Scientific Name:	*Common Name:*
MSP Occurrence ID:	*New MSP Occurrence? Yes:____, No:____, Unknown:____*
Sample Point #:	*New Sample Point? Yes:____, No:____, Unknown:____*
Occurrence Name: *CNDDB EO#:*	*Translocated? Yes:____, No:____, Unknown:____*
Preserve:	
Land Owner:	*Land Manager:*
Surveyors & Affiliation:	
Date:	*Time Start:*

I. SAMPLE PLOT INFORMATION. *Count # plants in 10m radius sample plot, see p. 4 for category definitions for phenology, herbivory, disease & stunted growth. Record notes on p. 3.*

Plants/Sample Plot:_____ Exact:_____ Estimate:_____ Uncertainty?_____ Sample 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 Sample Plot (Categories 1-6): Vegetative: _____ Flowering:_____ Fruiting:_____ Dead:_____

Evidence in Sample Plot (Categories 1-6) of: Herbivory: _____ Disease:_____ Stunted Growth:_____

Is Sample Plot within Current Mapped Extent? _____ Yes _____ No

II. SAMPLE PLOT LOCATION & SITE PHOTOMONITORING - *consult SDMMP 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. SAMPLE PLOT ASSESSMENT - *Assess habitat covariates in **10m radius sample t 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 SAMPLE PLOT *Record cover estimate, not cover category. See % cover diagram, p. 5. Record substrate, total veg & total cover at bottom of form. Total cover should be at least 100% to account for entire plot. Record notes on p. 3.*

Species	% Cover	Species	% Cover

Bare Ground:_____ Cryptogamic Soil Crust:_____ Rock: _____ Litter:_____

Water: _____ Total Live Vegetation: _____ Dead Shrubs: _____ Total Cover: _____ (∑ =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:

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.

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:_____

Restoration Project (Impacts) _____ 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. CNDDB SPECIES DETECTED & NOTES

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

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Time Finish: _____

Categories of % Individuals in Sample 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 Sample 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 Sample Plot:

1 = No feral pig activity (rooting, wallowing, vegetation destruction, tracks, scat, pig) detected.

2 = Signs of pig activity (rooting, wallowing, vegetation destruction) in sample plot appear months old.

3 = Signs of recent pig activity (rooting, wallowing, vegetation destruction, tracks, scat, pig) in adjacent area but not within sample plot.

4 = Recent signs of pig activity (rooting, wallowing, vegetation destruction, tracks, scat, pigs) within sample plot.

Ground Squirrel Activity within Sample Plot:

1 = No ground squirrel burrows detected.

2 = Burrows and/or ground squirrels observed in adjacent area but not within sample plot.

3 = Single squirrel or burrow seen within sample plot.

4 = Multiple burrows and/or squirrels seen within sample plot.

Botta's Pocket Gopher Activity within Sample Plot:

1 = No pocket gopher mounds detected.

2 = Mounds or gophers observed in adjacent area but not within sample plot.

3 = <10 mounds observed within sample plot.

4 = ≥10 mounds or one or more gophers seen within sample 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.

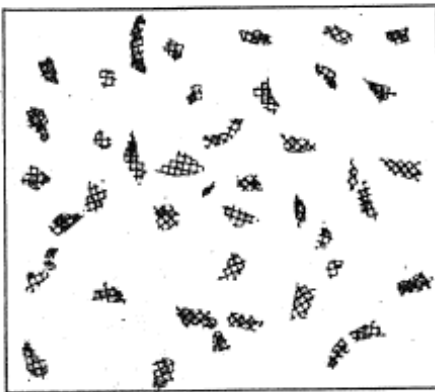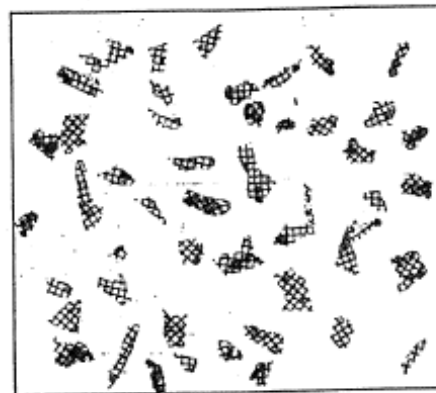7 = Disturbance occurs ≥75% of area within maximum extent.
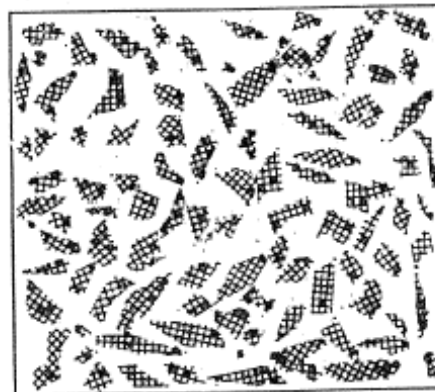
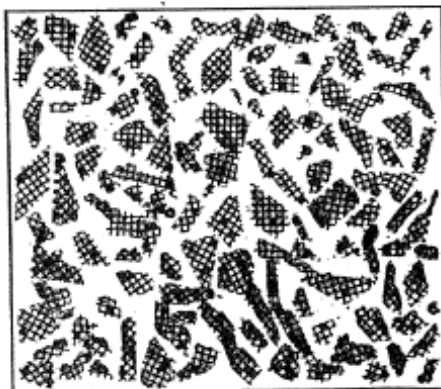Cover Diagrams from CNPS

1%

5%

10%

15%

25%

35%

50%

75%