Photo, Habitat Assessment, Quantitative
		Mission Trails ^	26-May	MJR, KG, JF, LH	Census, Photo, Habitat Assessment, Quantitative
		Penasquitos Cyn	19-May	MJR, KG, MK	Census, Photo, Habitat Assessment, Quantitative
		Sabre Springs	19-May	MJR, KG, MK	Census, Photo, Habitat Assessment, Quantitative
<i>Ambrosia pumila</i> (San Diego Ambrosia)	First	Mission Trails Regional Park	8-Jun	MJR, LMN	Photo, Habitat Assessment
<i>Dudleya variegata</i> (Variegated Dudleya)	Second	Black Mtn Pk - E (BMR)	10-May	MJR, BM	Photo, Habitat Assessment
		Black Mountain Pk W (BMR)	19-May	MJR, MK	Photo, Habitat Assessment
		East Elliot	26-May	KG, MJR, BM	Photo, Habitat Assessment
			1-Jun	MJR, JG	
		Goat Mesa	16-May	MJR, BM, LMN	Photo, Habitat Assessment
		Marron Valley	2-May	MJR	Photo, Habitat Assessment
		Mercy Road	10-May	MJR, BM	Photo, Habitat Assessment
		Mission Trails ^	26-May	MJR, KG, JF, LH	Photo, Habitat Assessment
		Otay Lakes ^	24-May	MJR, LMN	Photo, Habitat Assessment
		Santa Luz (BMR)	10-May	MJR, BM	Photo, Habitat Assessment
<i>Dudleya blochmaniae</i> subsp. <i>brevifolia</i> (Short-Leaf Dudleya)	First	Carmel Mountain	2-Jun	KG, MJR, BM, LH	Photo, Habitat Assessment, Quantitative @ Pop 3
		Crest Canyon	2-Jun	KG, MJR, LH	Photo, Habitat Assessment
		Skeleton Canyon	2-Jun	KG, MJR, LH	Photo, Habitat Assessment

City of San Diego MSCP Rare Plant Monitoring: 2006 Field Dates and Staff

Species	Risk Group (SDSU 3/06)	Site	Survey Date	Field Staff	Methodology
<i>Lotus nuttallianus</i> (Nuttall's lotus)	First	Hospitality Pt	18-May	MJR, JG, LMN	Photo, Habitat Assessment
		No Men's Land	1-Jun	MJR, JG	Photo, Habitat Assessment
		South Shores	1-Jun	MJR, JG	Photo, Habitat Assessment
		Dunes Triangle	1-Jun	MJR, JG	Photo, Habitat Assessment
<i>Monardella viminea</i> (Willow Monardella)	Second	Lopez Canyon	14-Jun	MJR, LMN, MKI	Quantitative, Photo, Habitat Assessment
		Marron Valley	30-Jun	MJR, BM, PS	Quantitative
		Sycamore Canyon^	20-Jun	KG, LMN	Quantitative, Photo, Habitat Assessment
		Otay Lakes^	12-Jul	MJR, PS, LMN	Habitat Assessment, Photo
<i>Deinandra conjugens</i> (Otay Tarplant)	First	Proctor Valley^	16-Jun	MJR, PS	Photo, Habitat Assessment
<i>Cordylanthus orcuttianus</i> (Orcutt's Bird's Beak)	First	Otay River Valley	7-Jul	MJR, JG	Quantitative, Photo, Habitat Assessment

^ Survey site is located in Oct 2003 fire-affected area

City Staff, Planning Department

KG = Keith Greer, Planning Deputy Director
MJR = Melanie Johnson Rocks, MSCP Biologist
BM = Betsy Miller, MSCP Planner
LMN = Lisa Markovchick-Nicholls, MSCP Intern
MKI = Michael Klein, Information Systems Analyst II

City Staff, Park and Recreation Department

J. Garcia = Joshua Garcia, Open Space Natural Resources Manager

City Staff, Water Department

PS = Paul Schlitt, Water Operations Biologist

Volunteer (Non-Staff) Monitors:

MK = Mike Kelly, Conservation Resources Network
JF = Dr. Janet Franklin, MSCP Monitoring Plan Revision Grant Lead, SDSU
LH = Lauren Hierl, MSCP Monitoring Plan Revision Grant Staff, SDSU