



2018 REQUEST FOR RHINO RESEARCH PROPOSALS

The International Rhino Foundation (IRF) is requesting proposals for research that is directly applicable to management, propagation, and conservation of rhinoceros species under intensive protection and management in the wild or maintained *ex situ*.

Proposals for research involving any scientific discipline(s) can be submitted and must directly address one of the targeted IRF research priorities below. These priorities include a subset of those developed at the *Science Workshop on Best Practice Rhino Management across Southern Africa* earlier this year and at the AZA Rhino Research Council 2018 meeting. These priorities were chosen because they address some of the greatest challenges faced today in maintaining healthy, self-sustaining rhino populations that will survive well into the future.

Research Priority Target Areas

Only proposals addressing the following will be considered. Examples provided are meant to be illustrative, indicating a possible range of research topics.

- 1. Improving rhino population monitoring and/or tracking, for example,**
 - Testing and developing improved tools and technology for monitoring and tracking rhinos *in situ*.
 - Testing and developing improved tools and technology for monitoring and tracking rhinos in large *ex situ* areas.
 - Exploration of alternative low-power, long-range systems to track rhinos and integrate anti-poaching data.
 - Developing and testing systems/technologies to identify individual rhinos, particularly from camera trap data.
- 2. Desk study documenting information on Sumatran rhino captures and translocations in the 1980s.**

The ecology and sociobiology of Asian rhinos differs vastly from that of the African species. Primarily, anecdotal data are available on Sumatran rhino captures from the 1980s. A desk study documenting information and lessons learned from the captures in the 1980s would be a useful first step to lay the groundwork for future Sumatran rhino search and rescue efforts.
- 3. Economic analysis of rhino conservation, for example,**
 - What economic values do rhinos contribute to national economies?

- How much do rhinos serve as proxy indicators for ecosystem processes and other components of natural capital and what are the economic implications arising from this?
- How much does rhino conservation cost (in a set of study sites) over and above the basic per-area protection costs that need to be met for a typical spectrum of other wildlife species in protected areas (private and state) in Africa?
- What economic stimuli could be applied to achieve extensive *in-situ* range expansion options in areas which depends on small land units being induced to merge with larger ones, such as South Africa?

4. Determination of the conservation value of different rhino populations, for example,

- Establishing an objective way (including genetic and demographic factors) to ascertain a new or amended conservation value index for selected rhino populations.
- Determining what is happening in terms of genetic exchange between small, privately-owned groups of black and white rhinos in South Africa and recommendations for future mechanisms.
- Reviewing the effects of any age/sex skewing, derivation of trend data on inbreeding coefficients to help provide guidelines for the IUCN/SSC African Rhino Specialist Group to amend current classifications (“Key”, “Important”, to also include “Marginally viable,” “Non-viable”, etc.).

5. Investigating important factors affecting health, well-being and reproduction *ex situ*, for example

- Epidemiology of health issues in the browsing rhino species
- Iron overload disorder (significance, detection, treatment, prevention)
- Reproductive dysfunction (stillbirths, acyclicity, anovulation, pregnancy loss)
- Impacts and control of obesity/over conditioning
- Factors impacting animal well-being and long-term welfare (could also apply to wild rhinos recovering from traumatic injuries/orphans)
- Nutritional analysis of food plants most frequently fed to Sumatran rhinos at the Sumatran Rhino Sanctuary in Way Kambas National Park, including daily food consumption comparison of food plants consumed by SRS rhinos.

*** Grant funding awarded for Priority Target Areas 1, 3, and 4 will be eligible for IRF's Mark Hopkins Schell Research Award (up to \$50,000 each for two winning proposals). For more information about Mark Hopkins Schell, please see <https://intlrhinofoundation.wordpress.com/2018/02/01/international-rhino-foundation-announces-generous-bequest-from-mark-hopkins-schell/>*

Student Project Proposals

In addition, the IRF is soliciting **student project proposals** to provide seed money for students entering the field of rhino conservation research. Student project costs

requested from IRF may not exceed \$5,000. Student project proposals will be reviewed separately from the proposals submitted by established scientists. A minimum of three (3) grants will be awarded to student projects.

Application Timeline

Proposals must be received by midnight Eastern Standard Time, 12 November 2018 and must follow the requested format to be considered for support. Proposals should be sent to c.sieffert@rhinos.org. (If an applicant believes his/her proposal idea is outstanding but does not address the priorities listed below, they can submit an explanation of the idea in 250 words or less to c.sieffert@rhinos.org by 15 August 2018. If approved after review, the applicant be invited to submit a proposal.)

Projects selected for funding will be announced in January 2019.

Submission Requirements

Proposals should be double-spaced, on one side of the page, with one-inch margins and using 12-point Arial font and consist of:

1. A title page containing:

- a) Title of project
- b) Project type: Full Proposal or Student Project
- c) Research priority(s) addressed (choose one or more of the five listed)
- d) Name, position, affiliation, address, e-mail, telephone, and fax numbers of Principle Investigator and Co-Investigators.
- e) Duration of project
- f) Total amount requested
- g) Signature of the PI and the Director of their institution/organization

2. A summary (abstract) of 500 words or less describing in lay language:

- a) The problem being addressed
- b) The general objectives of the study
- c) A general explanation of the methods to be used and experimental design
- d) The expected results and how they will be applied

3. Body of the proposal - section 3 must be no longer than 12 pages, one-sided, double-spaced and must include the following:

- a) General aim and hypothesis (or hypotheses) to be tested
- b) Specific objectives
- c) Background
- d) Preliminary data, if available
- e) Experimental design and methods
- f) Percent time of the PI and each Co-PI committed to project and specific responsibilities of each

4. Budget and explanation justifying expenses – section 4 is limited to two pages, one-sided, double spaced and should contain a breakdown of the budget as follows for each year funds are requested:

- a) Salaries, stipends and benefits
- b) Equipment
- c) Disposable supplies
- d) Travel
- e) Matching funds from the institution or additional grants

Please use the following budget format:

Item	Per-unit item cost	No. of units needed	Requested from IRF	Matching funds from "partner x"	Matching funds from "partner y"	Total
Total (USD)						

(Note: Please provide enough information in the per-unit item cost column that it is clear to reviewers how the costs were derived. For example, "hormone assays - \$2,400" is inadequate, whereas "3 hormones per sample X 200 fecal samples X \$4.00 per hormone evaluated = \$2,400" is more informative). Justifications for personnel salaries should be well-documented including the baseline salary figure, and the estimate of time (percent) to be charged to the project.

The IRF will not fund administrative overhead. Budget requests that consist primarily of salary generally will not be considered favorably. Conditional support may be committed for subsequent years of multi-year projects at the time of initial approval of a funded grant and funding will be contingent upon satisfactory review of the prior year's performance. Multi-year projects should not exceed two (2) years or \$50,000 in total funds requested.

Proposal totals should range from \$5,000 - \$50,000 per award.

5) Cited references from peer-reviewed publications providing authors, year, title, journal, and volume/pages.

6) Two-page CV for the PI and each Co-Investigator with title, experience, and list of relevant publications for each.

7) Letters of support

- a) Letter of support from any institution listed as a collaborator.
- b) Letter of support, referencing the specific proposal by title, from the appropriate local, regional or national wildlife or conservation authority, if applicable.

8) Wildlife/Research Permit(s)

- a) If wildlife research permit(s) are required in the country in which the project will be conducted, please provide a copy of the permit or proof that an existing permit is valid for the duration of the project.

Funding Details

The total funding currently committed to support the RFP is approximately \$250,000 but this amount may differ by the time grant evaluations are conducted.

Proposal Review

A panel of established scientists, disciplinary experts, veterinarians, and IRF Board Members will review and score all proposals. Proposals will be evaluated on their quality, soundness of science, feasibility, likelihood that the results will lead to progress in resolving the challenges, effectiveness of the budget, and importance to the overall effort of maintaining healthy, self-sustaining populations of rhinos.

Selection Priorities

Priority will be given to projects that demonstrate:

- Scientific Soundness - projects must follow accepted scientific principles so that results are credible.
- Relevancy - projects must aim to significantly improve the conservation management of rhinos.
- Cost Benefit - each project must aim to obtain scientific information or an applicable benefit for the money expended.
- Projects with matching funds and/or supported by sound preliminary data.
- Past Performance - Principal investigators must have a reputation for completing projects, publishing results in an expeditious manner and cooperating with funding agencies in providing reports and educational materials. If awarded funding previously by the IRF, satisfactory performance on previous grant awards is essential.
- Humane Treatment - Projects must meet humane standards of care when animals are involved. Each of these studies must be approved by the appropriate agency at the facility or institution where the study is conducted.

REPORTING

At a minimum, each grant recipient will be required to submit a performance and financial report one (1) year from the date of the award. For multiple-year grants, continued funding will depend on satisfactory review of the prior year's performance and continuation of annual report submissions. IRF will provide reporting guidelines to each PI awarded a grant.