One Green Ridge Road
Pittsford, New York 14534
October 19, 1979

Department of Environmental Conservation
Ray Brook, New York 12977

ATT: Thomas Higgenbotham
REF: Eagle Lake, Essex County

Dear Tom:

I recently discovered that the young man who is renting the basement apartment from my Step-mother in Ithaca, is doing his Master's Thesis at Cornell on particular aspects of lake quality - specifically which aspect, I am not sure. In any event, I mentioned our problem to him, and he suggested that I get him some specimens, which I have done. He took them to the lab, and the enclosed letter is the result. He has had his findings verified by Dr. Oglesby, who is at Cornell, who was very interested in these.

In further discussion with Frank Vertucci, after the date of his letter, he gave me a little more information, which I list below:

1) "Blue-green" algae are generally "good" algae. He says that this particular creature is very difficult to get rid of. It generally is an uncommon situation, and, without further study he cannot make any judgement why it would be in Eagle Lake.

2) It is very possible that it is in the lake due to a rise in the nutrient level, i.e., from phosphates used in washing machines or dishwashers, or from fertilizers used on lawns. (I assured him that the latter possibility was quite remote.)

3) When he says that trying to get rid of it would bring in less favorable algae, he is talking about chemical treatment of the lake. I asked him if he thought that a reduction in the amount of phosphates in the lake could cut back their development and he said "possibly".

4) Since writing his letter, he has found other articles about this algae which state that it can be toxic to the skin of some swimmers, giving them a type of "swimmer's itch". This allergy is not common, but it can occur.

An interesting side light on this critter is that it adjusts it own level in the water by the amount of nutriments it needs for life. It is hollow and retains gas in its core which makes it float. If there is too much sun, it exudes this gas and sinks, but when it needs more light, it retains the gas and rises. Therefore, after a rainstorm or in the morning, one finds many more on the surface than later in the day. (Witness the pictures I sent you.)

I have sent this information on the the present officers of the Lake Association for their interest. Possibly you, or one of your group, would like to contact Dr. Oglesby for further information about this.

The question is what to do? I am convinced that we should proceed as soon as possible in the Spring to test all the septic systems of the year-round residents, and then later those of the summer people. I wonder, though, if it is possible to actually rid a lake of phosphates. Do they degrade into harmless substances, or once a level is established, they cannot be reduced? There is not that much outflow of Eagle Lake that would carry them off if they do not change chemically.

I would appreciate your thoughts and ideas of what we can do to slow the growth of this algae, and hopefully go back to the situation of three to four years ago, when these did not exist in the lake.

Sincerely,

Robert C. Stevens

Enc.

P.S. The identification is exactly the same as the Connecticut findings!

R. C. S.