

Texas Parks and Wildlife Department Is Searching for Control and Management Options for Golden Alga, Research Help Welcomed

Golden Alga Research Grant Information

Introduction

The Texas Parks and Wildlife Department (TPWD) is soliciting targeted research projects for development of management tools, approaches and technologies to help aquatic managers detect, combat, and manage the harmful golden alga *Prymnesium parvum* in Texas. Also, funding available from TPWD is limited, so cooperative or matching funding is encouraged. Below is information detailing research needed, funding available and a protocol for submitting project pre-proposals and proposals to secure funding grants. Further information on the golden alga problem in Texas and results of the Golden Alga Workshop held in Fort Worth, Texas are available on the TPWD golden alga web page at:

<http://www.tpwd.state.tx.us/hab/ga/workshop/>

Targeted Research Areas

There are many issues associated with golden alga needing attention with limited time and money to serve those issues. Therefore all activities are being prioritized to aid achieving greatest efficiency and obtaining most needed information for dealing with golden alga. A research area identified with high priority is development of cost-effective and viable management / mitigation for golden alga bloom and toxin treatment or control in natural ecosystems. Research topics that have potential to assist good management of golden alga in natural ecosystems are encouraged for grant consideration. Pre-proposals submitted for consideration must address TPWD's goals pertaining to this algal problem. Therefore, it is suggested that the areas of research noted in the Golden Alga Workshop discussions be reviewed. While all pre-proposals will be considered, pre-proposals that address one or more of the needs identified by the workshop will be more favorably considered.

Funding

TPWD funding for golden alga research is about \$600,000 per year for two years. It is expected that several projects will be funded each year from this total. TPWD does not intend to provide support for purely basic research or indirect costs not closely associated with the research effort. Overhead costs are expected to be 15%, or less, and travel costs should be restricted to that necessary for the research. Projects will be linked to the annual funding process; activities and funds expenditures will need to be completed within the timeline of the grants.

TPWD Contact Personnel Information

TPWD has created an agency Golden Alga Task Force for the purpose of managing Texas' response to golden alga blooms and the problems they cause. The task force is also responsible for administering the state funds to be provided through this proposal process. Members of the task force include fish hatchery, fisheries and aquatic resource protection biologists as well as Department administrators from Inland Fisheries (IF) and Resource Protection (RP). Task force representatives who may be able to provide answers to questions you have include:

Aaron Barkoh, IF	aaron.barkoh@tpwd.state.tx.us	830-866-3356
Dave Buzan, RP	david.buzan@tpwd.state.tx.us	512-912-7013
Joan Glass, RP	joan.glass@tpwd.state.tx.us	254-867-7956
John Prentice, IF	john.prentice@tpwd.state.tx.us	830-866-3356
Dave Sager, RP	david.sager@tpwd.state.tx.us	512-912-7150

Golden Alga Proposal Review Protocol

Introduction

Texas aquatic resources are threatened by the toxic golden alga *Prymnesium parvum*. There has been limited research and there are many unknowns pertaining to golden alga. Aquatic resource managers need information and practical techniques to assist them in combating this threat, which necessitates research be conducted. With limited funds at the discretion of the Texas Parks and Wildlife Department (TPWD), it is important that research attempts to find answers in the most needed areas with efficiency. A strong tool for guiding research efforts is the review of research proposals that outline specific objectives, and describe specific steps or procedures to meet the objectives.

The goals of this review process are two-fold. It should direct research efforts where needed and ensure scientific rigor is applied to each project before it is begun. Therefore, the likelihood of selecting a successful project with applicable results is enhanced. Second, the process should serve as an opportunity for the various researchers and managers within the golden alga arena to interact and learn from one another. Although this educational opportunity is secondary, it is an important portion of the process.

Protocol for Pre-proposal and Proposal Review and Subsequent Investigations

1. A pre-proposal, submitted by interested researchers to the TPWD golden alga task force, will begin the process. A pre-proposal is to be a one- to two-page concept statement to allow the task force to approve the described action before additional time is spent in full proposal development. A pre-proposal will consist of: title, clearly stated objective(s), need for the objective (how it addresses identified TPWD research needs), expected benefits (i.e., how will results provide information to assist in management or control of golden algae), and a general cost estimate. The task force will decide if the concept is one which should be pursued and inform the researcher to continue (or not) with formal proposal preparation.

To begin review processes, pre-proposals are to be submitted to Dr. David Sager of the TPWD Resource Protection Division (phone = 512-912-7150, email = David.Sager@tpwd.state.tx.us).

2. The formal proposal will be prepared (see proposal sections to include below) and submitted to the TPWD golden algae task force. The task force will review the proposal to insure that appropriate objectives are being targeted and provide a panel of reviewers (at least 3 people total and at least 2 of these from within TPWD, one of which will serve as a spokesperson to coordinate reviews and send summary recommendations to the task force.).

3. Proposal review will be completed within 4 weeks: 3 weeks for independent reviews and 1 week for combined (consensus review) of the review panel, preparation of recommendations and submission of the summary recommendations to the author(s) and golden alga task force.
4. All reviewers will independently review the proposal within 3 weeks and grade it as either Pass, Pass with Minor Revisions, Pass with Major Revisions, or Fail. Reviewers will evaluate proposals for all possible items leading to a successful project including at least the following: clear, attainable, measurable objective(s); adequate sample sizes; how the project will address identified goals; ability to stay within budget and time limits; and sound study design. Once all reviewers have made their independent assessment, reviewers are encouraged to exchange their reviews.
5. All reviewers will hold a meeting to discuss their reviews and determine a consensus grade as soon as all reviews are complete. Meetings need not be face-to-face, but this would be most beneficial.
6. Either the review panel or a spokesperson from the panel will contact the proposal author to discuss the results of the proposal review after the grade has been finalized. The task force and the author will receive copies of the grade and written comments from the review panel. The review panel should strive to discuss results of the review process with the author, and deliver the written comments and grade, within 1 week following the independent review process of step 3.
7. a) In the case of a Pass with Major Revision or Fail grade, the proposal will either i) be revised and submitted to the task force for further consideration, or ii) the project will be dropped. For proposals that need major revisions (such as those for which the review panel recommends significantly altering the intent or objective of the proposal) or are graded as Fail, an explanation/justification shall be sent to the task force describing the review panel's reasoning for Failing or recommending a significantly different path for the proposal. If revisions are to be made, the task force will need to set a timeline for completion of revisions.

b) If the proposal is judged as Pass or Pass with Minor Revision, the author will submit the revisions to the task force within a timeline set by the task force (approximately 2 weeks).
8. The proposal will then be judged as acceptable or in need of further review by the task force. If further review is warranted, the task force will forward the proposal to reviewers and institute a new deadline for review (returning to step 2).
9. If the task force accepts the proposal, the recommendation to proceed with the project will be forwarded to TPWD Division Directors for Inland Fisheries and Resource Protection for approval and funding. No project activities should

commence before TPWD and the proposal author have signed a contract agreeing to the terms of the project and funding. The task force and Division Directors can consult with the review panel at their discretion during the approval process.

Requirements for the Task Force

The task force should keep the Division Directors informed of progress of the review process.

Sections to Include in Proposals

The proposal shall consist of the following sections (not necessarily labeled as such, but containing the appropriate information):

- Title
- Objective(s)
- Justification
- Introduction
- Methods
- Anticipated Results
- How the project will address identified research needs
- Timeline, Including Progress/Interim Reporting and Final Report to TPWD
- Projected Costs and Personnel
- Literature Cited
- Details of any matching value, or funding, which can be applied by the researcher toward study costs.

Flow Chart of Research Approval Process

