

Scientific Name:	Common Name:
MSP Occurrence ID:	Existing MSP Occurrence? Yes: _____, No: _____, Unknown: _____
Occurrence Name:	CNDDDB EO#: _____ Translocated? Yes: _____, No: _____, Unknown: _____
Preserve:	
Land Owner:	Land Manager:
Sample Point #:	Existing Sample Point? Yes: _____, No: _____, Unknown: _____
Surveyors & Affiliation:	
Date:	Time Start:

I. HABITAT PLOT INFORMATION. Count # plants in habitat plot, see p. 4 for category definitions for phenology, herbivory, disease & stunted growth. Record notes on p. 3.

Plants/Habitat Plot: _____ Exact: _____ Estimate: _____ Uncertainty? _____ Habitat plot radius _____ m
 For both exact counts and estimates, indicate: Counted/estimated indiv. plants: _____ OR Counted/estimated clusters of plants: _____
 For geophytes: are counts of flowering or vegetative individuals? Flowering: _____ Vegetative: _____
 Phenology in Habitat Plot (Categories 1-6): Vegetative: _____ Flowering: _____ Fruiting: _____ Dead: _____
 Evidence in Habitat Plot (Categories 1-6) of: Herbivory: _____ Disease: _____ Stunted Growth: _____
 Is Habitat Plot within Current Mapped Extent? _____ Yes _____ No

II. HABITAT PLOT LOCATION & SITE PHOTOMONITORING - consult SDMMMP list of GPS coordinates for plot center and photo locations. Enter here only if new habitat plot location or to make a correction to coordinates in list provided.

GPS/Smartphone Accuracy: +/- _____ m Datum: _____ (NAD83 Recommended) Coord. Syst: UTM: _____ State Plane: _____
 Center of Plot Coord: E: _____ N: _____ No Change: _____ New: _____ Correction: _____
 Camera type: _____ PhotoCoord: E: _____ N: _____ No Change: _____ New: _____ Correction: _____
 Location 1: _____
 Direction (facing) _____ Height (m) _____ Camera Angle _____ Up or Down _____ Photo # _____
 E: _____ N: _____
 Photo Location 2 [Coordinates] _____ Direction (facing) _____ Height (m) _____ Camera Angle _____ Up or Down _____ Photo # _____

III. HABITAT PLOT ASSESSMENT - Assess habitat covariates in **10m radius habitat plot**. Vegetation alliance can be assigned using San Diego vegetation key (AECOM 2012) in office or field using "Associated Species" data. See page 4 for mammal activity categories. Record any notes on p. 3.

SANDAG 2012 Vegetation Alliance/Association: _____
 Cover Classes: 1 (0%); 2 (>0 - <10%); 3 (10 to <25%); 4 (25 to <50%); 5 (50% to <75%); 6 (≥75%)
 Cryptogamic Crust Cover: _____ (category) Thatch (Non-Native Grass) Cover: _____ (category)
 Thatch Depth categories: 1 (no thatch); 2 (<1 cm); 3 (1 to <5 cm); 4 (5 to <10 cm); 5 (10 to <15 cm); 6 (15 to < 20 cm); 7 (≥ 20 cm)
 Thatch Depth: Ave. _____ (category) Thatch Depth: Max: _____ cm
 Dead Standing Biomass? Yes: _____ No: _____ If yes, species: _____ Cover Class (1-6): _____ Ave. Height: _____ cm
 Mammal Species Activity Categories (1-4): Feral Pig Activity: _____ Ground Squirrel Activity: _____ Gopher Activity: _____
 Habitat plot representative of maximum extent? Yes: _____ No: _____ If no, note differences on Page 3.

IV. ASSOCIATED SPECIES IN HABITAT PLOT Record cover estimate, not a cover category. See % cover diagram, p. 5. Record substrate, total veg & total cover at bottom. Total cover should be at least 100% to account for entire plot. Record additional data & any notes on p. 3.

Nonnative?	Species	% Cover	Nonnative?	Species	% Cover

Bare Ground: _____ Cryptogamic Soil Crust: _____ Rock: _____ Litter: _____
 Water: _____ Total Live Vegetation: _____ Dead Shrubs: _____ Total Cover: _____ (Σ =100%)

Scientific Name: _____	MSP Occurrence ID: _____	
Preserve: _____	Occurrence Name: _____	
Date: _____	Surveyors & Affiliation/Agency: _____	
V. CURRENT MAPPED EXTENT INFORMATION. Count or estimate number of plants in mapped extent. Area can be calculated based on GIS perimeter mapping or visual mapping on aerial photo in the office.		
# Plants/Current Mapped Extent: _____, Exact Count: _____, Estimate (1000s, 10k): _____, Uncertainty? _____		
For both exact counts and estimates, indicate: Counted/estimated individual plants: _____ OR Counted/estimated clusters of plants: _____		
For geophytes: are counts of flowering or vegetative individuals? Flowering: _____ Vegetative: _____		
Area of Current Mapped Extent: _____ Units: _____ Exact (GPS mapping): _____ Estimate: _____		
Perimeter of current extent determined by walking it or estimated by other means (mapped on aerials)? Walked: _____ Other (describe p. 3): _____		
Species in Maximum Extent? Yes: _____ No: _____ If not, why: _____		
VI. THREATS ASSESSMENT IN MAXIMUM EXTENT - Assess threats within the occurrence's maximum extent (cumulative extent over years of monitoring) plus 10-m surrounding buffer . Record notes on p. 3.		
Surrounding Land Use/Activity at or Adjacent to Site: _____		
<i>Disturbance Classes (rank each threat as 1-7): 1 = no sign of disturbance, 2 = disturbance in 10m surrounding buffer but not within maximum extent, 3 = disturbance occurs in >0 % to <10% of area within maximum extent, 4 = disturbance in 10% to <25% of maximum extent, 5 = disturbance in 25 to <50% of maximum extent, 6 = disturbance occurs within 50 to <75% of maximum extent, and 7 = disturbance occurs within ≥75% of maximum extent.</i>		
Non-Native Forbs _____	Feral Pig Activity _____	Erosion _____
Non-Native Grasses _____	Trampling _____	Urban Runoff _____
Non-Native Woody Plants _____	Vandalism _____	Slope Movement _____
Competitive Native Plants _____	Grazing (Y/N/UNK) _____	Soil Compaction _____
Dumping/Trash _____	Historic Agriculture (Y/N/Unk) _____	
Encampments _____	Altered Hydrology _____	
Fuel Modification Zone/Fire Break _____		
Road Construction/Maintenance _____ If Observed, Briefly Describe: _____		
Vegetation Clearing _____ If Observed, Briefly Describe: _____		
Brush Management/Restoration _____ If Observed, Briefly Describe: _____		
ORV Activity _____ If Observed, List Type(s) of ORV Activity: _____		
Evidence of Recent Fire _____ If Sign of Recent Fire: Year Burned? _____ OR Unknown Burn Year? _____		
Disturbance from Trails (authorized & unauthorized) _____ If Trails are Present, are they Authorized (circle one)? Yes / No / Both / Unknown		
Type of Trail Use (Yes/No)? Hiking: _____ Biking: _____ Equestrian: _____ Dog: _____ Service Vehicles: _____		
Other (Describe): _____		
Illegal Trail Use? Yes: _____ No: _____ Unknown: _____ Describe: _____		
Other Disturbance? List & Rank: _____		
Collection? Yes: _____ No: _____ Collector: _____		
Collection #: _____ Herbarium: _____ Species Collected: _____		
Collection 2, Collector: _____ (enter additional collections on p. 3)		
Collection #: _____ Herbarium: _____ Species Collected: _____		

Occurrence ID: _____ Species: _____ Date: _____

VI. MANAGEMENT RECOMMENDATIONS

VII. MANAGEMENT ACTIONS IN LAST YEAR

VIII. CNDDDB SPECIES DETECTED & NOTES

List any sensitive plant or animal species to add to the CNDDDB:

Time Finish: _____

Categories of % Individuals in Habitat Plot for Phenological Stages (Vegetative, Flowering, Fruiting & Dead) and for Evidence of Herbivory, Disease and Stunted Growth.

- 1 = 0% (not detected)
- 2 = >0% to <10%
- 3 = 10% to <25%
- 4 = 25% to <50%
- 5 = 50% to <75%
- 6 = ≥75%

% Cover Class Definitions within Habitat Plot for Cryptogamic Crust and Thatch.

See page 5 for illustrations of different cover classes.

- 1 = 0% cover (not detected)
- 2 = >0% to <10% cover
- 3 = 10% to <25% cover
- 4 = 25% to <50% cover
- 5 = 50% to <75% cover
- 6 = ≥75% cover

Feral Pig Activity within Habitat Plot:

- 1 = No feral pig activity (rooting, wallowing, vegetation destruction, tracks, scat, pig) detected.
- 2 = Signs of pig activity (rooting, wallowing, vegetation destruction) in habitat plot appear months old.
- 3 = Signs of recent pig activity (rooting, wallowing, vegetation destruction, tracks, scat, pig) in adjacent area but not within habitat plot.
- 4 = Recent signs of pig activity (rooting, wallowing, vegetation destruction, tracks, scat, pigs) within habitat plot.

Ground Squirrel Activity within Habitat Plot:

- 1 = No ground squirrel burrows detected.
- 2 = Burrows and/or ground squirrels observed in adjacent area but not within habitat plot.
- 3 = Single squirrel or burrow seen within habitat plot.
- 4 = Multiple burrows and/or squirrels seen within habitat plot.

Botta's Pocket Gopher Activity within Habitat Plot:

- 1 = No pocket gopher mounds detected.
- 2 = Mounds or gophers observed in adjacent area but not within habitat plot.
- 3 = <10 mounds observed within habitat plot.
- 4 = ≥10 mounds or one or more gophers seen within habitat plot.

Disturbance Categories within the Maximum Extent:

- 1 = No sign of disturbance within maximum extent or in adjacent 10 m buffer.
- 2 = Disturbance does not occur within maximum extent but is detected within the surrounding 10 m buffer area.
- 3 = Disturbance present in >0% to <10% of area within maximum extent.
- 4 = Disturbance occurs in 10% to <25% of area within maximum extent.
- 5 = Disturbance occurs in 25% to <50% of area within maximum extent.
- 6 = Disturbance occurs 50% to <75% of area within maximum extent.
- 7 = Disturbance occurs ≥75% of area within maximum extent.

Cover Diagrams from CNPS

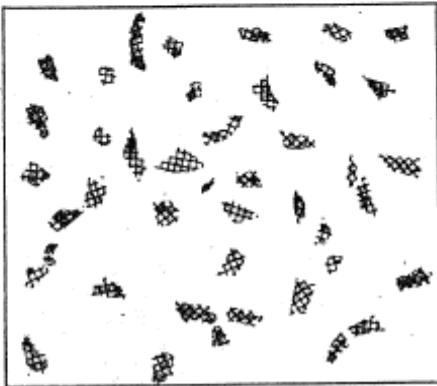
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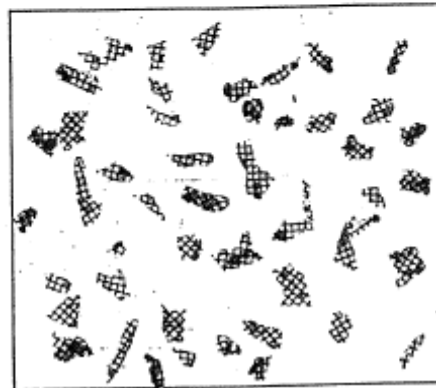
5%



10%



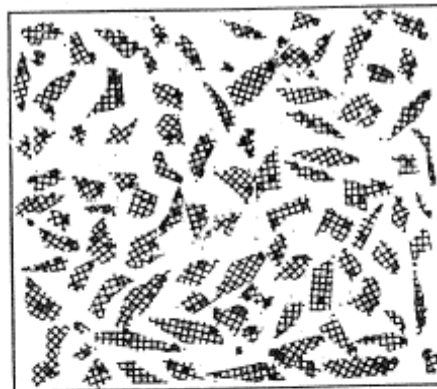
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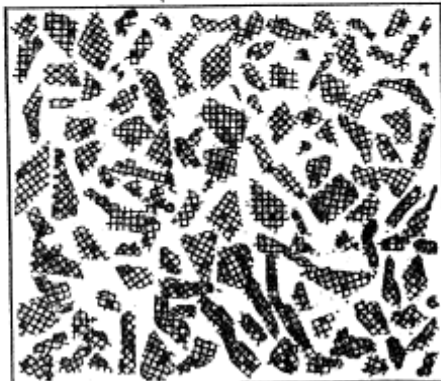
25%



35%



50%



75%

