## Lake Report from 05/03

On May 27, 2003, employees from Dixie Fish Farm, LLC visited Lake Ramsey to perform an electro-fishing survey of the fish population in the lake. Upon arriving and attempting the survey, it was determined that the lake did not suit electro-fishing equipment for an effective survey. Clear water, low conductivity, and lack of cover in shallow water were factors that reduced effectiveness of the survey. However, some important things were observed during the survey.

A concern was expressed about vegetation growing in the lake. The prominent vegetation found was Chara grass. This is a submerged weed that appears to be a higher vascular plant, but is actually algae. If it gets out of control it can easily be treated using copper sulphate.

You expressed a general concern about the bass in the lake being skinny or under weight. The bass we captured were slightly under-sized and averaged around 85% of their ideal weight. It appears to be a lack of forage of the proper size in the lake. Bluegill found during the survey were either very small fish that could stay hidden in the extreme shallows or were large specimens that are too large to be eaten by most bass. It appears that the lake is somewhat predator crowded with the bass, crappie and catfish all feeding on limited food.

Catfish could be reduced in the lake to take predator pressure off the forage fish.

Gizzard shad are abundant in the lake. Very large specimens were captured. These fish are problematic in that they reach sizes too large for many fish to eat and they compete adversely with more desirable forage fish. They are effective plankton grazers and reproduce quickly. Reducing the shad population in the lake should help the other forage fish to recover. Shad can be removed from the system by precise applications of Rotenone without harming other fish.

Forage fish in the lake would also benefit from the addition of more cover to the lake to offer hiding places for the fish. The existing Chara grass is beneficial cover for young and small fish, but more cover should be added. There are trees along the undeveloped shoreline of the lake that could easily be cut an allowed to fall into the lake. Vegetation such as lily pads could be added to the lake. There are immense stretches of shore with no cover or bottom features that would be helped by adding some cover.

One important step in managing the fishery of Lake Ramsey would be to have a better understanding of what fish are being harvested from the lake and what members' objectives are. A survey or monthly mail out could be used. Also members could keep catch records with the length and weight of fish caught to build a database that Dixie could use to analyze the fishery.

I hope this information has been helpful to you.

Best regards,

Jeff Sibley Fisheries biologist