

2021 Michigan Sea Grant Undergraduate Environmental Internship Program

Michigan Sea Grant hosts a summer internship program that coordinates and funds undergraduate students from any accredited community college, college, or university in Michigan to work with private businesses, state and federal agencies, environmental non-profit organizations, or university faculty to plan or implement environmental stewardship in the Great Lakes. Through this internship program, undergraduate students have two options: 1) students may propose projects they are interested in working on related to Great Lakes stewardship with sponsor organizations that will provide guidance and support for their research projects; or 2) students may apply for a project that has been proposed by one of our partners identified under Section H below. These opportunities are new for the 2021 Internship and are limited in number. In addition, we acknowledge that the ongoing coronavirus pandemic presents many uncertainties regarding the type of work that can be accomplished in lab and field environments. If applying for one of the opportunities detailed below, please keep in mind how the pandemic may impact your proposed project activities and address how you plan to modify those activities, should that become necessary.

Michigan Sea Grant encourages applicants from underrepresented racial and ethnic groups, individuals with disabilities, and individuals from economically or educationally disadvantaged backgrounds. Michigan Sea Grant is committed to diversity and multiculturalism through staff training and organizational development for fellows, interns, and employees to help them provide effective and inclusive programs for the diverse residents of Michigan's communities.

Award Information

Students will be compensated \$5,000 for two (2) months during the Summer of 2021 for at least 24-hours of work per week. A non-Federal match of \$3,225 per application is required from the sponsor organization. This match may be in the form of selected "in-kind" services, such as office space, mentorship, or additional funds from a specified institution, agency, industry, or non-federal program. The in-kind services could include travel and poster printing for interns to present research at MISG symposium in August 2021, should in-person meetings be allowed and advisable. Sponsors of the projects in Section H will provide the required match.

Eligible Applicants

Applicants should be enrolled undergraduate students at any level of study or recent graduates (May 2021) at accredited universities or colleges in Michigan. Preference will be given to students who plan to pursue a career in environmental science. Additionally, preference will be given to applicants who have created an internship with an organization outside of an academic setting, including a local, state, or federal agency or NGO.

A. Application and Submission Information

If proposing your own project for consideration, a complete set of application materials must include:



- 1) A statement with a description of the proposed project (maximum two-pages, double-spaced, Times New Roman, 12-point font)
 - The statement should address the following:
 - A short description of the proposed project and how it relates to Great Lakes stewardship
 - o Experiences the candidate expects to receive from this training
 - o A description of how the proposed project will benefit the sponsoring organization, community, and environment
 - A description of how the proposed project relates to the candidate's future career goals
 - A brief description of how the project activities can be modified should COVID-19 impact planned lab work, field work, outreach, etc.
- 2) One letter of support from the sponsor organization's internship supervisor, on the sponsor organization's letterhead.
 - The sponsor organization's letter should include the following:
 - o Name of supervisor
 - o Description of how the internship will be supervised
 - A description of how the proposed project will benefit the sponsoring organization and the intern
 - A statement about the intern's skills and leadership relevant to the proposed project
 - Ocost Sharing or Matching Requirement provide sources of the match and provide adequate documentation for in-kind match. Please note, match may be in the form of selected "in-kind" services, such as office space, mentorship, or additional funds from a specified institution, agency, industry, or non-federal program. No funds from federal entities can be used as match
- 3) Undergraduate transcripts unofficial are acceptable
- 4) A current resume (one page, single-sided)

If applying for a project that has been submitted by one of our sponsors (see Section H below for additional details), a complete set of application materials must include the following:

- 1) A statement detailing the candidate's interest in the proposed project (maximum two-pages, double-spaced, Times New Roman, 12-point font)
 - The statement should address the following:
 - o The project the candidate is applying for, including the partner's name
 - o A brief description of why you are interested in this project



- The candidate's relevant qualifications
- o Experiences the candidate expects to receive from this opportunity
- A description of how the proposed project relates to the candidate's future career goals
- 2) One endorsement letter from either a professor or advisor of the candidate that is familiar with the candidate's qualifications
 - The letter of endorsement should include the following:
 - Name of professor or advisor
 - o Description of how the professor/advisor knows the candidate
 - A statement about the candidate's skills and leadership that would be relevant to the project
- 3) Undergraduate transcripts unofficial are acceptable
- 4) A current resume (one-page, single-sided)

B. Submission Dates and Times

Applicants must submit materials by **5:00 p.m.** (**EST**) **March 1, 2021** to the MISG Undergraduate Internship <u>submission portal</u>. The application form can also be accessed from the <u>MISG Environmental Internship</u> web page. Applications received after the deadline will be rejected without further consideration. No e-mailed applications will be accepted.

C. Application Review Information

Evaluation Criteria - The evaluation criteria and weighting of the criteria are as follows:

- (1) The description of proposed project or statement of interest in project (40% total)
- (2) Letter of support or endorsement (40% total)
- (3) Submitted undergraduate transcript (10% total)
- (4) Current resume (10% total)

D. Internship Contacts

Questions about the application and submission requirements may be sent to msgfellowships@umich.edu. FAQs received will be posted on the MISG Environmental Internship page by February 12, 2021.

E. Review and Selection Process

The Michigan Sea Grant Internship Committee will review each application based on the evaluation criteria listed in the previous section. Each committee member will score each application and application scores will be averaged and ranked by the committee. MISG will also share applications that target the proposed projects with the project sponsors to help identify applicants that best fit the goals of those projects. The top scoring applicants will be notified by March 24, 2021. Michigan Sea Grant may select up to ten (10) applications based on the



<u>evaluation criteria</u>. This includes students that are selected for the pre-proposed projects submitted by our partners.

F. Anticipated Announcement and Award Dates

The Michigan Sea Grant Environmental Internship Program selection process will be completed by March 24, 2021. Awards are for two months (start date-end date) during the Summer of 2021 and cannot be extended or renewed.

G. Reporting

- 1) A final internship narrative report will be submitted to the MISG Internship Committee by August 31, 2021. A link will be sent out to each intern upon accepting the internship. This report must include project location, project goal and objectives, and information regarding project outcomes, contributions to the partners, and overall internship experience. Advisors will also be sent a final report to complete.
- 2) Interns will be expected to attend and present research at the MISG Internship Symposium in August on the University of Michigan Ann Arbor campus. Depending on the circumstances, virtual attendance may also be acceptable.

H. Project Ideas

Student proposed ideas: Students are encouraged to work with local communities, NGOs, agencies and their universities to identify environmental projects related to Great Lakes stewardship. For more information on previous internship projects, please visit our <u>Fellows and Interns page</u> on the MISG website. To discuss ideas for potential projects, please send an email to the MISG Internships team at <u>msgfellowships@umich.edu</u>.

Below are three projects that have been proposed by MISG partners that would support three to six student interns.

Partner Project #1 – Supporting One Intern



Project Title: Role of smallmouth bass in Lake Michigan reef communities

<u>Project Description</u>: An intern working on this project would collaborate with MDNR Fisheries researchers to investigate the dynamics (abundance, movement, survival, reproduction) of



smallmouth bass on and around northern Lake Michigan reefs, as well as how bass affect and are affected by other reef inhabitants (both native and exotic/invasive). Work would include assisting with tagging and movement studies, sampling smallmouth bass diets, and characterizing the other (non-bass) components of the reef community including fish, invertebrates, and habitat. The intern would have the option to stay at the Charlevoix Fisheries Research Station and conduct work at the Central Michigan University Lake Michigan Biological Station on Beaver Island. In addition to field work, an intern would collaborate with project partners in laboratory studies, data analysis, presentations, and publications.

Partner Organizations: MDNR

Source of Match: MDNR will serve as the source of match. Match will be provided in the form of on-site housing, office use, equipment purchase, and mentorship.

Contact Information:

David Clapp, Research Station Manager, MDNR – Fisheries Division: clappd@michigan.gov

Partner Project #2 – Supporting Two to Three Interns



<u>Project Description</u>: Intern(s) working on this project would have the opportunity to develop educational programming opportunities for students and visitors to the Detroit Zoo and partner locations. The Detroit Zoo's Education Program aims to create good stewards for the environment at an early age, therefore interns will be directly involved with assisting in the creation of programming and outreach materials that will help foster a lifelong appreciation for the environment. This experience would involve hands-on curricula development, production of promotional and learning materials, and direct outreach in the parks. While most of this activity will take place within the Detroit Zoo, Belle Isle, and the surrounding park system, there may be an opportunity for some travel to other urban areas to work with partners and collaborators. The ultimate goal of this project is to demonstrate the environmental impacts our actions have, foster a sense of stewardship in our youth, and help develop an appreciation, value for, and understanding of nature.

Source of Match: The Detroit Zoological Society will serve as the source of match.

Contact Information:

Mike Reed, Curator of Education – Informal Programs, Detroit Zoological Society: mreed@dzs.org



Partner Project #3 – Supporting Two Interns



Organization Description: Herpetological Resource and Management (HRM) is dedicated to the conservation and best management of amphibians and reptiles throughout the Great Lakes region. HRM administers the MI Herp Atlas (MIHA) and is active in educational outreach that engages the public as citizen scientists, not only contributing observation to the MI Herp Atlas but also helping to restore and create habitat in their own backyards. In addition, HRM has created multiple technical documents that are referenced by regulatory agencies in general practice, including the Michigan Amphibian and Reptile Best Management manual and the Herp Habitat Assessment Tool, whose development is underway.

Project Description: There are two potential projects under this proposal. One student will assist HRM staff with revisions to the second edition of Michigan Amphibian and Reptile Best Management Practices manual. This technical document developed by HRM in 2014 has been an integral part of conservation and management of amphibians and reptiles in Michigan and used throughout the Great Lakes region and abroad. For example, it served as an important resource for U.S. Fish and Wildlife Service guidelines for Eastern Massasauga Rattlesnake best management practices (BMPs). The student would help conduct literature reviews, write content, assist with layout and formatting, and graphics work; therefore, a background in landscape architecture and graphic design is desirable. The student would also assist in promoting the document and expanding the network of users across Michigan and the great lakes region.

The second student would focus on assisting with the Michigan Herp Atlas (MIHA) project. HRM is currently revising the MIHA and the HRM websites to provide greater content and resources for educators, citizen scientists, and agencies charged with conservation and management of amphibians and reptiles. The student would help review observations on the website for correct identification, engage with the contributors, and help promote the MIHA and herpetofauna enthusiasm through public outreach via social media and other outlets available, making a student's background in communication, civic engagement, and graphic design valuable. The student would also assist in developing web content for the newest edition of the HRM website, working through their supervisor and our web technical team. Knowledge of native Michigan herpetofauna is encouraged.

Both students will be given the opportunity to participate in the field testing of the Herp Habitat Assessment Tool HRM is developing for amphibians and reptiles in Michigan. This along with opportunistic surveys will help develop the students' overall skill in identification and understanding of herpetofauna in Michigan.



<u>Source of Match</u>: HRM will provide match for these projects. As part of the match, a GIS workstation will be provided, along with an additional \$500 stipend per month to offset expenses such as travel costs.

Contact Information:

David Mifsud, President – Herpetological Resource Management: dmifsud@herprman.com