*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:_____ Not Applicable: _____

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 |
|---|---|---|---|
| | | | |
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| | | | |

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:_____ Not Applicable:_____

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:_____ _____

Is the Current Mapped Extent different from previous years due to variation in survey efforts from previous years? (Y/N) If yes, 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 exent, 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* _____ | Sea-level rise* _____ |
| Competitive Native Plants* _____ | Grazing (Y/N/UNK)* _____ | Slope Movement* _____ |
| Dumping/Trash* _____ | Historic Agriculture (Y/N/Unk)* _____ | Soil Compaction* _____ |
| Encampments* _____ | Altered Hydrology * _____ | *Additional room for notes on page 4. |

Drought (low, medium, or high severity) _____ If Observed, Briefly Describe: _____

Fuel Modification Zone/Fire Break _____ If Observed, Briefly Describe: _____

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:_____

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:** _____

Occurrence ID:_____ Species:_____ Date:_____

Non-Native Forbs. If Observed, Briefly Describe:

Non-Native Grasses. If Observed, Briefly Describe:

Non-Native Woody Plants. If Observed, Briefly Describe:

Competitive Native Plants. If Observed, Briefly Describe:

Dumping/Trash. If Observed, Briefly Describe:

Encampments. If Observed, Briefly Describe:

Feral Pig Activity. If Observed, Briefly Describe:

Trampling. If Observed, Briefly Describe:

Vandalism. If Observed, Briefly Describe:

Grazing. If Observed, Briefly Describe:

Historic Agriculture. If Observed, Briefly Describe:

Altered Hydrology. If Observed, Briefly Describe:

Sea level rise. If Observed, Briefly Describe:

Erosion. If Observed, Briefly Describe:

Urban Runoff. If Observed, Briefly Describe:

Slope Movement. If Observed, Briefly Describe:

Soil Compaction. If Observed, Briefly Describe:

**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

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.

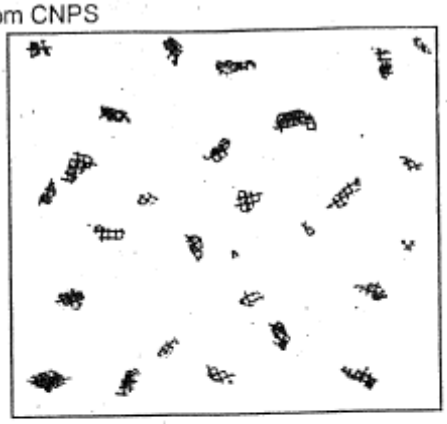
6 = Disturbance occurs 50% to <75% of area within maximum extent.

7 = Disturbance occurs ≥75% of area within maximum extent.

**CNPS Cover Diagram** 

Cover Diagrams from CNPS

1%



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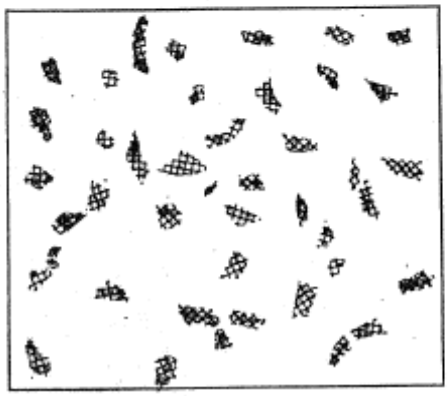

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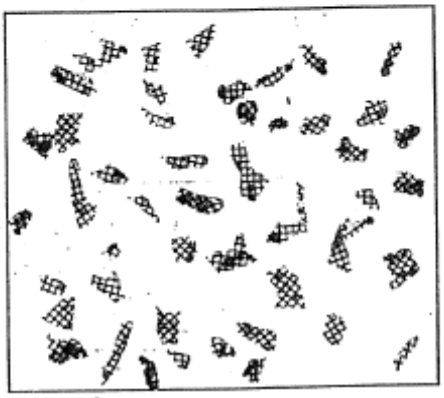

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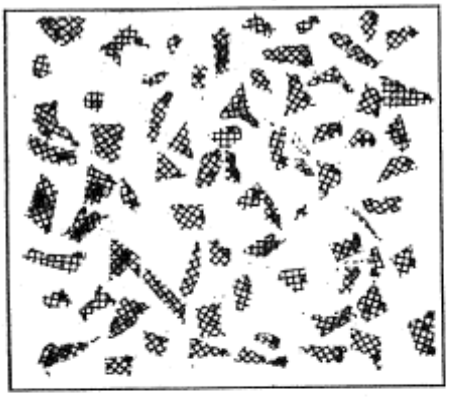

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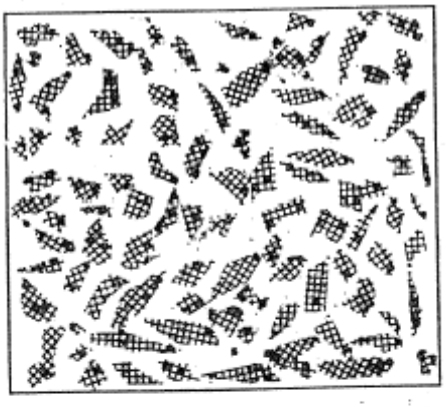

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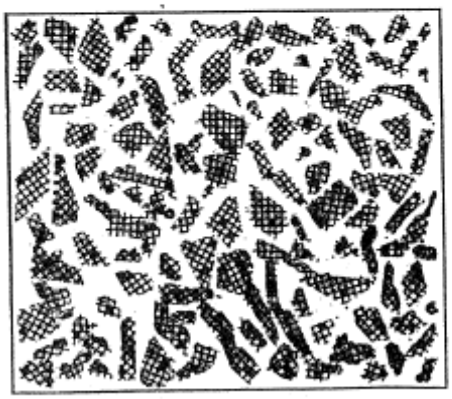

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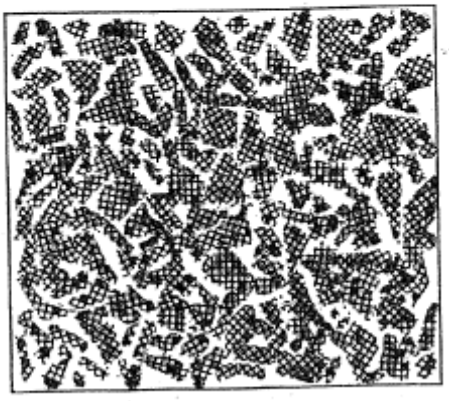

75%