

2019 Small Grants Program

The Boulder County Parks and Open Space Department is offering small grants for research and biological inventories on Open Space lands. These research projects and inventories provide valuable data to monitor management practices and improve resources and park visitor experiences. Grants awarded up to \$10,000.

The deadline for proposals is Monday, January 14, 2019.

Priority Research Topics

Boulder County Parks and Open Space (BCPOS) staff has identified the following research topics as priority needs for natural resource and visitor management. This list is not exhaustive and we encourage you to submit research topics that are not listed. Please note for the purpose of this request, the terms “grant” and “proposal” are only used in an informal context. We strongly encourage you to contact appropriate staff members (see list on last page) to discuss research topics in advance of the deadline.

Cultural Resources

1. Evaluate and summarize existing archeological information for Ron Stewart Preserve at Rabbit Mountain Open Space for future management.
2. A study to identify and record the existence of cultural landscapes on Caribou Ranch Open Space, Walker Ranch Open Space, Heil Valley Ranch Open Space, Hall Ranch Open Space or Ron Stewart Preserve at Rabbit Mountain Open Space.
3. Research and map, with ground penetrating radar or magnetometry, reported historic grave sites in the town of Ward area.

Education and Outreach

1. A study of visitation on Boulder County regional trails.

Forestry

1. Study to look at the effects of prescribed fire on the fine roots surrounding previously mapped Legacy Trees, and some strategies to mitigate any negative consequences.
2. Design a long term protocol for Parks and Open Space properties. Deliverables would include baseline assessment of conditions of the vegetation including a soil profile, along with monitoring design and strategy. Plots will be monitored through time by the researcher, BCPOS staff, citizen scientists or others.
3. Historic Range of Variability of forest ecosystems to help guide forest restoration and management. Possible properties include: Betasso Open Space, Walker Ranch Open Space, Reynolds Ranch Open Space, Billings Open Space, and the town of Ward Area.

Plant Ecology

1. A study to provide methods to increase success in establishing forb diversity in restored grasslands, utilizing herbicides to control native grass species, non-native annual grasses, and non-native broadleaf weeds, and experimental seeding rates and methods.

2. A feasibility study of utilizing Unmanned Aerial Vehicle (UAV) flights to map spatial distribution of *Physaria bellii*, a rare and endemic plant species.
3. A plant species inventory of CNHP Highest Ranking (B1) Potential Conservation Areas at Red Hill or Rabbit Mountain Open Space.
4. Assess the plant-back period for successful germination of native grasses and forbs within Esplanade treated areas, at different seeding depths.
5. Study the germination success rate of native grass and forb seed dispersal on Esplanade-treated plots (field or laboratory).
6. Study the germination success rate of various native seeds at varying stratification times (0, 30, 60, 90, 120 days; field or laboratory). Report on the implications for climate change and a shorter duration of freezing night temperatures in future winters.

Wildlife

1. Develop three (3) Species Conservation and Recovery Plans for high-priority [Boulder County Species of Special Concern](#). BCPOS staff will provide the researcher with the selected species for plan development.
2. Development and/or refinement of an environmental DNA (eDNA) detection “kit” for the local population of the Northern Leopard Frog species, including sample collection, laboratory work, and field validation.
3. Locate and map northern leopard frog overwintering habitat and travel corridors by use of telemetry at Carolyn Holmberg Preserve at Rock Creek Farm Open Space and Mayhoffer Open Space.

Important Dates to Keep in Mind

- Proposals must be received by **Monday, January 14, 2019**.
- Applicants will be notified by **Monday, February 25, 2019**.
- Grantees will need to submit a draft final report by **Monday, October 28, 2019**, unless other arrangements are made in advance.
- The final report (see requirements below) is due no later than **Monday, December 9, 2019**, in order to receive final payment.

Proposal Requirements

- Please visit BoulderCountyOpenSpace.org/research and click on the Submit Proposal button to submit your proposal electronically. **No hard copies will be accepted.**
- Late and/or proposals that do not meet our requirements will not be considered. Researchers are encouraged to submit early. If a proposal is submitted early and it is determined that it does not meet our requirements, the researcher will be given a chance to re-submit their proposal one additional time by the deadline.
- The proposal must be typed, double-spaced, and not exceed six pages. The only pages not included as part of the six page limit are the cover page, maps and Section 5 (Qualifications of Researchers).

- Other sources of funding supporting the project should be identified.
- Anyone may apply. Students must submit a signed letter from an academic advisor to confirm that the proposal has been reviewed, approved, and is supported.
- Research must take place on Boulder County Parks and Open Space properties.
- Researchers may use Boulder County conservation easement lands with the condition that the researcher secures prior written permission from the private landowner.
- Researchers must adhere to all applicable policies and regulations set forth by the department. The researcher is responsible for knowing the appropriate rules.
- Grant proposals over \$10,000 will not be considered.
- Proposals must include the following five sections. Proposals that do not follow the required format listed below will not be considered.

SECTION 1, Abstract

- Provide a summary (abstract) of the proposal that describes the objectives, general methods, and anticipated value of the research.

SECTION 2, Introduction: *Objectives, Hypotheses, Anticipated Value, Literature Review*

- The proposal report cover page should specify the proposal report title, author name(s) and contact information, and proposal report date.
- Describe the overall objective(s) to be addressed by the research.
- State the hypotheses and alternative hypotheses or purpose of research related to the objective.
- State how the research will contribute to the natural resource and/or visitor management needs of Boulder County Parks and Open Space.
- Describe the anticipated value of the research to furthering of scientific knowledge and public education.
- Provide a summary of pertinent published literature.

SECTION 3, Methods: *Description of research*

- A detailed explanation of sampling or survey methods.
- A discussion of data analysis techniques.
- Project requirements, including logistics and permits.
- A detailed project schedule.
- A map showing location of research activities.
- Describe in detail any potential negative impacts to the natural resources on Boulder County Open Space.

SECTION 4, Budget

- Provide a detailed and itemized annual budget, including funding requirements for salaries, equipment, travel, office supplies, report preparation, and required overhead.
- Provide information on any sources of cooperative funding or assistance-in-kind and include appropriate documentation.

SECTION 5, Qualification of Researchers

- Provide a resumé or curriculum vitae of the investigator(s), including the faculty advisor for student projects.
- For student projects, attach a signed statement from a faculty advisor (as the first page) supporting and approving the proposal and describing the degree of faculty involvement and supervision. Faculty sponsors are responsible for providing the final report should the student fail to submit one. Future requests by students of a faculty advisor who has not provided required reports may not be processed.

Interagency Research

Did you know that [City of Boulder Open Space and Mountain Parks \(OSMP\)](#) and [Jefferson County Open Space \(JCOS\)](#) also fund research? To discuss the possibilities of a shared research project, please contact [Mac Kobza \(BCPOS\)](#), [Brian Anacker \(OSMP\)](#), [Hillary King \(JCOS\)](#) to discuss custom application procedures.

Research Proposal Contacts:

You are welcome to contact us to discuss your proposal ahead of time!

Mac Kobza
Small Grants Coordinator
mkobza@bouldercounty.org
303-678-6203

Rob Alexander, Agriculture
ralexander@bouldercounty.org
303-678-6239

Carol Beam, Cultural Resources
cbeam@bouldercounty.org
303-678-6272

David Hirt, Plant Ecology
dhirt@bouldercounty.org
303-678-6218

Pascale Fried, Park Visitor Issues
pfried@bouldercounty.org
303-678-6201

Therese Glowacki, Biomass & Biochar
tglowacki@bouldercounty.org
303-678-6206

Stefan Reinold, Forestry
sreinold@bouldercounty.org
303-678-6202

Steve Sauer, Weeds
ssauer@bouldercounty.org
303-678-6207

Susan Spaulding, Wildlife
sspaulding@bouldercounty.org
303-678-6292