

“JORDAN LAKE FISH KILL JULY 27, 2000”

On Tuesday, August 29, 2000 at a packed **town hall meeting in Lake Odessa**, officials from the **Departments of Environmental Quality and Natural Resources** attempted to **explain to residents and fishermen what had happened during the Jordan Lake fish kill** on July 27, 2000. I had fished Jordan Lake the day after the fish kill was first noticed, and saw **thousands of dead fish floating** and washed up on shore. Two **DNR employees** were at the ramp **cleaning up dead fish** when I launched. State representative Terry Geiger hosted the meeting and did a nice job of keeping things moving along. I attended the meeting and learned a lot from the presentations given. Although **I still have a number of questions and concerns**, I have a better **appreciation of the complexity of this matter**. A number of informational handouts were available at the meeting about fish kills, tournament mortality, and lake environment quality.

I am not a fisheries biologist and have no training in fisheries management. However, being a biology major in college, a serious fisherman for over 30 years, and having bred and raised aquarium tropical fish for over 40 years, I feel that **I have a decent understanding of fish, their environment, and their biology**.

Many interesting points were made by the residents, fishermen, and the officials. It appeared that **weed treatment with chemicals on lakes is still not completely safe or understood, as evidenced by this fish kill**. If it is understood, then **management and application guidelines** are not followed or controlled enough. The complexity and **variations of lake environments make chemical treatment a risky undertaking**. **Season, nutrient levels, oxygen levels, agricultural runoff, boating traffic, wind, weather, water levels, and lawn fertilizer/weed control applications all impact on the health of a lake and its oxygen levels**. **A lake under stress is certainly not a good candidate for killing weeds and adding all that decaying organic matter to the mix**. Many of the above factors cannot be predicted or we have little control of them. For example, a **long hot windless period of time could cause oxygen levels in a lake to drop severely**. The impact of that condition would be even more severe if there were no natural weeds present in the lake to produce oxygen. **A fish kill resulting from these conditions would likely be classified as from “natural” causes because the weed treatment was done weeks earlier**. Yet the **decaying organic matter left in the sediments and the absence of plants to produce oxygen was because of the chemical weed treatment**.

It was brought up that **hardness of lake water above 50 ppm makes the chemicals more toxic**. **Jordan Lake water is above that level but was not tested**. Also, **lake oxygen levels were not tested before the last application of chemicals**.

The DNR Fish Health Laboratory autopsies showed no infection or disease present but that the **fish were under stress prior to their death**. The report stated: “The stress **may be due to low oxygen**, since the lake had recently been treated for weeds, and decaying weeds can cause oxygen depletion.”.

The argument was given that **Tupper Lake was not treated and some dead fish were found there also**. Several residents spoke up that **they had seen apparently dazed, lethargic fish** at the surface **migrating from Jordan Lake into Tupper lake to seek oxygen**. Jim Dexter, the DNR biologist from the Plainwell office confirmed that this would be possible.

The DNR officials stated that because **most of the floating dead fish were crappie**, the fishery was still intact, and that often many larger fish are caught after a panfish dieoff. Yet in a fish kill, **aren’t a good portion of the fish lying dead on the bottom?** This occurs when fish have **little food in their stomach** to form gas, which causes them to float up. Wouldn’t the **dead fish contribute to more oxygen depletion?** I know that one or two **dead fish in an aquarium can kill all the other fish** unless there is very powerful filtration and aeration. **I fished Jordan Lake the day after the fish kill**. The **water color did not allow anything to be seen below 3 feet**. **How do we know there was not a much larger dieoff, including pike,**

bass, and other species? These fish usually live deeper and might not float to the surface. Jordan Lake has been noted for its **exceptional northern pike fishery** over many years. **Pike are more sensitive to lack of oxygen than largemouth bass.** I would recommend the **DNR do a thorough study** of the pike population in Jordan Lake after the fish kill.

The **DNR takes wildlife kills, population declines, and law violations affecting those populations seriously, often instigating lawsuits or criminal prosecution.** **Aquatic wildlife should receive no less of that attention and protection than land or winged wildlife.** **Fishing is a very popular sport in Michigan,** both in numbers of **people involved and money spent.** Fishermen take their sport and the resource seriously. Whether it was caused by the **spraying company, the Lake Board, or the DNR** itself for issuing the permit, **this matter must be investigated, corrected, and prevented in the future.** My thought is that all three played a part in the Jordan Lake fish kill. As fisherman, we are not as concerned with laying blame as with **preventing this kind of tragedy in the future.**

Chase F Klinesteker