



Sequoia Park Zoo Research Program

Updated: March 2019

1. Research Mission Statement

The Sequoia Park Zoo's research mission statement is as follows:

The Sequoia Park Zoo will encourage, conduct, and support research projects for the betterment and conservation of animal life and ecosystems both in human care and the wild.

To accomplish this mission, the zoo will *prioritize* supporting research projects that share the following operational goals:

Animal welfare research will focus on developing or understanding methods for 1) assessing animal welfare or 2) quantitatively improving the lives and welfare of captive animals.

Conservation research will focus on rare and endangered species and 1) the development or improvement of scientific husbandry management practices or 2) understanding the behavioral ecology of those species in order to develop or supplement species-specific conservation strategies in situ.

Education research will focus on the visitor's experience and the efficacy of the zoo's educational messaging.

The Sequoia Park Zoo values research on a diverse and broad array of topics and species. Research projects are not required to share the zoo's research operational goals. All research conducted at the zoo must be approved in advance and adhere to the research policies (see Section 2 below).

Furthermore, the Sequoia Park Zoo will encourage and support the involvement of staff, universities, interns, and students in research projects and endeavor to conduct research in cooperation with the Association of Zoos and Aquariums (AZA), international conservation organizations, and specific zoological initiatives.

2. Research Policies

The purpose of the section is to detail the Sequoia Park Zoo (SPZ) policies for the scientific use of its animal collection. All research requests (internal and external) must be submitted to the SPZ Research Coordinator at rmock@ci.eureka.ca.gov and include all of the documents listed in the Procedural Checklist in Section 3. Each application will be evaluated by the Research Coordinator and, if the application is satisfactory, by the Animal Care Supervisor and Zoo Director. If applicable, your institution's Institutional Animal Care and Use Committee (IACUC) will also evaluate the application. The Zoo Director has final authority to approve or deny research proposals. Email questions to the Research Coordinator at rmock@ci.eureka.ca.gov or leave a message at the Sequoia Park Zoo's keeper office at 707-441-4228.

A. General Research Policies

1. Researchers must follow SPZ rules at all times, unless given permission otherwise by the Zoo Director.
2. Research involving animals at the SPZ will be conducted under IACUC oversight from the institution that sponsors the research and/or employs the Principle Investigator (PI).
3. Research at the SPZ will not commence until a copy of an approved IACUC protocol is filed with the SPZ. All research must strictly follow the methods outlined in the approved IACUC protocol. Any methodological modifications must be resubmitted for approval through IACUC, and a new copy of the approved IACUC proposal must be filed with the SPZ.
4. Research may be terminated at any time if concerns develop about animal welfare or safety or if researchers do not abide by the research program guidelines or other SPZ rules. Any continuation of research after the termination of a project may result in a ban from non-public SPZ areas.
5. Research must be approved by the Zoo Director, Animal Care Supervisor, Research Coordinator, and veterinarian if applicable.

B. Research Proposal Evaluation/Approval Criteria

Research proposals will be evaluated based on the following parameters:

1. Alignment with SPZ's Research Mission Statement (see Section 1)
2. Level of invasion (preference given to non-invasive or minimally invasive [e.g. fecal collection] methodology)
3. Animal welfare (preference given to projects perceived to increase or not impact animal welfare and to projects assessing animal welfare)

4. Impact on public experience (preference given to research that does not require animals to be off-exhibit for extended durations)
5. Scientific merit (e.g. well-defined purpose, ability to answer proposed research question based on project design, qualification of PI)
6. Conservation merit (e.g. conservation priorities of the species, support of appropriate species management groups [e.g. SSP or TAG])
7. Effect on animal collection (e.g. perceived stress of the animal in relation to the research, conflict with normal routine, conflict with other research)
8. Resource commitment (e.g. animals, personnel time, equipment, funds)
9. Collaborative effort (involvement of other zoological or academic institutions)
10. Educational merit (plans for dissemination of results)

C. Project Oversight

1. Any problems with sample collection or animal safety should be immediately reported to animal care staff on duty (typically the keeper for that animal).
2. Any problems with research design or feasibility should be reported to the Research Coordinator.
3. Copies of sample collection data sheets must be provided to the Research Coordinator at project completion or, if the project duration is longer than six months, on a semiannual basis.
4. If the project's duration is greater than six months, a brief status report should be provided to the Research Coordinator semiannually at rmock@ci.eureka.ca.gov

D. Project Final Report and Publications

1. For internal (e.g. within SPZ) projects, a copy of the resulting manuscript, report, or abstract must be submitted to the Zoo Director prior to reporting the results to the media or for scientific publication.
2. For external projects, a final report must be submitted to the Research Coordinator or Zoo Director. This report may be a class final paper, poster presentation, senior thesis, manuscript, dissertation, report specifically written for SPZ, etc. **This final report is required.**
3. A copy of the resulting publications must be provided to the Zoo Director at gziegler@ci.eureka.ca.gov
4. Publications must acknowledge the Sequoia Park Zoo or, if appropriate based on contributions, include relevant staff as co-authors.

3. Research Application Checklist

- a. Review and adhere to the SPZ's Research Policies.
- b. Complete a Research Proposal in the following general format:
 - i. Introduction and Literature Review (should clearly state purpose, potential value of project, goals, and hypothesis)
 - ii. Methods (should be very detailed and include description of animal use and expected impacts of research such as potential risks to animals)
 - iii. Project Outcome (how you will disseminate the information; how the information gained will/could be utilized by the scientific community, SPZ staff, and the public)
 - iv. Project Schedule (include timeline of data collection and specific daily data collection schedule if applicable)
 - v. Literature Cited
- c. Complete the SPZ Research Request Application.
- d. Submit your Research Proposal and the SPZ Research Request Application to the Research Coordinator at rmock@ci.eureka.ca.gov
- e. Await approval from the SPZ. Applications will be evaluated based the criteria listed in Section 2B. Research applications may be approved as written, approved with specified modifications, or denied. You will be notified via e-mail unless otherwise discussed.
- f. Following zoo approval, provide a copy of an approved IACUC protocol with the assistance and oversight of your affiliated institution.
- g. Meet with the Research Coordinator and Zoo Director to discuss your research schedule and coordinate necessary assistance from staff.
- h. If you will require access to any non-public areas of the zoo, sign a liability waiver prior to beginning research.
- i. If applicable during your research (see Section 2C), provide copies of all sample collection data sheets and status reports on a semiannual basis to the SPZ.
- j. Provide a final report of your findings to the Sequoia Park Zoo, regardless of the perceived relevance of your results. If applicable, provide digital copies of subsequent publications from your research to the SPZ Zoo Director at gziegler@ci.eureka.ca.gov