

# **Request for Proposals (RFP)**

Proposals are Due October 31, 2024 (5:00 pm PST)

Camera Trapping for 2024 Pilot Study for Mohave Ground Squirrel RFP MGSWCB 24-1

#### MGSCC Grant Coordinator:

Kathryn Simon, email kathy.simon@mgsconservation.org, Phone 909-289-4649

#### Alternate MGSCC Contact for Administrative Questions:

Don Mitchell, email don.mitchell@mgsconservation.org, Phone 909-754-6939

### \*Proposals will be disqualified and not reviewed if they are

- Submitted after the submittal end time stated above,
- Incomplete, or
- Not meeting the specifications of the scope of work and costs detailed below.

# Introduction

The Mohave Ground Squirrel Conservation Council (MGSCC) is a 501(c)(3) nonprofit organization formed in January 2023 with a mission to assure the perpetual survival of viable populations of Mohave Ground Squirrels throughout their historical range and any future expansion areas. More information can be found for the MGSCC at our website at mgsconservation.org.

The MGSCC has been awarded several grants related to establishing a long-term monitoring program for the Mohave ground squirrel (*Xerospermophilus mohavensis*), a California threatened species endemic to the western Mojave Desert of California. 2025 will be the second year of a pilot program designed by U.S. Geological Survey (USGS) to assist in determining methods for expanding this effort throughout the species' range. As part of this effort, up to 195 camera trap stations and 26 rain gauges will be maintained.

# **Proposal Schedule**

October 18, 2024, 5pm PST October 23, 2024, 5pm PST October 31, 2024, 5pm PST

Questions sent to contact above by email. All questions and answers to be posted on MGSCC website. All final proposals due to contact listed above via email.

# **Performance Period and Location**

The period of performance for this work is January through December 2025. The figure on the following page shows the location of the approximately 5,000-acre study area, existing camera cells, upload and download speeds across the site for commonly used providers, rain gauges, and open routes of travel.



# Existing Cameras and Rain Gauges

#### Existing Cameras

The following cameras are located on the project site – specific locations will be given to the successful contractor.

All cameras have solar cells and battery backup, with 512GB SD Memory Cards, security enclosures and locks.

- 81 cameras for occupancy cells, represented by the black cells. These are at or near the centroid of the grid cell. These cameras will not be baited at any time during 2025.
- 103 demographic cameras, represented by the blue cells. These cameras will be baited between May and August 2025.
- 14 dual cameras, represented by the magenta cells. These cameras will be baited between May and August 2025.
- A subset of cameras (approximately 75) is currently equipped with cellular capability and batch download photos nightly. The successful contractor will be given access to the cellular program information.

#### Potential Additional Cameras

We do not currently have access to one land parcel on the west side of the study area, shown in white on the figure. If we gain access, the following cameras will be installed by the contractor in that section: 3 additional occupancy cameras.

8 additional demography cameras.

1 additional dual camera.

## Existing Rain Gauges

26 existing rain gauges are distributed throughout the study area as shown on the figure.

## Scope of Work

This scope of work includes the following elements, with detailed instructions being given to the successful contractor:

- 1. If access is obtained to the final private land section, placing of additional cameras and adding those to current maintenance process.
- 2. Conducting camera maintenance throughout 2025 as described below.
- 3. Processing camera images as described below.
- 4. Conducting rain gauge checks.

All access will be using existing open routes as shown on the figure and walking to camera and rain gauge stations.

All activities will be recorded in ArcGIS Field Maps and Survey123 with login information provided to the successful contractor by MGSCC. These data will include such fields as surveyor, dates and times of checks, camera numbers, data related to camera checking, and any signs of human disturbance to the camera station including theft or vandalism. Theft or vandalism will be reported to the MGSCC Grant Coordinator within 24 hours.

Meetings will be held throughout 2025 to ensure successful completion of this scope of work. The following meetings are anticipated, and all meetings will be held online using Microsoft Teams:

- January 2025 kickoff meeting with Contractor, MGSCC and USGS. Contractor will be supplied with specific written directions related to uploads and naming conventions, login info for Field Maps and Survey123, and access to cellular camera system.
- Approximately 6 additional shorter meetings throughout the year to coordinate with MGSCC and USGS to ensure continued success of camera system.

#### Placing Additional Cameras

Twelve additional cameras will be placed upon gaining access to the final private land section within the study area. This includes:

- Searching area for best appropriate habitat for camera placement.
- Placing camera post and attaching camera, security box, lock, solar panel and cable.
- Inserting camera card and batteries, checking camera settings, and placing camera into operation including starting cellular system as needed.

#### Camera Station Maintenance

Cameras will be maintained monthly, keeping the schedule consistent for each camera. Maintenance will include:

- 1. Field Activities at Each Camera Station
  - a. Removal of any vegetation that could obstruct the camera target area (by hand or using hand tools such as a hula hoe).
  - b. Checking battery life and replacing batteries as needed.
  - c. Inserting a new SD card.
  - d. Checking all parts of the camera setup to ensure proper functioning.
  - e. Submitting Field Maps and Survey123 records for camera checks

 In May 2025, bait tubes will be installed at all demography and dual cameras (138 with possible additional 9), as shown here in sample photo. Checking bait tubes will be added to camera maintenance and will include re-orienting tube and adding bait as needed.



area.

3. Removing all bait tubes during August 2025 checks, cleaning and storing at Ridgecrest field house storage

The contractor will have staff available to fix camera station issues on short notice so that any issue is corrected within 24 hours to reduce loss of images. Such issues in the past have include cameras knocked down by sheep in the western part of the study area, managing rapid vegetation growth, and kit fox urination clouding camera lenses.

#### Image Processing

- 1. Downloading, renaming, and uploading images
  - a. Downloading images from the SD Cards.
  - b. Saving a "clean" set of untouched images.
  - c. Creating a second set by renaming files to the project standards.
  - d. Uploading both sets of imagines to the MGSCC Box site.
- 2. SD Card Maintenance
  - a. Regularly inspect memory cards for damage, such as bent, compressed, heat, and water damage.
  - b. Regularly format SD cards as needed.
- 3. Quality Assurance/Quality Control (QA/QC) for Image Data
  - a. Image Review: Contractor will review a subset of images to assess the quality and clarity of the images.
  - b. Data Integrity: Contractor will verify that all images were successfully downloaded, renamed, and uploaded, and that no data loss occurred during the process. Any discrepancies will be reported to the MGSCC Grant Coordinator within 24 hours.
  - c. Documentation: Record all QA/QC activities, including any issues identified and the corrective actions taken. The QA/QC will be submitted to the MGSCC Coordinator at least monthly.

The contractor should expect to process millions of approximately 560KB images during the period of performance. In 2024, approximately nine million images were processed.

#### Rain Gauge Checks

Rain gauges will be checked monthly, keeping the schedule consistent for each rain gauge. Checks will include:

- 1. Reading rainfall and completing Field Maps and Survey123 for rain gauge checks
- 2. Emptying rain gauge, cleaning out as needed, and replacing mineral oil and mesh screening.

#### Materials Provided by MGSCC

MGSCC maintains a project field house in Ridgecrest, CA approximately 30-45 minutes north of the study area. The successful contractor will be provided full access to the house and storage area. Amenities at the house include high-speed internet, printer, sleeping and shower facilities, fully equipped kitchen, and laundry facilities.

Materials and information provided by MGSCC:

• Additional materials are available at the MGSCC field house, including additional cameras,

batteries and SD cards, SD card readers, solar panels, stakes and other security materials for camera stations, additional rain gauge materials.

- Access to cloud file storage to upload camera images.
- Field Maps and/or Survey123 licenses as needed.
- Access letters for this project will be provided to the successful bidder (BLM and private landowners), as well as maps where access has not been granted on private parcels.
- Access to Ridgecrest field house and storage area.

#### Contractor Provided Materials

Contractor is expected to provide the following in their scope of work and cost estimate:

- Transportation, lodging, food, which can be offset using the field house as needed.
- Insurance including auto and commercial liability insurance.
- Contractor will follow all requirements of BLM and other landowners regarding access. Access will only be by open BLM routes and by foot. Four-wheel drive or similar vehicles may be needed to access some sites as most of the study area is accessible only by dirt roads.
- If project funders, MGSCC Grant Coordinator, USGS or MGSCC or other project partners request time to accompany camera crew, this will be allowed and coordinated by the MGSCC Grant Coordinator to ensure least interference with on-going work.

#### Deliverables

Deliverables include those that are daily, monthly and end of funding agreement as outlined below.

#### Daily/Weekly Deliverables

- 1. Completion of Field Maps and/or Survey123 as provided by MGSCC daily.
- 2. Completion of SD card uploads on the same day cards are collected.
- 3. Completion of renamed set of photos within 1 week of the date SD cards are collected.
- 4. Image QA/QC documentation within 1 week of the date SD Cards are collected.
- 5. Notification by phone and/or email to the MGSCC Project Manager within 24 hours of any camera theft or vandalism with specific information on location and details.

#### Monthly Deliverables

Invoicing for the previous month within 5 business days of the end of the month.

At least monthly the Contractor will complete the "Camera Problem Log," and "Photo Upload Tracking" databases provided by the MGSCC.

- 1. The "Camera Problem Log" document camera-related issues, including:
  - person entering the log,
  - ♦ date,
  - camera ID,
  - issue description,
  - person resolved by, and
  - resolution date.
- 2. The "Photo Upload Tracking" database tracks photo uploads, detailing:
  - camera ID,
  - start and retrieval dates/times,
  - interruptions,
  - comments, SD card IDs,
  - image counts,

- upload completion status,
- processed folder name, and
- QA/QC comments.

MGSCC reserves the right to modify the logs and will notify the contractor of any changes.

# End of the Agreement

After completion of December 2025 camera and rain gauge checks, Contractor will inform the MGSCC Grant Coordinator that work is completed. Final invoicing by January 15, 2026.

# **Proposal Elements**

Provide an approach and costing information.

Approach will complete the scope of work described above, or a portion of that work. If a portion is being proposed, list the number of camera stations and general location your scope and cost would cover. For example, 48 demography camera stations in the western half of the study area. Preference may be given to proposals that cover the full scope of work.

The approach should be no more than 6 pages single-sided, 1.5 line spacing and will include the following information:

- Approach to completing scope, or portion of scope proposed.
- Key personnel.
- 2 similar projects with brief description.

Resumes and/or CVs may be included as an attachment and not included in page length. Limit each to two pages maximum of most relevant information.

Provide Not-to-Exceed costing for the entire scope of work presented above, or for a specific portion of this scope. You may provide one cost, or more detailed costing explanation. Costing information shall not exceed one page. If a portion is being proposed, list the number of camera stations and general location your scope and budget would cover. For example, 48 demography camera stations in the western half of the study area.

Please provide any information on discounts applied related to non-profit research funding.

# Additional Information

Retention: the MGSCC grants have a retention clause and up to 10% of each invoice may be held in retention until the end of each state fiscal year. MGSCC does intend to pass the same retention to subcontractors in contacts.

Evaluation Criteria: Proposals will be evaluated based on the following criteria: project understanding and technical approach, technical expertise, and cost. Each proposer will also be screened for potential conflict of interest.

Intellectual Property and Data Ownership: All intellectual property rights and data generated from this research project shall remain the exclusive property of MGSCC. The contractor acknowledges and agrees that they do not have any ownership rights, title, or interest in any intellectual property or data produced during this project.