National Park Service U.S. Department of the Interior Lake Mead National Recreation Area



# 2005-NPS-609E

Interlocal Agreement for Inventory, Research, and Monitoring for Covered Plant Species Technical Conditions



Five 1 meter plots in each of the 3 density types along the transect



Perennial vegetation inventory in high, low, and no density

# **Vegetation Data Collected**

### **5** Sandy sites

Percent cover recorded within a 5 m radius from the center of the plot:
all perennial vegetation
dead/alive tamarisk
dead/alive russian thistle

Percent cover recorded within the 1 m plot:
rock
gravel
sand

#### 7 Gypsum sites

 The 6 closest rare plants from the center of each 1 m plot were recorded with:

□ species

□ distance

compass bearing

whether the plant was alive or dead

Percent cover data recorded within the 1 m plot
species of perennial vegetation
rock/gravel
disturbance
biological crust (as well as a crust sample at each plot)

•A penetrometer was used to record how compact the soil was along the transect at each plot

•A 20 m belt transect on either side of the main transect was used to record perennial vegetation within each of the density types. The number of individuals per species was recorded.

# **Soil Data Collected**

• Depth in inches for the 3 horizons (gypsum sites) and 1 horizon-6 inches (sandy sites)

• The Munsell color system was used to record the color of the soil for each horizon

 Compliant cavity technique was used to gather data for bulk density and soil samples

Soil analysis performed:
water soluble ions
%CaCO3
total C & N
Organic Carbon
pH & EC
particle size analyses LASR
bulk density
available P

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