



New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Natural Resources
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- Fishery Science
- Forest Science
- Wildlife Science
- Natural Resources
- Environmental Conservation

December 5, 1979

Mr. David Warren, President
Eagle Lake Property Owners Assoc.
9 No. Tappan Landing Road
Tarrytown, NY 10591

Dear Mr. Warren:

I am writing in reply to your inquiry of November 27 relative to a possible study of Eagle Lake. In general, problems associated with increased growth of algae like Gleotrichia echinulata are the result of increased phosphorus inputs to a lake. The likely sources of this fertilizing element in the case of lakes with substantial numbers of residences in their watershed are: septic tank drainage, lawn fertilizers and, in some cases, storm drainage from roadways. In particular cases, a single source, such as a concentrated animal production operation or a trailer park can be pinpointed as a major contributor to the problem.

Chemical analysis of a lake's water is usually of little help in management unless done as part of a fairly extensive study program. The first steps in developing a strategy for management are usually to survey the lake's watershed, to converse with individuals familiar with development patterns over the past decade or so and possibly to undertake some preliminary water quality sampling. At this point the experienced professional may be able to identify the most likely causes of a problem and to recommend remedial measures. If not, a more extensive program of study may be recommended.

A close analogy to the situation I have described would be a person experiencing physical discomfort who seeks advice from a physician. Most problems would be diagnosed rather easily based on fairly simple procedures and a rather straightforward treatment prescribed. Others would require an extensive (and expensive) set of diagnostic procedures and treatment might be difficult even when the problem is defined.

If you would like to contact me by telephone (607-256-2110) to provide further information and/or if you have printed material on Eagle Lake (e.g. contour maps of the watershed and the lake depths, data on number of residences

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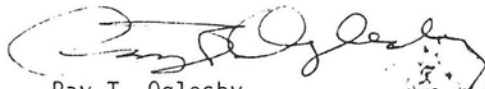
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and their location, other land use activities in the watershed, etc.), I could discuss the various study possibilities more meaningfully. Unfortunately, the State of New York does not provide us with any support for this type of activity so that any substantive time involvement on the part of myself or my associate would have to be on a consulting basis.

Sincerely yours,



Ray T. Oglesby
Professor of Aquatic Science

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