

INDEPENDENT SCIENTIFIC RESEARCH AT MOJAVE NATIONAL PRESERVE

Thank you for your interest in conducting scientific research at Mojave National Preserve. Independent studies need not address specifically identified management issues but do require a permit and must conform to laws and National Park Service Policies. The Mojave National Preserve was created in 1994 with the passage of the California Desert Protection Act to, “preserve unrivaled scenic, geologic, and wildlife values” but also to “retain and enhance opportunities for scientific research in undisturbed ecosystems.” The primary mission of the National Park Service, as laid out in the 1916 Organic Act, is “...to conserve the scenery and the natural and historic objects and the wildlife therein, and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations.” The key phrases with respect to conduct of scientific research are “undisturbed ecosystems” and “unimpaired for the enjoyment of future generations.” Collecting or removing natural, cultural, and historic objects from the Preserve or disturbing plants and wildlife is expressly forbidden unless specific exemptions are provided in the Scientific Research and Collecting Permit.

Scientific collecting is regulated under 36 CFR 2.5. Paragraph (b) states “A specimen collection permit may be issued only to an official representative of a reputable scientific or educational institution or a State or Federal agency for the purpose of research, baseline inventories, monitoring, impact analysis, group study, or museum display when the superintendent determines that the collection is necessary to the stated scientific or resource management goals of the institution or agency and that all applicable Federal and State permits have been acquired, and that the intended use of the specimens and their final disposal is in accordance with applicable law and Federal administrative policies.” A permit will be issued only when the superintendent approves a written research proposal and determines that the collection will benefit science or has the potential for improving the management and protection of park resources. All permits require that the researcher file an Investigator’s Annual Report. In addition, permits may include requirements that the permit holder provide copies of appropriate field notes, information about the data, progress reports, final reports, and publications derived from the permitted activities. Field data, objects, specimens, and features obtained for preservation during research projects, together with associated records and reports, must be curated and managed as a museum collection. Specimens that are not authorized for consumptive analysis will be labeled and cataloged according to National Park Service standards.

Approximately 44% of Mojave National Preserve is designated wilderness. The 1964 Wilderness Act prohibits certain uses. Specifically, “...there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.” Wilderness is marked by signs at most commonly visited areas but it is the researcher’s responsibility to know where wilderness areas are located and to abide by the conditions of the Wilderness Act. Wilderness stipulations attached to your research permit are:

1. All motorized vehicles shall remain on existing roads, designated routes and vehicle ways. Vehicles shall remain on established roads or parking areas. No off-

road (i.e., cross-country) travel by motorized vehicles is allowed. Vehicle use is prohibited in wilderness areas. Observe speed limits. Watch for tortoises on the road or road shoulder area. Driving off the established roadways and parking outside of designated parking areas is prohibited.

2. No motorized vehicles may be operated in wilderness. No motorized or mechanized equipment may be operated in wilderness. In general, Wilderness begins: 100' to either side of the centerline of all maintained roads (e.g., Kelbaker Road, Cedar Canyon Road, Black Canyon Road, Ivanpah Road, Morningstar Mine Road, Kelso Dunes Road, etc.) 30' to either side of unmaintained roads
3. Vehicles will use only existing roads or previously disturbed areas outside of wilderness. Permittee shall not in any way harm or damage any vegetation or wildlife. Parking along the roadway shall occur on previously disturbed sites only.
4. The permittee shall follow, and provide information to and ask each of their participants to become familiar with and follow the Special Conditions of this permit and the "Leave No Trace" philosophy.

The Mojave National Preserve is home to a portion of the Mojave population of desert tortoise, listed as threatened by the U.S. Fish and Wildlife Service since 1990. Proposed research in areas designated as critical desert tortoise habitat will be intensively reviewed and may be subject to strict limitations. Vehicles are allowed only on existing roads, camping and parking areas. Researchers are strongly encouraged to manage refuse, food, and water supplies so as to avoid subsidizing ravens.

Prior to conducting scientific research activities at Mojave National Preserve, investigators must apply for a research and collecting permit via the online system operated by the National Park Service. Please apply a minimum of 90 days prior to the time you wish to begin fieldwork; otherwise your permit may not be reviewed or approved in time. Your application should be accompanied by a written study proposal describing scientific hypotheses to be tested, methods, equipment, and location of fieldwork. Guidelines for developing the study proposal can also be found online. Research projects can have an indefinite time frame but permits will be renewed annually. At the end of each year you must file an Investigator's Annual Report using the online system. Natural history specimens collected require cataloging and curation according to National Park Service standards. Cataloging and curation instructions are provided in the Park Specific Conditions and can be found online.

National Park Service Webpages for Scientific Research

For permit applications, renewals, and Investigator's Annual Reports

<http://science.nature.nps.gov>

Information about applications procedures and guidelines for study proposals

http://science.nature.nps.gov/nps_permits/html/introduction.html

Map of Mojave National Preserve showing wilderness areas and tortoise critical habitat

<http://www.nps.gov/moja/mojamap.htm>

Museum handbook for cataloging and curation of natural history collections

<http://www.cr.nps.gov/museum/publications/>

PARK-SPECIFIC CONDITIONS
for
SCIENTIFIC RESEARCH AND COLLECTING PERMIT
United States Department of the Interior
National Park Service
MOJAVE NATIONAL PRESERVE

1. **Notification** – Notify the Kelso Depot Visitor Center and obtain a researcher's placard for your vehicle. Please provide your vehicle description including year, color, make, model, state, and license number and locations where you will be working.

2. **Interpretive Programs** - Scientific information is important to park management and staff and may also be of interest to park visitors. We encourage you to contact Science Advisor Debra Hughson at 760 252-6105 to arrange for a presentation of your research to park management and staff.

3. **Hardware** - No hardware (field markers, pin flags, stakes, rock cairns, recorders, signs, caches, traps, nets, cameras, weather stations, data loggers, radar reflectors, equipment, etc.) may be left in the park unless specified on the permit. Any such permitted items must be identified with a minimum of (1) the principal investigator's last name, (2) the date of establishment, and (3) the name of the study, e.g., "Darwin, 04 July 2002, Finch Genetics." Unmarked hardware will be removed as abandoned or unknown.

4. **Report Unusual Circumstances** - Help the park rangers by reporting observed violations, off-road driving, destruction of park resources (contact San Bernardino County Dispatch at 909-383-5668), locations of exotic plants, burros, rare wildlife, rare plants, desert tortoise sightings, road kill and archeological sites .

5. **Park Rules** – The following apply throughout the entire Preserve

- All areas are open 24 hours a day.
- Camping, whether within designated campgrounds or backcountry or roadside, is limited to a maximum of 14 consecutive days.
- Camping is not allowed within 0.25 miles of paved roads, along Kelso Dunes and Zzyzx access roads, or within 0.5 miles of Ft. Piute and Kelso Depot.
- Camping is allowed in previously used sites outside of the day use only areas.
- Campsites must be more than 200 yards from any natural or constructed water source.
- Collecting firewood is not allowed. Visitors must bring their own firewood.

- Fires must be attended at all times and completely extinguished prior to leaving a campsite.
- Target shooting or “plinking” is prohibited.
- All food and food containers must be stored in a manner that will prevent access by wildlife, especially ravens.
- Dispose of human waste in individual catholes dug 6 to 8 inches deep at least 200 yards from water, camp, and trails. Cover and disguise when finished.
- Pack out all toilet paper and hygiene products.
- Pet excrement must be collected and disposed of in garbage receptacles.
- Driving off established roads is prohibited.
- Vehicles must be street-licensed.

6. **Wilderness** – Approximately 44% of Mojave National Preserve is designated wilderness. Please familiarize yourself with the locations of wilderness area boundaries where you will be working. No wheeled vehicles, other forms of mechanical transport (except wheelchairs for physically disabled), motorized equipment (except battery-powered hand-held equipment), and no structures or installations are allowed in wilderness areas. Special exceptions for use of motorized equipment in wilderness can be made only if the research is necessary to manage the area as wilderness.

7. **Leave No Trace** - Practice "Leave No Trace" outdoor skills and ethics, and teach these to your students. See the "Leave No Trace" web page at www.lnt.org.

- Plan ahead and prepare.
- Concentrate use in resistant areas.
- Avoid places where impact is just beginning.
- Protect and conserve water resources (don't camp near water).
- Pack it in, pack it out.
- Leave what you find.

8. **Collection of specimens or materials** – 36 CFR 2.5(g), outlines specific conditions that govern specimens and related data. If the researcher or permittee collects specimens that are to be permanently retained – regardless of where they are kept – those specimens must be accessioned and cataloged into the National Park Service (NPS) *National Catalog*, and must bear official NPS museum labels. In addition, reports, publications, field notes, and all data resulting from specimen collecting must be filed with the Park Superintendent.

a) Before specimen collecting begins, the researcher must contact the Park's Collections Coordinator (see below) to obtain a Park accession number for the collection. This number must appear on all reports, field records, correspondence, and permit(s) relating to the collection, and, on the label of each specimen or material that will be permanently retained.

b) When specimen collecting is finished, the researcher must contact the Collections Coordinator to obtain a block of Park catalog numbers for the specimens that will be permanently retained. Specimens that are consumed in the course of analysis or research need not be cataloged. The Collections Coordinator will have a copy of the permit to which to refer. The researcher will provide the Collections Coordinator with the following information:

- Park accession number

- Collection date(s)
- Number of specimens collected (estimates are acceptable for large collections)
- If the collected specimens are to be curated at a non-NPS institution, the researcher will provide the name, address, and telephone number (and email address if available), of the institution, and, the name and title of the individual who will be responsible for the curation of the specimens.

c) The Collections Coordinator will either provide NPS specimen labels to the researcher, or, will approve the electronic scanning or writing, and completion of NPS specimen labels. The Collections Coordinator will also provide instructions for label completion. The labels must be completed in permanent ink and appropriately affixed to specimens or their containers, even if the researcher applied their own or their institution's labels. If the size of the specimen or the container precludes completion of another label, the researcher's label must at minimum include the Park accession and catalog number, in permanent ink, in the following format:

MOJA-1234 (for the accession number, must include a hyphen)

MOJA 99999 (for the catalog number, do not include a hyphen)

The accession number must appear on all reports, correspondence, and permit(s) regarding the collection. Catalog numbers must be referenced in the final report or publication when individual specimens are referred to.

d) The Collections Coordinator will provide the researcher -- or the non-NPS institution responsible for curating the specimens collected -- catalog worksheets and instructions. The researcher or cataloger may also submit data in either Microsoft Excel or Access formats, but the catalog fields must have the same field attributes as ANCS+ (size, numeric, text, etc.). Specimen catalog data must include:

- Classification
- Specimen Name (scientific and common name)
- Quantity or item count
- Collection Site
- Township/Range/Section **or** UTM Coordinates **or** Latitude/Longitude (if GPS is used, include the datum)
- Collector
- Collection Number
- Collection Date
- Collection Method (chisel, shovel, net, hand, etc.)
- Identified By and Date
- Formation (for geology)
- Period/System (for geology and paleontology)
- Condition
- Type (if designated)
- Description
- Preservative and/or preparation

- Accession number
- Catalog number

e) If the collected specimens are to be curated at a non-NPS institution, the Collections Coordinator will send the institution an *Outgoing Loan* form, referencing the collection's Park accession and catalog numbers. The form is to be signed by the individual who will be responsible for the curation of the specimens. All specimens, as well as their derivatives and byproducts, shall remain Government property.

f) The researcher must submit to the Collections Coordinator within one (1) year of the final date of collecting:

- Associated catalog documentation (catalog worksheets and/or electronic data) for all specimens that are to be permanently retained in a non-NPS institution
- Copies of all field records (notes, maps, recordings, reports, etc.), printed or copied onto archival or acid-free quality paper
- Copies of final reports or publications

g) If the researcher cannot meet the one-year submission deadline, please call or write the Collections Coordinator to make other arrangements. The researcher is responsible for annually reporting the status of their collection cataloging and curation. Research and collecting projects are considered complete when most, if not all, of the above conditions are fully met.

h) Researchers are encouraged to contact the Collections Coordinator's office at any time during this process with any questions that may arise. Park. Please contact:

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