

BRENNER 1981

SUMMARY

THIS REPORT SUMMARIZES DATA COLLECTED JULY 14., 1981, BY FISHERIES PERSONNEL OF THE MASSACHUSETTS DIVISION OF FISHERIES AND WILDLIFE TO ASSESS THE FISH POPULATION AND MAKE APPROPRIATE MANAGEMENT RECOMMENDATIONS.

THE FISH SAMPLING OPERATIONS WERE CARRIED OUT BY THE FISHERIES CREW FROM THE CONN. VALLEY WILDLIFE DISTRICT UNDER THE DIRECTION OF PHILLIP BRENNER, DISTRICT FISHERIES MANAGER.

I. LAKE ASSESSMENT: THIS FERTILE , 69, ACRE WARM WATER POND IS LOCATED ONE MILE EAST OF RTE. 63 NORTH OF DEPOT ROAD, ACCESS IS OFF LONG HILL ROAD.

THE POND IS CHARACTERIZED BY CLEAR WATER COLOR, TRANSPARENCY OF 9, FT., PH OF 6,5, TOTAL ALKALINITY; 51, PPM., TOTAL HARDNESS OF 43, PPM AND A SPECIFIC CONDUCTANCE OF , UMHOS/CM, THE MEAN AND MAXIMUM DEPTH ARE 9, FEET AND 20, FT, RESPECTIVELY, THE BOTTOM IS MUCK AND SAND . THE 1,9 MILES OF SHORELINE ARE 40, PERCENT DEVELOPED, THERE ARE 20, RESIDENTIAL DWELLINGS, THE EMERGENT AQUATIC VEGETATION COVERS APPROXIMATELY 40, PERCENT OF THE SURFACE AREA.

THERE IS ONLY AN INFORMAL ACCESS AND PARKING ALONG THE ROAD, A 7/26/50 SURVEY FOUND 5,0% TROUT WATER BY VOLUME, BUT THE 1981 SURVEY FOUND NONE, SUBMERGENT VEGETATION COVERS ALMOST THE ENTIRE BOTTOM, THE POND IS UNUSUAL IN HAVING A VERY HIGH ALKALINITY FOR A VALLEY POND.

II. FISH STOCK ASSESSMENT: THE FISH POPULATION WAS SAMPLED ON JULY 14., 1981, USING GILL NETS AND SHOCKBOAT, THE 9 SPECIES OBSERVED, LISTED IN ORDER OF ABUNDANCE INCLUDED: BLUEGILL, LARGEMOUTH BASS, PUMPKINSEED, CHAIN PICKEREL BROWN BULLHEAD, GOLDEN SHINER AND BLACK CRAPPIE, AMERICAN EELS AND SMALLMOUTH BASS.

A TOTAL OF 15, LARGEMOUTH BASS WERE COLLECTED (1,5 TO 18,4 INCHES) REPRESENTING 20,5 PERCENT OF THE TOTAL FISH SAMPLE BY NUMBER AND 42,6 PERCENT BY WEIGHT, ANALYSIS OF GROWTH RATES INDICATED BELOW AVERAGE GROWTH COMPARED TO THE STATE AVERAGE FOR THIS SPECIES, MOST FISH ATTAINED THE LEGAL SIZE OF 12,0 INCHES AT 4+ YEARS OF AGE, MORTALITY WAS ESTIMATED AT ,% AT AGE 3 AND ,% AT IV, THE P.S.D. IS PROJECTED TO BE 20,0% +/-19,4% INDICATING AN UNBALANCED BASS POPULATION, CONDITION FACTORS WERE ABOVE AVERAGE .

A TOTAL OF 4, CHAIN PICKEREL WERE COLLECTED (5,0 TO 14,9 INCHES) REPRESENTING 5,5 % OF THE TOTAL FISH SAMPLE BY NUMBER AND 8,8% BY WEIGHT, MOST FISH ATTAINED THE LEGAL SIZE OF 15,0 INCHES AT YEARS OF AGE; A GROWTH RATE WHICH IS AVERAGE COMPARED TO THE STATE AVERAGE FOR THIS SPECIES, CONDITION FACTORS WERE BELOW AVERAGE . THE GAME FISH LISTED IN ORDER OF SAMPLE ABUNDANCE ARE: LARGEMOUTH BASS, CHAIN PICKEREL AND SMALLMOUTH BASS.

RICHARD HANCOCK 508-366-4470