2010 Volunteer Mohave Ground Squirrel Studies Summary for the MGS TAG Meeting

September 2010

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Volunteer MGS Studies

Where did the idea come from?

BROWN FORMAN | COCKTAIL TIMES.COM

Purpose and Need

- With Exception of DOD Studies Virtually all MGS Presence/Absence Data are based on Surveys for Development Projects leaving much of the Species' Range Unsurveyed

- Take Advantage of June Gap in the Survey Protocol to gather Additional Data in Reproductive Years

Ad-Hoc Volunteer Coordinating Committee

- Don Mitchell, ECORP Consulting, Inc.
- Russell Scofield, BLM
- Scott Osborn, CDFG
- Bronwyn Hogan, CDFG
- Phil Leitner, ESRP
- Larry LaPre, BLM

Survey Types

- Trapping (with tissue sampling where appropriate)
- Motion-Triggered Camera Stations
- Visual/Auditory Transects

Targeted Trapping Locations for 2010

- Hinkley to Kramer Junction (MGS/RTGS Contact Zone)
- Kramer to Mojave
- Boron (North of EAFB but South of Hwy 58)
- South of EAFB
- North of Searles
- Near Weldon

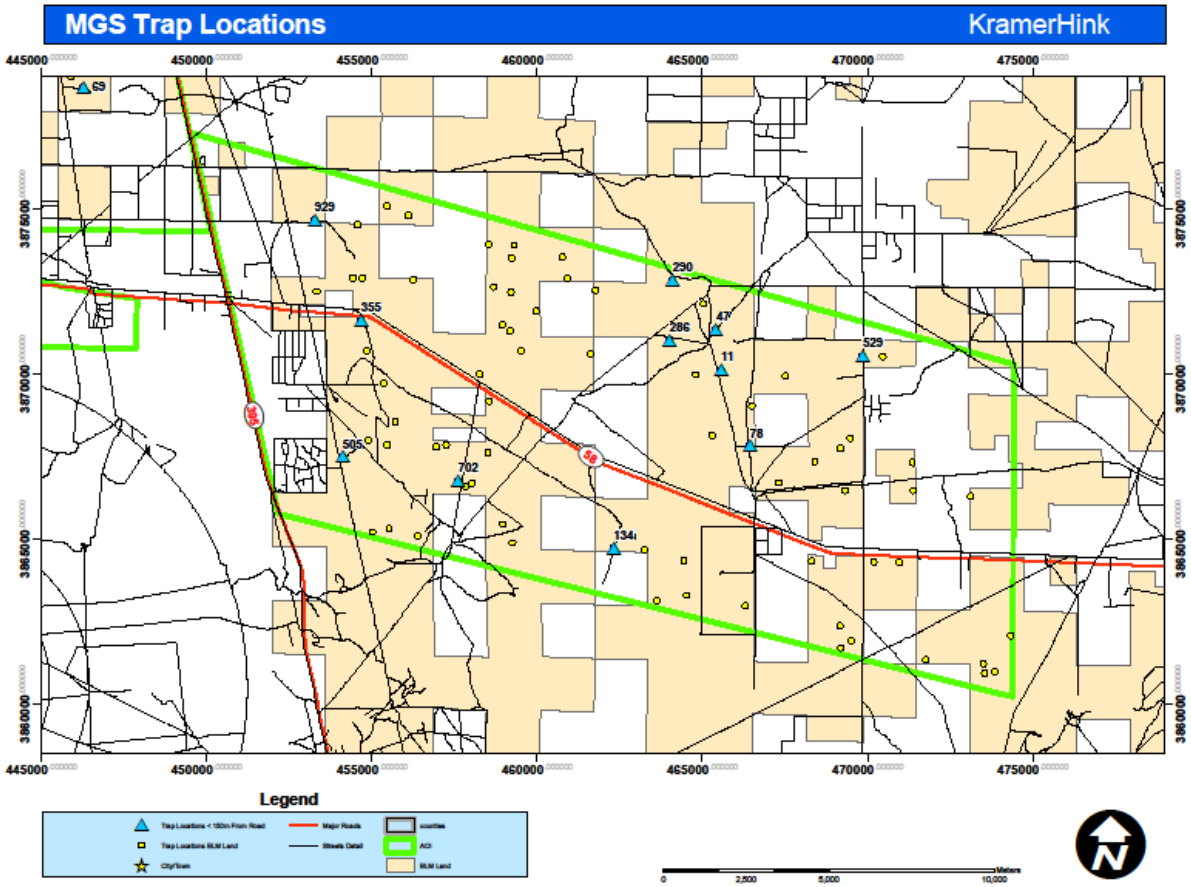
Trapping Site Selection

- All sites on BLM Land
- 1,000 Random Points Generated
- Filter Applied for Accessibility (within 150m of Passable Paved or Dirt Roads)
- Boron and North of Searles (special cases)
  - Only one small parcel of BLM land in this area
  - North of Searles sites placed at locations of 1990s records in order to obtain tissue samples
- Surveyor Choice

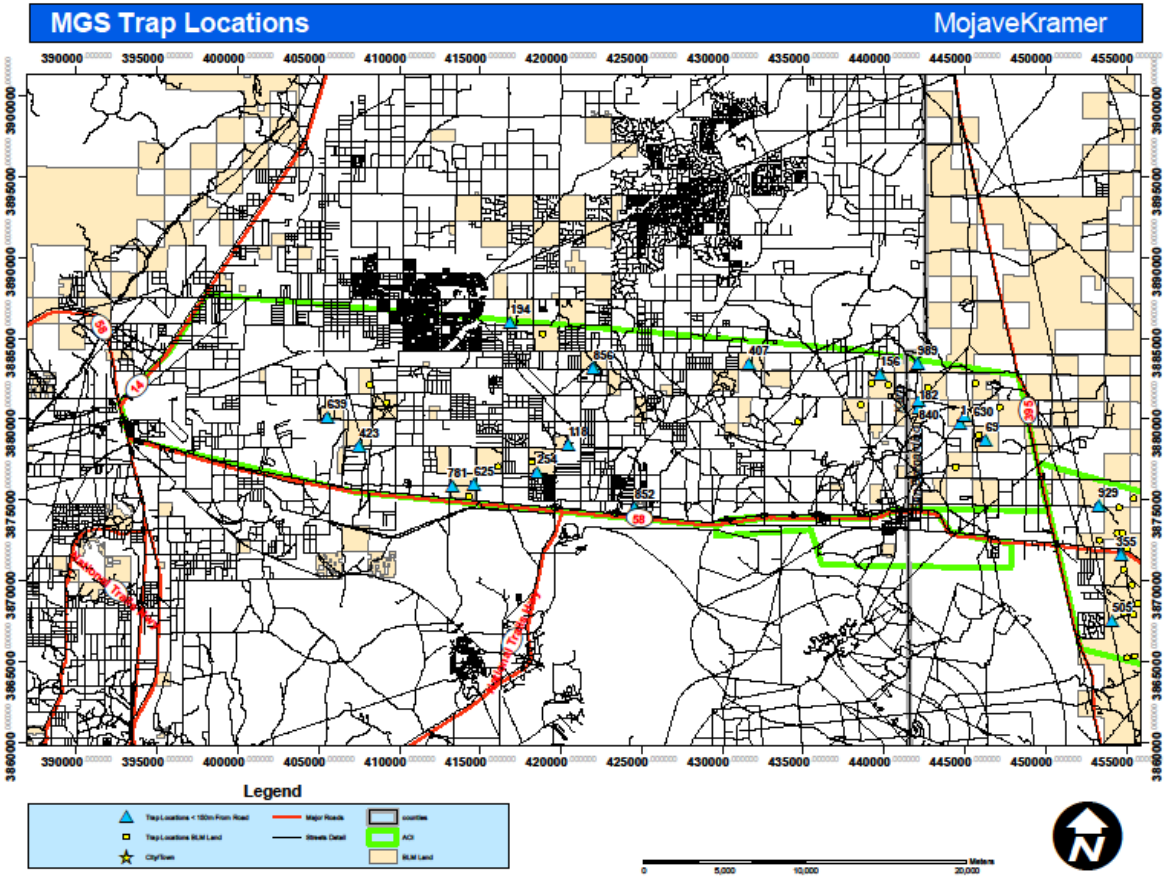
Trapping Site Selection

- Grid points in each survey area were divided by the number of trappers assigned to each survey area and surveyors given their choice of 2-6 grid locations based on their preliminary field visits.

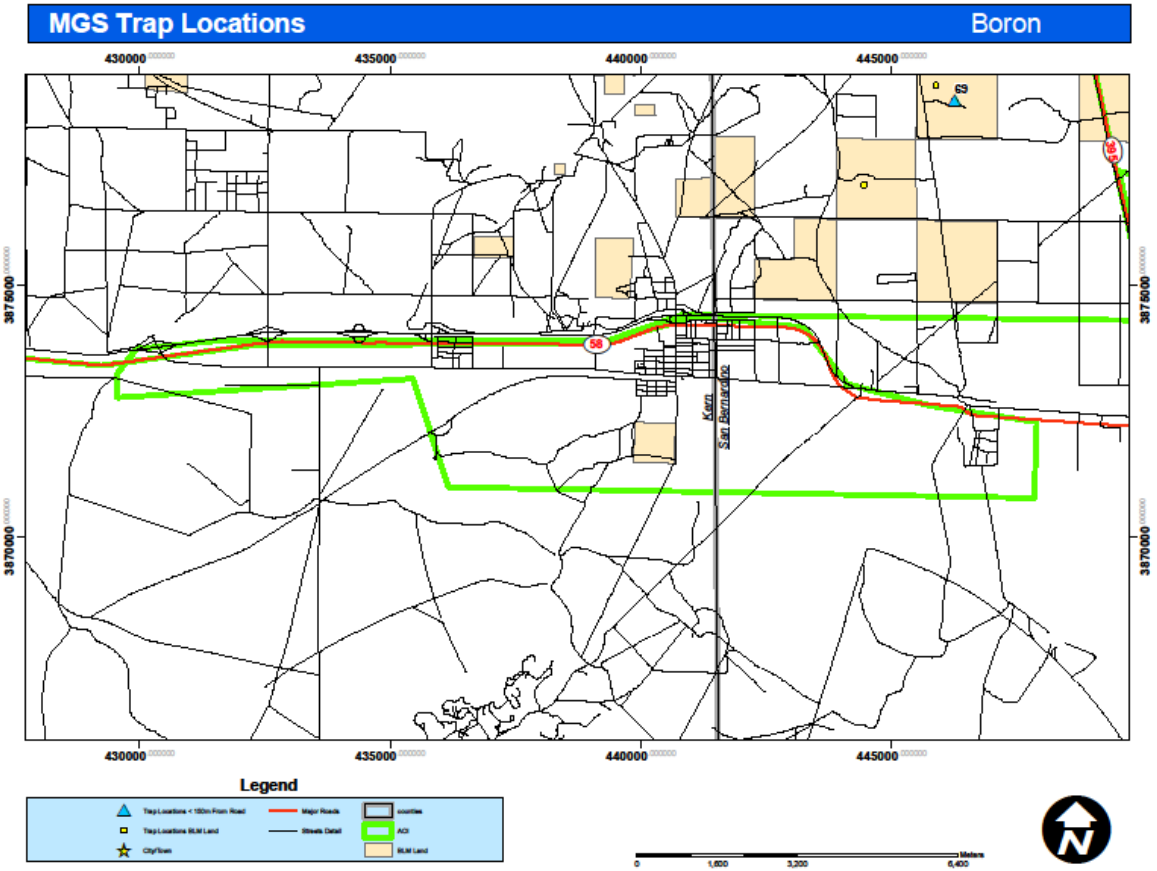
Hinkley to Kramer Junction



Kramer to Mojave

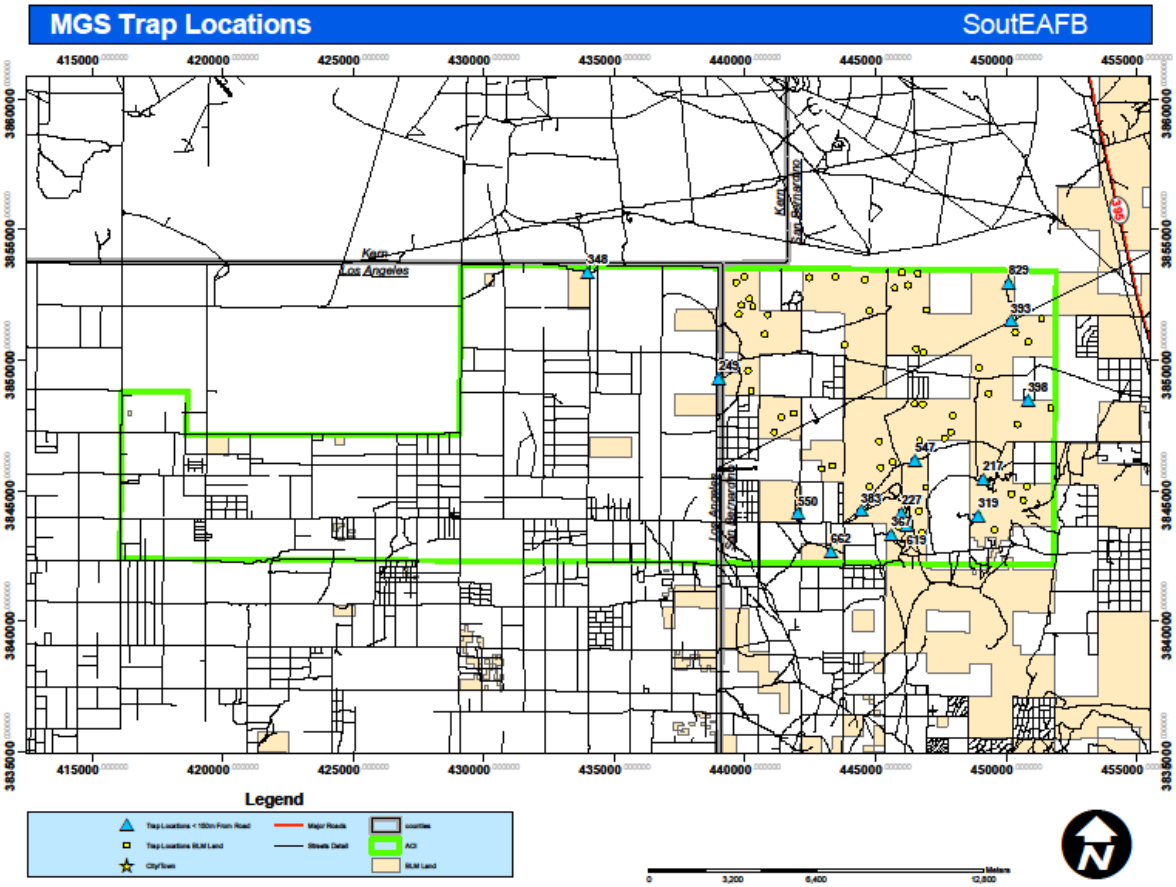


Boron

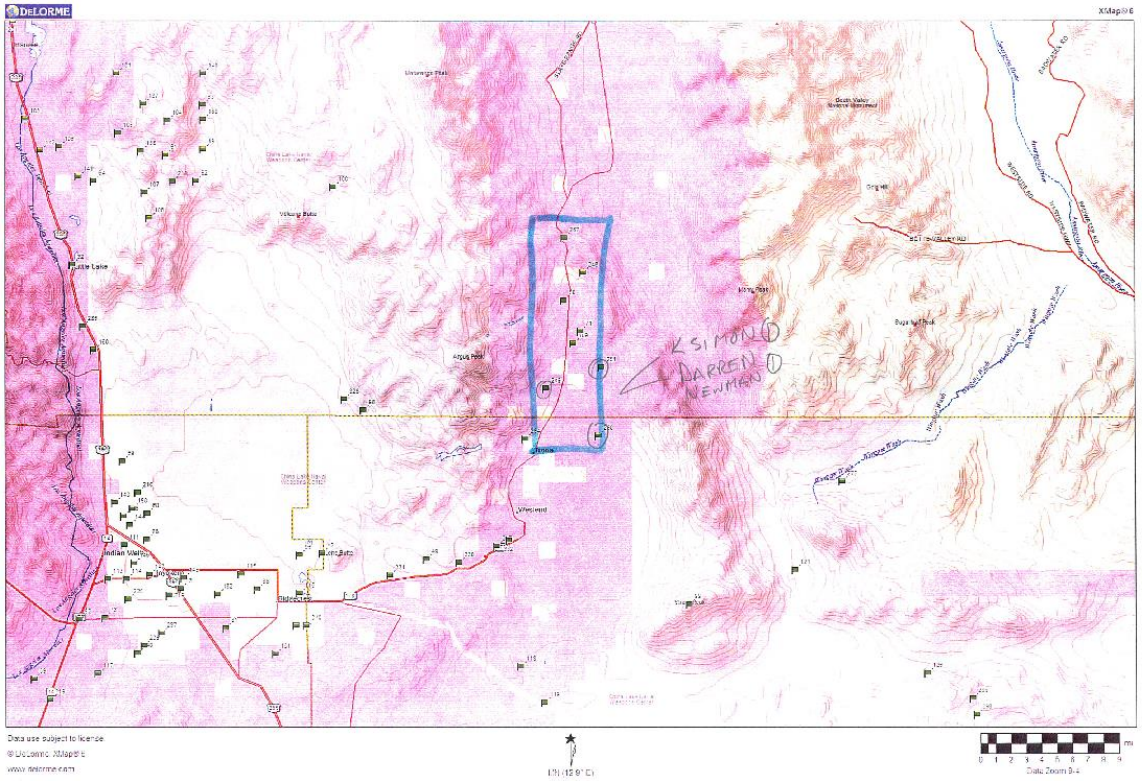


MGS Trap Locations
Boron
430000
435000
440000
445000
3875000
3870000
58
Kern
San Bernardino
Legend
Trap Locations < 150m From Road
Trap Locations BLM Land
City/Town
Major Roads
Streets Detail
counties
AOI
BLM Land
0
1,600
3,200
6,400
Meters

South of EAFB



North of Searles Lake



Preliminary Results

- 7 grids trapped for five days
  - 5 in Hinkley to Kramer Area
  - 1 in Kramer to Mojave Area
  - 1 in North of Searles Area
- 7 Motion-Triggered Camera Stations run for 3-5 days (all in Hinkley to Kramer Area)

Preliminary Results

- Trapping Conducted From Mid May To Early July
- Vegetation Data Collected at Each Grid
- All Grids Trapped were in Suitable Habitat
- MGS Captured only at North of Searles Grid
- No Round Tailed GS Captures
- No MGS or RTGS Detected By Cameras

Preliminary Results North of Searles Grid

- Choosing the site
- Catching MGS??
- Check this out . . .

Preliminary Results North of Searles Grid

Preliminary Results
North of Searles Grid

Preliminary Results
North of Searles Grid

Preliminary Results
North of Searles Grid

Preliminary Results
North of Searles Grid

Still to Come

- Data to CDFG & GIS Staff at MDEIP
- Results of Genetic Analysis From North of Searles Samples
- 2011 & Beyond?

Thanks!

- Surveyors
  - Kathy Simon
  - Leo Simone
  - Mark Allaback
  - Steve Montgomery
  - Phil Brylski
  - Caleb Murphy
  - Brad Haley
  - Kristen Mobraaten
  - Don Mitchell

GIS
-Fon Duke
-Ryan Schulz

Assistants
- Lee Ripma
- Cara Snellen
-Rachel Woodard

- Thanks also to all the others who tried to help but couldn’t due to other commitments or our logistical difficulties.

Questions??