City of San Diego MSCP Rare Plant Monitoring: 2009 Summary Results

		Population				Native		Non-Native				
Species	Site Name	Area (m^2)[1]	Area (ft^2)[1]	# Individuals	Percent cover	Number of Species[2]	Percent Cover[2,3]	Number of Species	Percent Cover[3]	Management Recommendation's	Field Data Sht (pg.#)	Photo number
	Proctor Valley	3347.3	36018.0	150	1%	7	17%	7	98%	Continue to miantain fences and gates, herbicide cynara (2 ind.) ASAP	134	39
Dudleya blochmaniae* ssp. *Brevifolia (Short-Leaved Dudleya)	Carmel Mountain Obs. 1	450.0	4842.0	1142	0.5%	8	14%	4	4%	Maintain	138	40
	Carmel Mountain Obs. 2	250.0	2691.0	344	1.0%	12	46%	2	2%	Maintain fencing and educational kiosk	140	41
	Carmel Mountain Obs. 3	279.0	3000.0	1052	1.0%	13	27%	3	4%	Maintain fence and educational kiosk	142	42
	Crest Canyon North	158.0	1700.0	1200	1%	11	29%	2	2%	Contact nearby owner RE black cord	144	43
	Crest Canyon South	25.0	270.0	9	0.5%	10	14%	0	0%	Maintain fancing	146	44
	Skeleton Canyon	†	†	†	†	†	†	†	†	†	†	†
Dudleya variegata (Variegated Dudleya)	Black Mountain East	0.0	0.0	0	0%	9	25%	5	37%	Weeding	150	45
	East Elliot - Creek	0.0	0.0	0	0%	6	19%	4	32%	Monitor trail-fence if necessary, large scale weed control?	152	46
	East Elliot - Hilltop	10.0	108.0	57	1%	13	35%	2	2%	None	154	47
	East Elliot - Slope	500.0	5380.0	85	1.0%	5	14%	5	34%	Weed control if possible given remote location and steep terrain	156	48
	Goat Mesa (Spring Canyon)	802.6	8636.0	0	0%	9	21%	6	24%	None	158	49
	Lake Murray	0.0	0.0	0	0%	7	27%	4	16%	Weed if possible given difficult location-especially weed by trail	160	50
	Marron Valley	150.0	1614.0	1200	1%	12	15%	5	44%	Maintain existing signage	162	51
	Mercy Road	35.0	377.0	150	1%	9	18%	5	35%	None	166	52
	Mission Trails #1	12.0	130.0	5	1%	10	23%	5	18%	Extend fence if trail impacts in future, weeding if Avena enters Dudleya area	168	53
	Mission Trails #2	241.4	2598.0	129	1%	10	18%	5	25%	Weed control if grasses enter Dudleya site	170	54
	Mission Trails #3	50.0	358.0	66	1%	7	18%	6	18%	Weed control if grasses enter Dudleya site	172	55
	Navajo/Mission Gorge	8926.0	96044.0	1500	3%	11	18.0%	10	42%	Monitor weeds-weeding if necessary	174	56
	Otay Lakes	72702.0	782557.6	500		8	14%	3	101%	Weed control implemented 2007-2009	178	57
	Ocean View Hills	†	†	†	†	†	†	†	†	†	†	†
	Paradise Valley	†	†	†	†	†	†	†	†	†	†	†
	Santa Luz	10.0	108.0	24	1%	10	30%	4	22%	Weeding	180	58, 59
Eryngium aristulatum* var. *parishii (San Diego Button Celery)	Del Mar Mesa #1	1047.0	11266.0	4000	7%	18	26%	6	26%	Weeding in uplands	186	60
	Del Mar Mesa #2	3278.0	35284.0	350	7%	15	22%	6	21%	Continue to restrict access via fencing	190	61
	Del Mar Mesa #3	6351.2	68363.9	150000	15%	10	38%	3	3%	Remove Brassica, repair fence	194	62
	General Dynamics	266.8	2872.1	950	2%	15	27%	6	9%	Continue maintaing fence as needed	196	63
	Goat Mesa #1 (Spring Canyon)	293.0	3150.0	350	3%	6	11%	9	39%	Maintain perimeter fence, weed	200	64
	Goat Mesa #2 (Spring Canyon)	1930.7	20778.4	500	3%	6	25%	12	44%	Weeding	202	65
	Otay Lakes	†	†	†	†	†	†	†	†	†	†	†
Lessingia filaginifolia* var. *linifolia (Del Mar Sand Aster)	Carmel Mountain	1658.29	17843.2	100	1%	11	34%	4	6%	Monitor trail; fence/reroute as needed	206	66
	Crest Canyon #1	140	1506	450	13%	7	40%	4	6%	Remove ice plant; monitor trail and fence if expanding	208	67
	Crest Canyon #2	75	807	80	3%	12%	22%	3	3%	None	210	68
	Del Mar Mesa	†	†	†	†	†	†	†	†	†	†	†
	Overlook Park	3052	32842	1000	5%	11	22%	2	2%	Maintain fence	212	69

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

Scientific Name: Dudleya variegata **Common Name:** Variegated Dudleya
Site Name: East Elliott - Creek **Management Unit #:** TBD
Date: 5/21/09 **Management Regime:** TBD
Surveyors and Affiliation/Agency: Betsy Miller City of San Diego Park + Recreation
Mark Jennings City of San Diego Park + Recreation

Species Found? ☐ Yes ☑ No _____
If not, why (if reason known or suspected)?

Total No. Individuals: Ø ☐ Exact ☐ Estimate (use orders of 10, 100 and 1000 for estimates)

Population/Subpopulation Area: Ø _____ Units ☐ Exact (based on GPS mapping) ☐ Estimate

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: +/- 1 ☑ meters ☐ feet

Observation Location: 6316394.856 1897093.542 ☑ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: non-native grassland, sparse coastal sage scrub
Landowner/Manager: City of San Diego Park and Recreation

Overall Site Quality** ☐ Very Good-Excellent ☑ Fair to Good ☑ Poor ☐ Very Poor

Surrounding land use: _____

Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible):
high cover Avena, nearby trail

Management Recommendation/s:
monitor trail - fence if necessary; large scale weed control?

III. ASSOCIATED SPECIES

List dominant, subdominant and invasive species in/near target species observation area/management unit.

*Species'=List all species (sci. name). Use * to indicate non-native species; 'Cover"= % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted).*

Species	Cover	Coll?	Coll. #	Species	Cover	Coll?	Coll. #
* Avena sp.	25			Rhus integrifolia	1		
Isocoma menziesii	8			Achnatherum speciosum	1		
Nassella sp.	3						
* Bromus madritensis ssp. rubens	1						
Eriganum fasciculatum	3						
* Erodium sp.	5						
* Centaurea melitensis	<1						
Lotus scoparius	1						

IV. SITE PHOTOMONITORING

Camera type: Nikon Coolpix 5560

Location [State Plane (ft)]	Direction (facing)	Height	Camera Angle	Photo #	File location/s
6316394.856 1897093.542	SW, W, NW, N	1.1 m	level	827-831	5/05/MSCP

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.

Photo 46. *Dudleya variegata* (Variegated Dudleya) East Elliot - Creek

Panorama from Northwestern edge of population, facing Southwest, West, Northwest, North.
Panorama location is 6316694.86 1897093.54 NAD83 State Plane California Zone 6 (feet)
Photos merged using ArcSoft Panorama Maker 4.

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

Scientific Name: Dudleya variegata **Common Name:** Variegated Dudleya
Site Name: East Elliott - Hill Top **Management Unit #:** TBD
Date: 5/21/09 **Management Regime:** TBD
Surveyors and Affiliation/Agency: Betsy Miller City of San Diego Park + Recreation
Mack Jennings City of San Diego Park + Recreation

Species Found? ☑ Yes ☐ No _____ If not, why (if reason known or suspected)?

Total No. Individuals: 57 ☑ Exact ☐ Estimate (use orders of 10, 100 and 1000 for estimates)

Population/Subpopulation Area: 2 x 5 m (Units) ☐ Exact (based on GPS mapping) ☑ Estimate

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: +/- 1 ☑ meters ☐ feet

Observation Location: 6314264.1244 1897643.7101 ☑ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: Chamise chaparral

Landowner/Manager: City of San Diego Park + Recreation

Overall Site Quality** ☑ Very Good-Excellent ☐ Fair to Good ☐ Poor ☐ Very Poor

Surrounding land use: open space

Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible):	Management Recommendation/s:
too frequent fire	none

III. ASSOCIATED SPECIES

List dominant, subdominant and invasive species in/near target species observation area/management unit.

*Species'=List all species (sci. name). Use * to indicate non-native species; 'Cover'= % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted).*

Species	Cover	Coll?	Coll. #	Species	Cover	Coll?	Coll. #
Dudleya variegata	<1			* Avena sp.	1		
Hazardia squarrosa	<1			* Bromus madritensis ssp. rubens	1		
Eriogonum fasciculatum	3			Navarretia hamata	<1		
Adenostoma fasciculata	15			Calochortus weedii	<1		
Salvia mellifera	1			Hesperoyucca whipplei	1		
Lotus scoparius	5			Ferocactus viridescens	1		
Deinandra fasciculata	1			Porophyllum gracile	1		
Xylococcus bicolor	1			Nassella pulchra	3		

IV. SITE PHOTOMONITORING

Camera type: Nikon CoolPix 5540

Location [State Plane (ft)]	Direction (facing)	Height	Camera Angle	Photo #	File location/s
6314264.1244 1897643.7101	SE, S, SW	1.1 m	level	836-840	s/us/mscp

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.

Photo 47. *Dudleya variegata* (Variegated Dudleya) East Elliot - Hilltop

Panorama from the Southwestern edge of population, facing Southeast, South, Southwest.
Panorama location is 6316264.13 1897663.71 NAD83 State Plane California Zone 6 (feet)
Photos merged using ArcSoft Panorama Maker 4.

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

Scientific Name: Dudleya variegata **Common Name:** Variegated Dudleya
Site Name: East Elliott - Slope **Management Unit #:** TBD
Date: 5/21/09 **Management Regime:** TBD
Surveyors and Affiliation/Agency: Betsy Miller City of San Diego Park + Recreation
Mark Jennings City of San Diego Park + Recreation

Species Found? ☑ Yes ☐ No _____ If not, why (if reason known or suspected)?

Total No. Individuals: 85 ☑ Exact ☐ Estimate (use orders of 10, 100 and 1000 for estimates)

Population/Subpopulation Area: 20 x 25 m (Units) ☐ Exact (based on GPS mapping) ☑ Estimate

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: +/- 1 ☑ meters ☐ feet

Observation Location: 6315750.586 1896466.988 ☑ State Plane (feet) ☐ UTM

II. GENERAL HABITAT DESCRIPTION AND THREATS ASSESSMENT

Vegetation Community: non-native grasslands, post-fire, coastal sage scrub

Landowner/Manager: private

Overall Site Quality** ☐ Very Good-Excellent ☑ Fair to Good ☑ Poor ☐ Very Poor

Surrounding land use: open space

Disturbances and/or threats (be specific, include extent of disturbance or percent cover of disturbance if possible):	Management Recommendation/s:
high cover Avena; Ø impacts from trespass	weed control if possible given remote location + steep terrain

III. ASSOCIATED SPECIES

List dominant, subdominant and invasive species in/near target species observation area/management unit.

*Species'=List all species (sci. name). Use * to indicate non-native species; 'Cover'= % cover of species; Note if collected by checking 'Coll.' column; if submitted to herbarium, note collection number (submit to SDNHM unless otherwise noted).*

Species	Cover	Coll?	Coll. #	Species	Cover	Coll?	Coll. #
Dudleya variegata	1			Ferocactus viridescens	1		
Lotus scoparius	10			* Brachypodium distachyon	5		
Eriogonum fasciculata	1			* Avena sp.	20		
Tabcoma menziesii	<1						
* Erodium sp.	3						
* Bromus madritensis ssp. rubens	5						
Nassella pulchra	1						
* Centaurea melitensis	1						

IV. SITE PHOTOMONITORING

Camera type: Nikon Coolpix 5560

Location [State Plane (ft)]		Direction (facing)	Height	Camera Angle	Photo #	File location/s
6315750.586	1896466.988	NW, N, NE	1.1 m	5° up	832-835	S/DS/INSCP

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.

Photo 48. *Dudleya variegata* (Variegated Dudleya) East Elliot - Slope

Panorama from the Southern edge of population, facing West, Northwest, North, Northeast.
Panorama location is 6315780.58 1896466.98 NAD83 State Plane California Zone 6 (feet)
Photos merged using ArcSoft Panorama Maker 4.

Acknowledgments

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