

## Formation of this Program

Marin County Parks (<http://www.marincountyparks.org/depts/pk>) is offering two \$10,000 grants for research to be conducted within its system of open space preserves. The grants are open to all graduate students and faculty from accredited academic institutions in California, and to qualified independent researchers. Each individual may apply for only one of these two grants. Research must be conducted within or include at least one of the 34 open space preserves managed by Marin County Open Space District, but may also include other public lands. The grants will support research for a period of one year from the date of award and may be renewed. Successful applicants must conclude all elements of the grant scope and successfully deliver all required work products within 30 days following the one-year research period. At the present time, Marin County Parks anticipates offering this grant program on an annual basis, subject to modification, through June 30, 2022.

## Overview of the Marin County Open Space Preserve System

Marin County's system of open space preserves is managed by Marin County Open Space District (with funding from the Marin County Park, Open Space, and Farmland Protection Transactions and Use Tax Ordinance of 2012). The open space preserve system includes 34 preserves encompassing a total of nearly 15,000 acres with terrestrial, wetland, and estuarine habitats (see breakdown below). These preserves lie within a matrix of other public lands (federal, state, county, and special district), agricultural lands, and urban and suburban developed areas. The system of preserves represents many of the vegetation and habitat types found in the San Francisco Bay Area and in northern and central coastal California. Due to the nature of the preserves and their locations within Marin County, the vegetation, habitats, and species that occur in the preserves are likely to be impacted by humans, either directly or indirectly. Marin County has a long history of open space protection, public land management, and land use change. Today, the preserves are managed to preserve and enhance populations of species, habitats, ecosystem integrity, and natural processes, but also to allow for public use and recreation. The preserve system, along with other public lands within the county, offers unique opportunities to conduct research that can be applied to management of public lands and natural resources within the region and elsewhere.

Below is a breakdown (by percent of total area) of the vegetation types found within the preserve system.

- 91% terrestrial habitats
  - Hardwood woodland and forest
  - Mixed hardwood and conifer forest
  - Coast redwood forest
  - Chaparral
  - Grasslands (native, nonnative, serpentine)
- 7.4% estuarine habitats
- 1.0% wetland/marsh habitats

More information about the preserve system and the vegetation/habitat types within the system can be found at <http://www.marincountyparks.org/depts/pk> under the Open Space tab at the top. Spatial data may be downloaded from the following locations:

1. Marin County Open Space District preserve boundaries can be downloaded through Marin Map (<http://www.marinmap.org/dnn/Home.aspx>). On this site, click on the link for GIS Data Download. On the GIS Data Download page, scroll down to “Cadaster” and click on the dataset “Park Boundary.” This will download a shapefile for all public park lands within Marin County. To select only the 34 Marin County open space preserves, select those with the category “COUNTY OPEN SPACE DISTRICT.”
2. A detailed vegetation dataset that covers the terrestrial open space preserves can be downloaded from the California Department of Fish and Wildlife vegetation datasets page (<http://www.dfg.ca.gov/biogeodata/gis/veg.asp>). On that page, scroll down to “Central Valley and Bay and Delta” and click on the link for “Marin County Open Space District”.
3. Other helpful datasets, such as imagery, hydrology, topography, roads, and trails may be found at the Marin Map GIS Data Download page as well as:
  - a. California Geoportal (<http://portal.gis.ca.gov/geoportal/catalog/main/home.page>)
  - b. Data.gov (<http://catalog.data.gov/dataset>)

## Priority Research Areas

Proposals may include one or more of the following areas:

Botanical areas:

1. Status of special status species
2. Plant-pollinator dynamics
3. Environmental tolerances of plant species
4. Effects of stressors on plants and their populations
5. Reproduction or recruitment dynamics of plant species
6. Dispersal mechanisms of plant species

Wildlife areas:

1. Status and trends of wildlife species, especially those with special status
2. Wildlife community structure and dynamics
3. Interactions of wildlife and vegetation
4. Direct or indirect influence of humans on wildlife species
5. Spatial dynamics of wildlife species or communities
6. Occurrence and status of salmonid species in streams

Ecological areas:

1. Interactions of plants, wildlife, and humans
2. Status and trends of listed or special status plants
3. Status, trends, and control of nonnative and invasive plants
4. Spatial relationships between plant species and physical and biological variables
5. The direct and indirect influences of humans on plant species
6. Plant metapopulation dynamics
7. Fire ecology: severity, frequency, or suppression impacts on vegetation

8. Impacts of fuel breaks and fire roads on native plants and wildlife
9. The efficacy of fuel reduction strategies to alter fire behavior and reduce fire hazard
10. The status and impacts of sudden oak death or other *Phytophthora* species

Biogeographic areas:

1. Land use impacts to species or communities
2. Temporal analysis of land cover or vegetation change
3. Remote sensing of sudden oak death status or impacts
4. Land use, land use change, and conservation strategies

Physical areas:

1. Surface water dynamics
2. Vernal pool dynamics
3. Climate change impacts to terrestrial or wetland habitats

Research on other topics may also be considered. Please call the Marin County Parks Vegetation and Fire Ecologist and Research Grant Program Manager, Bill Kuhn, with questions (see contact information below).

### **Available Grant Opportunities**

Two \$10,000 grants are being offered each year for research to be conducted within Marin County's system of open space preserves.

### **Qualifying Criteria**

1. The applicant or fiscal agent of an applicant must be an academic institution in California accredited by a regional or national institutional accrediting agency recognized by the Secretary of the U.S. Department of Education or independent researcher able to meet the County of Marin's contracting and insurance requirements. If you are not associated with an academic institution, you just have to meet the contracting and insurance requirements. See the grant agreement for requirements.
2. The proposal focuses on one or more of the Priority Research Areas in open space preserves managed by Marin County Open Space District. Proposals on other research topics will also be accepted if first approved by the program manager.
3. The applicant agrees with all funding restrictions described below.

### **Funding Restrictions**

Grant funds may be used to cover a wide range of expenses related to the implementation of research. However, the following activities and costs will not be covered by this funding:

- Conducting lobbying, carrying on propaganda, or otherwise attempting to influence legislation or political decision making;
- Influencing the outcome of any specific election through any means;
- Purposes other than those that are charitable, scientific, or educational;
- Fundraising purposes;
- Budget shortfalls or endowment funds;
- Administrative costs not related to the implementation of the grant;
- Scholarships, fellowships, or grants to individuals;

- Land acquisition or real estate purchases; and
- Purposes other than those specifically agreed upon in the original scope attached to the executed grant agreement, or as agreed to in writing by the Marin County Parks contract manager.

***Important restriction:** A maximum of 15% of each grant may be allocated to cover program-related administrative costs directly related to work performed under this grant. Administrative costs are defined as any expense that directly supports the recipient organization's administration of the grant. Administrative costs may include, but are not limited to, book keeping; time keeping; invoicing; office supplies; use of phones; and use of computers, printers, and other technological resources. Administrative expenses may not include any items listed in the Funding Restrictions section of this Overview Document, any costs incurred outside the grant period, any indirect costs defined as overhead business expenses of the grantee's fixed or ordinary operating costs (rent, mortgage payments, property taxes, and utilities), nor any grant writing. Any administrative expenses submitted for reimbursement must be accompanied by clear documentation that shows how they directly supported the implementation of the grant agreement and scope of work.*

*For independent researchers, costs of the required commercial general liability, automobile liability, workers compensation, and professional liability can be applied to the maximum 15% administrative costs.*

## **How to Apply**

All applicants must coordinate with Marin County Parks staff to determine appropriate research methods and research sites. Instead of filling out an application form, the applicants will supply the following as several separate documents.

Students of accredited academic institutions must supply the following information in their application:

1. A recent resume or curriculum vitae with current contact information.
2. Proposed methods, including a hypothesis or hypotheses as applicable, potential research sites, sample sizes, proposed statistical methods, and schedule of data collection and field work. Proposals for monitoring need not include hypotheses, but will need to include a detailed statement of the need and value of the data or information to be collected through monitoring.
3. An explanation of the scope of the research and the anticipated benefits to Marin County Open Space District for managing and preserving species, systems, and processes within our 34 open space preserves.
4. A detailed budget of how the funds will be spent. Include all personnel time, travel, equipment, and other expenses. If the proposed work is also being funded by additional sources, please include the total project budget and a breakdown of how funds from this program will be used.
5. Your research experience, including any publications, within the last 5 years (these can be part of the resume or curriculum vitae).
6. Your interest in terrestrial or aquatic biology, ecology, or related field; human impacts on species, ecosystems, or processes; and your longer term career goals.
7. Unofficial copies of your academic transcripts for both undergraduate and graduate education. Send transcripts as PDF files that include the student's name in the file name.
8. Letters of recommendation from two people who can comment on the student's academic ability, research ability, and interest in the proposed work. Letters from current or former faculty or research advisors would be appropriate. See below for instructions to those writing letters of recommendation. These are to be sent directly to Marin County Parks by the letter writer.

9. Please attach all of the above as PDF files (except letters of recommendation; see below) to a single email and send to Bill Kuhn using the contact information below by February 15, 2016.

Student letters of recommendation must include the following components:

1. The applicant's name
2. How long they have known the applicant and in what capacity
3. An evaluation of the applicant relative to their peer group
4. An assessment of the applicant's ability or potential to successfully complete the proposed research
5. An evaluation of the applicant's oral and written communication skills
6. An evaluation of the applicant's ability to work independently
7. An evaluation of the applicant's interest and enthusiasm in the proposed research

Send letters as a PDF and name the file starting with the applicant's last name and first initial, followed by the respondent's last name and first initial (e.g. SmithJ\_JohnsonM.pdf). Letters should be sent to Bill Kuhn by the original author of each letter using the contact information below.

Faculty of accredited academic institutions and independent scientists must supply the following information in their application:

1. A copy of your most recent curriculum vitae that includes research grants awarded, publications, and presentations.
2. Proposed methods, including a hypothesis or hypotheses as applicable, potential sites, sample sizes, proposed statistical methods, and schedule of data collection and field work. Proposals for monitoring need not include hypotheses, but will need to include a detailed statement of the need and value of the data or information to be collected through monitoring.
3. A one-page explanation of the scope of the research and the anticipated benefits to Marin County Open Space District for managing and preserving species, systems, and processes within our 34 open space preserves.
4. A detailed budget of how the funds will be spent. Include all personnel time, travel, equipment, and other expenses. If the proposed work is also being funded by additional sources, please include the total project budget and a breakdown of how funds from this program will be used.
5. Please attach all of the above as PDF files to a single email and send to Bill Kuhn, using the contact information below, by February 15, 2016.

## **Application Timeline**

Applications are due to Marin County Parks no later than February 15, 2016. Marin County Parks will notify all applicants of the status of their application no later than March 1, 2016. Applicants are encouraged to contact Bill Kuhn with any questions, and to discuss appropriate research methods and sites during the application period.

## **Selection Process**

A review team comprised of Marin County Parks Natural Resources and Science staff will meet to review each application, including the qualifications of each applicant and proposed research, and select successful applicants on an annual basis.

If selected, students, faculty, or independent scientists selected for research grants will have five business days from receipt of notification to either accept or reject the offer.

Marin County Parks reserves the right to reject any and all applications.

## Timeline

- Applications Open: January 5, 2016
- Applications Due: February 15, 2016
- Staff reviews proposals: Late February, 2016
- Applicants notified of staff selections: March 1, 2016
- Grant agreements sent to successful applicants: March 3, 2016
- Board of Directors Executes Grant Agreements: March 15, 2016
- Grant Period: One year from date of grant execution
- Mid-year Report: November 1, 2016
- Grant Reporting Due: 30 days after the end of the grant period

Timeline is approximate.

## Reporting Requirements

Grantees will be required to submit a progress report by November 1, 2016. This report will summarize the methods used, the appropriateness or success of the methods applied to testing the hypothesis or meeting the monitoring goals, all major observations and results to date, and research conclusions thus far (if any). If the project is part of a larger research project, please also include the results so far for the overall project. This report will be 2-5 pages in length, exclusive of maps, figures, photos and tables. One final project report will be provided to Marin County Parks within 30 days of the conclusion of the one-year research period. The final report will provide all necessary details of the hypotheses, methods used, results, conclusions, and any recommendations for managers. Please also include informative digital photos that can assist in summarizing the project. This final report can be of any length, but should include sufficient detail to be useful for Marin County Parks.

All data collected by researchers within the open space preserve system will be provided to Marin County Parks at the conclusion of the grant period. Please provide databases as Microsoft Excel or Access format, or other text formats (e.g. comma separated). Any spatial datasets created by the researcher will be provided in ArcGIS format. For vector data, acceptable formats include shapefile, feature class in file geodatabase, or feature class in personal geodatabase formats. For raster data it can be in GRID or GeoTiff format. Spatial data will have a projection of UTM zone 10 North, NAD 1983. All spatial data will have sufficient metadata to explain all relevant details.

## Funding Disbursements

Disbursement of grant funds will include 50% of the total (up to \$5,000) at the beginning of the grant period and upon full execution of a grant agreement and 50% (up to \$5,000) at the conclusion of the grant period after successful completion of the grant scope of work, delivery of the final report, and all associated data.

## Staff Roles

The primary contact for this grant program is:

Bill Kuhn  
Vegetation and Fire Ecologist  
Research Grant Program Manager  
[bkuhn@marincounty.org](mailto:bkuhn@marincounty.org)  
415-473-5089

Other staff, including the Chief of Natural Resources and Science, will be involved in the grant selection process and ongoing research coordination.

## Funding in Future Years

A Marin County Parks team will review the progress of all funded research after the submittal of the year-end progress report. This may also include inquires to the grantee(s) and review of other

information. The team will then either approve the research to continue, require the grantee to make changes in the project to meet our requirements, or recommend discontinuing the research. Successful applicants may apply for grants within this program for any number of subsequent years, up to and including its year of termination.

### **Attachment A**

Sample Template of Grant Agreement