A Summary of State Involvement in Bear Lake Waupaca County, Wisconsin

By: Tim Rasman

- Bench mark installed on October 26, 1939. It was placed at a point where CTH "EZ" begins to parallel the lake shore; 30 feet northwest of "EZ" to a clump of six large white pines and one 12-inch cedar. The bench mark is 400 feet northwest of a dance pavillion, ten feet from the lake shore line, on county land.
- 1949 First record of carp brought to the attention of the Conservation Department. The investigator summarized by saying the number of carp was not great. Several factors limited the ability of carp to reproduce including water temperature, depth and very little shallow area.

The fishery was made up primarily of bass and bluegills with a good population of northern and perch.

- June A vegetation survey was conducted. Some areas of the lake contained an abundance of vegetation almost at a nuisance level. The <u>Potamogetons</u> or pondweeds predominated with "Big Leaf" or <u>Amplitolius</u> predominating. No <u>Myriophyllum</u> was observed. The fishery was described as good. There was a "very desirable" population of bass, northern, and panfish. Carp were present but not a significant problem at this time.
- 1956 Several species of trout were stocked.

1959 - June - The <u>Potamogetons</u> or pondweeds were the most abundant vegetation observed. <u>P. Amplifolius</u> was the most widely distributed taxa. Documentation of an influx of <u>Myriophyllum</u> was made. A buildup of silt at the inlet was noted.

Carp were present but not a serious problem. The trout appear to be losing in their competition with warm water species. Predation on trout by northerns was thought to be excessive.

- 1962 On April 28, 1962, a creel census of 20 fishermen totaled
 14 trout out of 33.08 man/hours of fishing. The total trout
 per manhour was 0.42 fish, and the average fisherman caught
 0.70 trout. The total average for all trout lakes in the
 East Central Area was 0.83 trout per manhour and 2.52 trout
 per average fisherman. Both averages on Bear Lake are
 considerably below this area's average.
- 1963 Fyke nets were set in Bear Lake April 5 to April 12, 1963, to check the northern pike spawning population. The following recommendations were made as a result of this survey. Bear Lake supports an excellent warm water fish population with most species attaining a desirable size. Trout have been planted since 1956. Fishing for this species has been spotty. A creel census of 11 fishermen on opening day in 1963 showed no trout taken. Based on an excellent northern pike predator population, a desirable warm water population, light fishing pressure for trout, and borderline thermo-chemistries the recommendation was that trout stocking be discontinued; and a management plan for warm water species be adopted.
- 1966 Construction of a structure to control water levels at the outlet was discussed at a January 26, 1966, meeting.

- 1973 October 15 A fish survey produced the following species:
 northern, largemouth bass, bluegill, pumpkinseed, rock
 bass, yellow perch, green sunfish, black and yellow
 bullheads, white sucker, carp and a variety of minnows. The
 most noticeable observation was the abundance of carp.
 Vegetation was excessive in certain areas, particularly
 Potamogeton Amplifolius. The American lotus was also
 observed. This species is protected in Wisconsin waters.
 Runoff from agriculture practices in the watershed was
 viewed as a potential source of pollution.
- 1975 Lake Michigan District DNR personnel monitored the water quality of Bear Lake on a quarterly basis. Nutrient levels exceeded Sawyer's (1947) limits for the spring turnover. The potential for excessive vegetation or algae would be expected at these concentrations. Significant dissolved oxygen depletion occurred in the hypolimnion or lower portion of the lake during winter and summer stratification.

Vegetation was abundant in certain areas during the 1975 summer survey. <u>Potamogetons</u> or the pondweeds dominated. Milfoil was also excessive. Some chara, wild celery and a few bushy pondweeds or <u>Najas</u> were also observed.

- 1979 On June 23, 1979, representatives from U.W. Extension,

 DNR, and a private consulting firm were invited to a meeting held by the Bear Lake Association. Discussion of Lake Management District status versus Sanitary District status was explained.
- 1980 May 28 a seine survey.

The survey revealed a good self-sustaining, warm water fish population present. Bass, northern pike and bluegill will provide the best returns for angler effort in the immediate future. Regarding the carp; they have shown up in all past surveys and do not pose a major management problem at this time.

July - Lake Michigan District of the DNR began monitoring Bear Lake on a quarterly basis to determine water quality since 1975. This study will continue for two years. Agencies will be brought together to identify poor land management practices in the watershed and suggest methods of improving these practices. Annual reports will be made available. A meeting will be held in the winter of 1980-1981 to inform property owners and all interested citizens of this project.

September - On September 4 the Royalton Town Board vetoed a petition to incorporate the Bear Lake Sanitary District.

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