



## Tomales Bay Foundation Student Research Grant Opportunities for 2025

### Applications due February 28, 2025

Each year, approximately 100 independent research projects are conducted within the boundaries of Point Reyes National Seashore, Tomales Bay and its watershed. While these areas provide a natural laboratory for ecological and other scientific research, many of these projects also provide key information for the conservation and informed management of natural and cultural resources. We are pleased to offer grant opportunities this year to encourage partnerships with the research community, and support National Park Service (NPS) and Tomales Bay Foundation (TBF) informational needs:

The Tomales Bay Foundation Science Fund will provide \$20,000 in grants, each up to \$5,000, for investigations that address at least one of the Foundation's top five science priorities which are: (1) Understanding recreational and tourist use patterns in Tomales Bay and its watershed. (2) Sea level rise mitigation, planning, and management. (3) Understanding the use of fish and other wildlife habitats in Tomales Bay. (4) Land-use and aquatic/terrestrial ecology. And (5) Water quality analyses.

Proposals will be rated on the following factors:

- The proposal is sound and feasible in terms of time frame, access to natural areas, quality of resources personnel.
- The proposal advances scientific knowledge of the region. Priority will go to proposals that address one of the five priority research areas listed above.
- The project deliverables are clearly articulated and appropriate in scope.
- The applicant is well qualified to undertake the proposed research. Students with senior projects, graduate students, post-doctoral researchers, and faculty are eligible to apply.
- The proposal is clearly written and complete.
- The budget appropriately correlates with project objectives and tasks.

- The proposed research addresses conservation or management needs.
- Includes educational opportunities for students and the public.
- The researcher will be required to present their findings at an appropriate local meeting or conference.

Prior to submitting a proposal, researchers may inquire with [steward@tomalesbayfoundation.org](mailto:steward@tomalesbayfoundation.org) (415 629 9697) about research needs, logistics, permitting, subject matter and contacts that the Tomales Bay Foundation may already be familiar with.

## APPLICATION INTRUCTIONS

APPLICATION DEADLINE: February 28, 2025

PLANNED ANNOUNCEMENT OF AWARDS: March 30, 2025

### SUBMISSION INSTRUCTIONS

A completed proposal and all supporting materials (and questions) should be emailed to [steward@tomalesbayfoundation.org](mailto:steward@tomalesbayfoundation.org). A single PDF of all documents is preferred, but not required. Questions? You can call Tom Gaman, TBF Chair at 415 629 9697.

### APPLICATION GUIDELINES

The application should have four sections: (1) Applicant information, (2) Project Description, (3) Budget, and (4) Curriculum Vitae. If possible, the overall package should not exceed seven pages. Students should include a short note from your advisor supporting the project. The note may be submitted by email to [steward@tomalesbayfoundation.org](mailto:steward@tomalesbayfoundation.org) or attached to the application as an additional page.

#### 1. APPLICANT INFORMATION (ONE PAGE)

Project Title:

Present position or degree being sought:

Institution:

Mailing address:

Telephone number:

E-Mail address:

Research advisor (if applicable):

Who letter of support will be submitted by (if applicable):

#### 2. PROJECT DESCRIPTION (THREE PAGE LIMIT)

The project description should have the following sections:

A. Title.

B. Introduction.

Briefly state the problem/questions to be studied, and current status of knowledge.

C. Research Description.

Briefly describe the research, including hypotheses and general experimental design. Address sample sizes and statistical approaches when necessary.

D. Description of field methods and study site(s). Include a general timeline of the project.

E. Describe the significance of the proposed work and benefits to park and local management and, if applicable, to the TBF Science Priorities listed above.

F. Anticipated scientific papers and publications for a general audience.

G. Describe potential educational opportunities for local students (i.e., talk to a local school, field trip). We can help plan this or suggest opportunities.

H. Collecting/research or other permits:

Include a statement as to their status. NPS Research Permits can be applied for at: [irma.nps.gov/rprs/](http://irma.nps.gov/rprs/) (It is not required to apply for a permit prior to submitting this grant application). Projects in Tomales Bay may require permits from the Greater Farallons National Marine Sanctuary and the State of California.

I. Literature Cited (may be short or compact format).

3. PROJECT BUDGET (ONE PAGE LIMIT). To reduce paperwork complexities for these small grants, we strongly prefer to grant funds directly to the awardee rather than the institution.

Place the Project Budget on a separate page in table format. It can be simple but should include the following:

A. Total projected costs of the entire research project broken down into salaries/stipends, supplies& equipment, travel, and other.

B. The budget should specify potential and secured sources of additional funding (or in-kind match) and costs requested from this grant source.

C. If travel by personal automobile is required, an allowance of up to \$0.585 per mile may be used.

D. The following budget items ARE GENERALLY NOT supported: overhead/indirect costs greater than 5% (we prefer these small grants be paid directly to awardees rather than institutions), conference or meeting costs more than 5% of budget.

#### 4. CURRICULUM VITAE (TWO PAGE LIMIT)

##### APPENDIX: Past Grants Awarded

##### TOMALES BAY FOUNDATION GRANTS: 2019 - 2022

- Long-term monitoring of Tomales Bay eelgrass to identify responses to oyster aquaculture o UC Santa Cruz
- Using eDNA and aerial (drone) imagery to characterize coastal fish communities in response to health and extent of eelgrass, *Zostera marina*, beds.  
o UC Davis
- Processes and Future Change in the Beaches of Tomales Bay  
o UC Davis - Bodega Marine Laboratory
- The Impacts of Climate Change on Biological Invasions in Estuarine Ecosystems o UC Davis - Bodega Marine Laboratory
- Assessing juvenile Dungeness crab habitat use to inform vulnerability to global change o UC Santa Cruz

##### 2023 Awards:

- Pinniped Subsidies along the Marin County Coast
- Integrating social and ecological metrics for evaluating estuarine restoration, Public opinion survey
- Improving restoration success and Phytophthora disease protection for native trees, mycorrhizae inoculum investigations, Stemple Creek and greenhouse.
- Evaluating Seagrass Resilience to Pathogen Variation in Tomales Bay, Study of wasting disease in sea grass
- Understanding the pathways to rampant invasion: Genetic structure and plasticity in a newly introduced sea anemone in Tomales Bay.

##### 2024 Awards:

- **May 2024. The Tomales Bay Foundation Student Research Grants Program was pleased to award 5 grants for research projects in the Tomales Bay Watershed.**
- **Eel grass** in Tomales Bay continues to be the focus of research. Deva Holliman and Liyu Mekonnen, both first year doctoral students from UC Davis, were each awarded \$5,000 to study eel grass. Seagrass meadows on the bottom of the bay support rich biodiversity, but their underlying sediments also facilitate processes that may greatly impact local trends of alkalinity and associated carbon storage in Tomales Bay. This research is being closely coordinated with the UC Davis Bodega Marine Laboratory.
- Francis Gerraty, of UC Santa Cruz, was awarded a \$3,500 grant to continue his study of the transfer of nutrients from the ocean environment via **coyotes feeding on seals**. This research will provide a better understanding of how marine and terrestrial ecosystems are connected by cross flows of nutrients, energy, and materials which can strongly influence biodiversity and ecosystem function.
- Sierra Jaeger received a \$2,500 grant to investigate the reproductive ecology of a charismatic California coastal dune wildflower, the **yellow sand verbena** (*Abronia latifolia*). This research will focus on the possibility that the increasing variability in climate may be causing mismatches in pollinator flight periods and plant flowering periods, which may lessen plant reproductive success or pollinator survival.
- A \$5,000 grant was awarded to the Chileno Valley Newt Brigade to fund research by Haley Toups and Dr. Gary Bucciarelli, a professor at UC Davis, to **identify the sex of mature newts as they cross Chileno Valley Road**. The group will correlate sex with crossing conditions such as date, time and weather conditions. For four years the Chileno Valley Newt Brigade has been rescuing California newts from being run over as they attempt to cross Chileno Valley Road to spawn in the Laguna. As part of this grant Sonoma State Biology and Herpetology students will be trained how to identify newt sex, perform statistics, visualize data, and prepare a scientific journal.
- The Tomales Bay Foundation has funded 17 research projects on Tomales Bay in the past 4 years. The Foundation encourages contributions to its Student Research Grants Program. Please visit [tomalesbayfoundation.org](http://tomalesbayfoundation.org)