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CONSERVATION DEPARTMENT
ALBANY

May 5, 1933

Mr. Edmond O. Luthy
P. O. Box 232
Cincinnati, Ohio

Dear Mr. Luthy:

Apr 30 A week ago today I went, with a helper, to Eagle Lake and did some seining and made observations in order to supplement the study made by the survey last summer. I was surprised by my findings. They indicated, in short, that food conditions are excellent considering the game species which are present there.

Mr. Wicks supplied us with a boat enabling us to get around the lower end of the lake conveniently. Our first seine haul in a likely looking cove netted forty specimens of the blunt-nosed minnow, in our experience the best minnow for use as bass food. Eagle Lake proves again that this minnow will stand up under the onslaughts of the voracious game species where others will not. Extending our work to the extreme foot of the lake we found a few golden shiners in the marsh (the lake was high) at the side of the outlet. We also found johnny darters to be common at the few places where there is a shelving beach. This is one of the smaller members of the perch family--a three inch specimen is a good sized adult. I have often found them in bass stomachs. We took two specimens of the common top-minnow which is apparently rare in the lake.

Runge's shiners

The food-stuffs resources of the lake
may then be summarized as follows:

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Common in shallow areas.

3. Golden shiner (Notemigonus c. crysoleucas) Fairly common at the extreme foot of the lake. Probably rare or absent in the upper part of the lake.

4. Barred killifish or top-minnow. (Fundulus d. diaphanus). Apparently rare in the lake.

These small fishes combined with the young whitefish which undoubtedly furnish food for the bass especially during the spring months, afford good food conditions. With natural conditions as they are in the lake and in consideration of the presence of bass, northern pike and perch this situation must be considered as excellent. It would hardly be possible to improve it, almost certainly not by introductions of minnows at any rate. To proceed with any such program seems entirely unwarranted by the conditions.

I was very glad of the opportunity to do this work on Eagle Lake. It demonstrated to me forcibly again the difficulties attendant upon survey work done in the hot weather months when most species of fish have moved away from the shoal areas into the cooler deeper water.

I might add one practical suggestion. These small fishes need shelter. The more shelter they have the more abundant they will be. The two places where I found the blunt-nosed minnow most abundant were: 1. Near a brush pile near the shore of a shallow water cove; and 2. At the extreme inside corner of a rather extensive shallow area. Here the shallow area itself protected them. In Michigan, in connection with the work of the Fisheries Institute there, experimental work has been carried on with the view of increasing shelter for the forage fishes in lakes, especially by the use of sunken brush piles. Brush simply piled in the water close to shore gives shelter for a limited period of time but since it is subject to ice action it is very impermanent. You might have the opportunity to sink some brush in connection with clearing on your property or that of other members of your association.

An interesting recent paper on the improvement of lakes for fishes is by McMurry, Eschmeyer and Davis "Objectives and Methods in the Lake Inventory in Michigan." I am sure that if you wish you can obtain a copy of this paper on request by addressing R. W. Eschmeyer, University Museums, Ann Arbor, Michigan.

Very truly yours,

C. Willard Greene

C. Willard Greene
Aquatic Biologist

CWG/M

*to 2nd class
minnow
at Eagle Lake*