

# Undesirable Factors Cited In Report Of 'The Big Pond', Lake Apopka; 1962-1964

A biological, physical and chemical study of Lake Apopka from 1962-64 has disclosed many "undesirable" conditions.

According to David B. Lee, director of the Bureau of Sanitary Engineering, Florida State Board of Health, copies of this report have been sent to Winter Garden Mayor Percy D. Blunt, and Robert W. Sherman, chairman of the Lake Apopka Chapter, F.I.S.H., Killarney.

The report states that the studies encompassed by this report were conducted at the request of the Lake Apopka Chapter of the Florida Inland Sportsfishing Host (F.I.S.H.) and the Orange County Health Department.

"A survey of a limited portion of the southeast side of Lake was carried out during October 1962 to determine the effect on Lake Apopka from citrus industrial operations, as well as the treated domestic waste contributed by the City of Winter Garden. This time was chosen," the report states, "because no citrus processing was taking place."

To obtain comparable information during a processing season, a resurvey was conducted in January 1963. The results of these two studies revealed that more was involved than the contributions of the citrus processing companies and the sewage treatment plant.

A thorough search for possibilities turned up numerous operations and activities that could contribute to the lake's

biological, chemical and physical condition. Consequently, it was decided to study the entire lake and all of these possibilities, the report stated.

The report continued, "Due to the freeze in the winter of 1962-63 and the seasonal operations of the citrus processors and truck farmers on the north side of the lake, it was decided to conduct the complete lake study over a minimum of six months.

"Samples were obtained during January through June 1964.

"A large fish kill consisting of an estimated 1,000,000 pounds of shad occurred in May 1963 and focused attention on the possibility of insecticides entering the lake through truck farm operations.

"As a result of nearly two years of study it appears that the citrus processors, citrus growers, truck farmers, the cities and communities surrounding the lake, the water conservation activities, fish management activities and the control of hyacinths have, in combination, caused some undesirable effects on Lake Apopka despite the beneficial contributions."

Conclusions arrived at as a result of this report pointed out that using the normal biochemical yardsticks of dissolved oxygen, biochemical demand, etc., the only significant pollution found, other than excessive nutrients, was a semi-circular area reaching one to two hundred yards from the

mouth of the drainage ditch which carries untreated citrus processing waste, and treated domestic waste into the lake.

The report also stated that the lake is in an undesirable biological condition and does not provide a satisfactory environment for fish foods. This is caused by excessive nutrients contributed over many years, from the following sources: Domestic waste, presently treated, but untreated in years past; untreated citrus packing, canning, and concentrating waste; leaching from citrus growing, fertilizing, and irrigating; irrigation drainage and spraying in the truck farm areas; allowing dead fish to remain and decay in the lake and allowing destroyed hyacinths to remain and decay in the lake.

Based on the data collected and information available, the Florida State Board of Health, Bureau of Sanitary Engineering recommended the following: The citrus processing industry provide a treated waste that will not be a detriment to the lake; the truck farmers rearrange their operations to either prohibit or minimize the contributed nutrients and solids through the pump discharge from their irrigation system.

Also, the aerial spraying operation stop depositing insecticides, fertilizers, and related materials into the lake's water; citrus growers exert a greater

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effort toward reducing the quantities of fertilizer applied to their groves in order to minimize the seepage or leaching of nutrients into the lake and any masses of dead fish, especially when numbering in the hundreds of thousands be immediately removed.

Reduce the amount of hyacinths killed and left in the lake to decay; the water conservation interest consider the lake's present and future chemical and physical requirements in their practice; all agencies involved continue to pool their knowledge, experience and facilities to improve the biological conditions of the lake and, finally, an economical study of the lake and surrounding area be made by a disinterested party to determine the best use of the lake.

Copies of the report may be examined in detail in the Winter Garden City Hall, according to William R. Pomeroy, City Manager.