Original: Fish Division
cc: Education-Game
Inst. for Fish. Res.
R. S. Marks
W. E. Mason
E. H. Bacon
Kensington Metro.Park (2)
Parks & Rec. Division
C. M. Taube

INSTITUTE FOR FISHERIES RESEARCH
DIVISION OF FISHERIES
MICHIGAN DEPARTMENT OF CONSERVATION
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UNIVERSITY OF MICHIGAN

GERALD P. COOPER PH.D.
DIRECTOR

ADDRESS
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A FISHERIES INVENTORY OF KENT AND WILDWING LAKES, LIVINGSTON AND OAKLAND COUNTIES

By

Clarence M. Taube

Most of Kent Lake and all of Wildwing Lake are situated in Kensington Metropolitan Park, a recreational area that is administered by the Huron-Clinton Metropolitan Authority. The park is about four miles east of Brighton off highway U.S.-16. The Island Lake State Recreation Area fronts on the lower end of Kent Lake, below the U.S.-16 bridge. The specific locations of these waters are: Kent Lake, Livingston and Oakland counties, Town 1, 2 north, Range 6, 7 east; Wildwing Lake, Livingston County, Town 2 north, Range 6 east, Section 36.

The Institute for Fisheries Research prepared a depth contour map of these lakes[1] in the spring of 1954. The shore outlines were drawn from maps provided by the Huron-Clinton Metropolitan Authority. The map was revised in 1955, and again in 1958, to include additions and alterations of shore developments. Copies are on file at the main offices of the Institute for Fisheries Research and the Huron-Clinton Metropolitan Authority. An Institute crew[2] inventoried the lakes during September 9 and 23-27, 1957[3].

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[1] Mapped by B. V. Hughes and R. L. Sides.

[2] C. M. Taube, R. N. Schafer, and W. C. Latta.

[3] Financed largely with Federal Aid to Fish Restoration funds under Dingell-Johnson Project No. F-2-R.

The public uses these lakes intensively for bathing, boating, picnicking, and sight-seeing. Hunting is prohibited in the park. Boats are not allowed on Wildwing Lake, in order to make this body of water more attractive for waterfowl, but fishing is permitted from shore and through the ice. The park had 1,443,000 visitors in 1957; peak attendance in 1957 was on July 4 when 47,000 people entered the grounds. The number of people who use the facilities of the Brighton State Recreation Area on Kent Lake also is large.

Kensington Park and the lakes possess educational as well as recreational values. A modern building called the Nature Center houses displays on various phases of natural history. It was opened in April of 1957. School classes and the general public use its facilities, the park's nature trails, and watch and study the numerous waterfowl that frequent the lakes.

The Kent Lake dam has a valuable secondary function of withholding excess water from spring runoff into the upper part of the Huron River. The level of the impoundment is lowered three feet each fall. Water from thaws and early spring rains refill the lake to its maximum level. Level control alleviates danger of flooding on certain down-river areas that are vulnerable to high water.

Physical characteristics

Kent Lake originally was a small lake (estimated area of 58 acres) that was formed by glacial action. In 1946 the Huron-Clinton Metropolitan Authority began construction of the dam on the Huron River that formed the present lake. The impoundment was filled by the spring of 1947, and work on the dam was completed by December, 1947. Drainage enters Kent Lake from an area of approximately 150 square miles.

The surface area of Kent Lake is 1,000 acres. The maximum depth is about 40 feet. Shoal (water less than 15 feet deep) comprises over 95 percent of

the area of the basin. Bottom soils on shoal areas are primarily peat and a mixture of peat and muck. The mixture of peat and muck characterizes the bottom on and to either side of the original channel of the river. A narrow band of sand, with occasional patches of gravel, parallels most of the shoreline. Muck overlies the bottom of the depression which was the basin of the natural lake.

The water of Kent Lake is basically colorless but is subject to "blooms" of plankton which impart a dull green cloudiness. These organisms (algae) were abundant at the time the lake was inventoried. At the chemical analysis station on September 9, 1957, the Secchi disk was visible to a depth of only 2 1/3 feet. At approximately the same location on August 31, 1956, extent of visibility was 2 1/4 feet. For the bulk of Michigan lakes, maximum visibility of the disk ranges between 7 and 15 feet. In September of 1957 the water in the large bay on the west side of the lake and south of the park office was clear in contrast to the cloudiness that prevailed elsewhere. We assume that isolation of this bay from flow and wind currents that distributed the algae and nutrients for their growth in other parts of the impoundment was responsible for the clarity of the water here.

Wildwing is a natural lake that formerly was named Beach Lake. It has no inlet. Outflow is by way of a culvert to Kent Lake.

The area of Wildwing Lake is 65 acres. The maximum depth is 14 feet; most of the basin is less than 5 feet deep. Peat is the predominant bottom soil. A narrow strip of sand occurs along portions of the south and east shores, and a very small area of marl is present in the southwestern part of the lake.

The water also of this lake was turbid from an abundance of phytoplankton. No readings with the Secchi disk were taken here, but the degree of cloudiness appeared to be about the same as that in Kent Lake.

Temperatures and chemical characteristics

Surface water temperatures of these lakes probably are quite similar to those of other lakes in this part of the state. Following are summarizations of temperatures recorded at Kent Lake in May and June of 1956. These data are based on daily readings taken by park personnel around 5 p.m. at the boat rental dock.

Temperatures from May 15 through May 31, 1956, ranged between 61° and 82° F. for the water, and 51°-91° F. for the air. The mean values of this series were 64° for both water and air. The ranges of the daily readings through the month of June, 1956, for water and air were respectively 61°-82° and 51°-91°. The means were 75° (water) and 80° (air). Surface temperatures of Kent Lake recorded during the inventory in late September of 1957 varied from 59° to 66°; one reading for Wildwing Lake was 65°.

Temperatures were taken at various depths and chemical tests on the water were done over the deepest part of Kent Lake on August 31, 1956, and again on September 9, 1957. The temperature and chemical data appear in Table 1.

The temperatures and values for dissolved oxygen show that the water in this part of the impoundment was stratified. Stratification is characteristic of fairly deep lakes of this region during the summer season. A thermocline (the zone in which the temperature drops abruptly at successive depth levels toward the bottom) occurred between depths of 20 and 33 feet at the time of the first analysis, and between 20 and 30 feet during the second analysis.

Dissolved oxygen was extremely limited below 17 1/2 feet on August 31, 1956, and below 22 feet on September 9, 1957. This condition has little significance for Kent Lake as the upper stratum of water over this area was adequately charged with oxygen, and the much greater portion of the

impoundment doubtless contained the gas in sufficient quantity from surface to bottom to satisfy the needs of fish and fish-food organisms.

The water of Kent Lake is fairly hard. Values of the methyl orange test for alkalinity ranged between 162 and 238 parts per million of dissolved mineral salts (mainly lime); these values are quite similar to those recorded for the water in the older impoundments on the Huron River (Brown, 1945). The water of Wildwing Lake is not so hard as that of Kent Lake. Methyl orange values of surface samples were 90 ppm on August 31, 1956, and 112 ppm on September 9, 1957; other natural lakes of this drainage area have shown similar alkalinity values. No other chemistry tests were done on Wildwing Lake.

Pollution and fish mortality

Although organic wastes enter the Huron River just above Kent Lake, no harmful effect by them on the lake has ever been demonstrated. Especially high counts of bacteria have occasionally been obtained from water samples collected from the stream at a point just below Camp Dearborn (Sampling Station No. 8, about a mile above the north end of the lake). The counts have been appreciably lower on samples from stations 7 and 1 (roughly one-half mile downstream from Station 8), collected on the same dates as those at Station 8. Much lower counts were recorded on samples from stations in the vicinity of the bathing areas on Kent Lake. The water at these beaches is regarded entirely safe for bathing. The sampling data[4] are on file at the Kensington Metropolitan Park office and at the Institute for Fisheries Research.

The wastes introduced into the river above the lake, and perhaps also the effluent from Kensington Park's sewage treatment plant, located on the

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[4] Water samples, Kensington Metropolitan Park. Unpublished tables, dating from June 10, 1952 to July 30, 1957.

Table 1.--Temperature and chemistry data, Kent Lake. Oxygen (O_2) and methyl orange alkalinity (MO) values in parts per million

	September 9, 1957			August 31, 1956		
	Temp.	O_2	MO	Temp.	O_2	MO
Air	72	...	...	74	...	...
Surface	68	8.5	162	76	9.6	165
2 feet	68	...	...	...	...	...
4	68	...	...	...	....	...
5	...	...	...	75	...	...
6	68	...	...	...	...	...
7.5	...	...	...	71	...	...
8	68	...	...	...	...	...
10	68	...	...	71	6.3	...
12	68	...	...	...	...	...
14	68	...	...	..	...	...
15	...	...	...	69	5.4	...
16	68	8.6	...	...	...	...
17.5	...	...	...	...	4.9	...
18	68	...	...	...	...	...
20	66	...	...	66	1.9	...
22	60.5	6.8	164	...	...	...
24	55	...	...	...	...	...
25	...	...	...	56	...	...
26	51	0.2	176	...	...	...
28	48.5	...	...	...	...	...
30	47	...	...	49	...	...
32	46	...	...	...	...	...
33	...	...	...	47	0.0	200
34	45	Trace	...	...	...	...
36	45	...	...	...	...	...
38	44.5	...	238	...	...	...
39.5	44	...	...	...	...	...

southeast shore about two-thirds mile below Martindale Beach, may affect the fish population of Kent Lake through the following chain of relations: The wastes probably are largely responsible for the heavy "blooms" of phytoplankton. Abundance of algae favors invertebrate animals that feed on algae and which are food for fish. No study has been made of the fish-food organisms of Kent Lake, but the obvious abundance of phytoplankton and the presence of habitat that appears favorable suggest that the population of invertebrates is large. Hence it is logical to suppose that the waste materials which enter the lake contribute significantly to the good growth of the fish by their promotion of a large supply of food.

The fish population of Kent Lake is subject to extensive mortality in the fall season around the time of the drawdown and first formation of ice. Dead and distressed fish appear at and near the deepest part of the basin. Bluegills apparently are most vulnerable, although crappies and largemouth bass have also died. Mortalities are recorded for the falls of 1953, 1955, 1956, and 1957. Possible causes that have been considered are an undetermined toxic pollutant and depletion of dissolved oxygen for brief periods of time. Samples of water collected at times the die-offs were investigated by Institute personnel always contained an adequate supply of oxygen. Distressed fish have revived completely when transferred to other water. Search for the mysterious cause of these kills will continue.

An extensive die-off of fish was observed on Kent Lake on May 27, 1950. About half of the dead fish were bluegills; most of the rest were crappies, with some perch and bullheads included. Sizes ranged from three to six inches. Areas near the lake had recently been sprayed with a water-soluble solution of DDT, and it was suspected that spray which had reached the water may have been responsible. However, numerous lakes are subject to fish

mortalities from undetermined cause in late spring or early summer, and this kill at Kent Lake could have been of that kind.

Wildwing Lake has no source of pollution unless the excrement of waterfowl is regarded as a pollutant. Numerous wild ducks and geese feed and rest on this small lake, and their droppings probably amount to a considerable quantity of material. There is hardly any question that the birds improve the fertility of the water. This fertilization likely encourages the plankton "blooms," and probably also indirectly contributes to the good growth of the fish. Wildwing Lake has no record of fish mortality.

Biological characteristics

Aquatic vegetation is abundant in Kent Lake. Most of the plants are of the submergent type; emergent and floating types are sparse. The plants of more common occurrence are water milfoil (Myriophyllum), coontail (Ceratophyllum), waterweed (Elodea), wild celery (Vallisneria), bushy pondweed (Najas flexilis), and several other pondweeds (Potamogeton). Milfoil and a broad-leaf pondweed (Potamogeton sp.) predominate. Abundance of unicellular algae has already been mentioned; filamentous algae are common.

Rooted vegetation is so plentiful that it has been something of a nuisance, especially for boating. Park personnel, with some assistance from the Department of Conservation, have controlled vegetation with chemicals on some parts of the lake during the last several years.

The stand of aquatic plants in Wildwing Lake also is dense. The species composition here is much like that of Kent Lake. Floating vegetation (consisting mainly of water lilies) is much more plentiful in Wildwing than in Kent Lake.

Fish collecting in Kent Lake was done with gill nets and seine. Eighteen overnight sets of gill nets were made. Each net was 125 feet long by 6 feet deep, and composed of one 25'-section each of 3/4-, 1-, 1 1/4-, 1 1/2-, and 2-inch mesh, square measure. The netting effort was distributed over the lake

as a whole; that is, no one area was netted intensively. The seining was done at three stations with a 20-foot by 4-foot common sense seine. The species of fish captured with nets and seine are listed in Table 2. Also listed in this table are species that were not collected in 1957 but which may occur in the lake as they have been collected from the Huron River in the vicinity of the lake in previous years.

Largemouth bass, bluegills, black crappies, and yellow perch presently are the principal game fish in Kent Lake. Warmouths are fairly numerous but this species is of minor interest to fishermen because it seldom attains good size in this region. Northern pike were abundant for several years after the present lake was formed, but they surely are much less numerous now, as was indicated by the catch of only three pike in gill nets in 1957. Unlike some other species (such as some of the centrarchids), this fish is quite vulnerable to capture by gill nets. Plentitude in the early years followed by a marked decline is generally characteristic of pike populations in impoundments. The inventory crew collected no rock bass, but this fish almost certainly is still a resident of the lake.

Kent Lake has a good reputation for largemouth bass fishing. There are far fewer smallmouth bass than largemouth bass, which is to be expected of a weedy, soft-bottomed lake that has little sand and gravel shoal. While the bluegills and crappies do not attain exceptional size, many of them are of a size to interest anglers. Thirty-four (46%) of the 74 bluegills collected with gill nets were at least 6.5 inches in length; the largest of these was 8.8 inches. Of the 87 crappies taken in gill nets, 19 (21%) were at least 6.5 inches long; the largest was 9.3 inches. The perch collected in 1957 would be considered small by most anglers' standards. Although 48 (59%) of the 81 specimens that gill nets caught were at least 6.5 inches long,

Table 2.--Fishes collected from Kent and Wildwing lakes in 1957 or from the Huron River in the vicinity of Kent Lake in previous years

Common name[1]	Scientific name	Kent Lake[2]	Wildwing Lake[2]
Game Fish			
Grass pickerel	Esox americanus	*	
Northern pike	Esox lucius	X	
Yellow perch	Perca flavescens	X	X
Smallmouth bass	Micropterus dolomieui	X	
Largemouth bass	Micropterus salmoides	X	X
Warmouth	Chaenobryttus gulosus	X	X
Green sunfish	Lepomis cyanellus	X	X
Bluegill	Lepomis machrochirus	X	X
Longear sunfish	Lepomis megalotis peltastes	X	
Pumpkinseed	Lepomis gibbosus	X	X
Rock bass	Ambloplites rupestris	*	
Black crappie	Pomoxis nigromaculatus	X	X
Coarse Fish			
Brook lamprey	Ichthyomyzon fossor or Lampetra lamottei (?)	*	
White sucker	Catostomus commersoni	X	
Northern hog sucker	Hypentelium nigricans	*	
Spotted sucker	Minytrema melanops	*	

[1] Names of the fishes are those used by Bailey (1958).

[2] An "X" denotes collection in 1957; an asterisk (*) denotes that the species was not collected in 1957 but may have been present in Kent Lake because it was found previously in the Huron River in the vicinity of the lake.

Table 2 (continued)

Common name	Scientific name	Kent Lake	Wildwing Lake
Coarse Fish (continued)			
Lake chubsucker	Erimyzon sucetta	X	X
Black redhorse	Moxostoma duquesnei	*	
Black bullhead	Ictalurus melas	*	
Brown bullhead	Ictalurus nebulosus	X	X
Yellow bullhead	Ictalurus natalis	X	X
Tadpole madtom	Noturus gyrinus	*	
Stonecat	Noturus flavus	*	
Brindled madtom	Noturus miurus	*	
Longnose gar	Lepisosteus osseus	X	
Bowfin	Amia calva	*	X
Carp	Cyprinus carpio	X	X
Forage Fish			
Golden shiner	Notemigonus crysoleucas	X	X
Creek chub	Semotilus atromaculatus	*	
Hornyhead chub	Hybopsis biguttata	*	
Rosyface shiner	Notropis rubellus	*	
Common shiner	Notropis cornutus	*	
Blackchin shiner	Notropis heterodon	*	
Sand shiner	Notropis stramineus	X	
Mimic shiner	Notropis volucellus	*	
Blacknose shiner	Notropis heterolepis	*	
Bluntnose minnow	Pimephales notatus	X	

Table 2 (continued)

Common name	Scientific name	Kent Lake	Wildwing Lake
Forage Fish (continued)			
Stoneroller	Campostoma anomalum	*	
Central mudminnow	Umbra limi	*	
Blackstripe topminnow	Fundulus notatus	*	
Brook silverside	Labidesthes sicculus	X	
Blackside darter	Percina maculata	*	
Logperch	Percina caprodes	X	
Johnny darter	Etheostoma nigrum	X	
Greenside darter	Etheostoma blennioides	*	
Iowa darter	Etheosoma exile	X	
Rainbow darter	Etheostoma caeruleum	*	
Fantail darter	Etheostoma flabellare	*	
Least darter	Etheostoma microperca	*	
Mottled sculpin	Cottus bairdi	*	

only 8 of these exceeded 8 inches and the largest was only 8.8 inches. By a weight-for-length comparison, a 6.5-inch perch is a less desirable fish than either a bluegill or crappie of the same length. As gill nets are quite effective in catching this species, the collecting results provide strong evidence that there were few large perch in Kent Lake in the fall of 1957.

The population of coarse fish other than carp apparently is not large. The nets caught small numbers of white suckers, chubsuckers, and bullheads, all of which can be readily taken in gill nets. Although only one carp was netted, Kent Lake apparently has a large population of this fish. We observed large numbers of spawning carp in the spring of 1956. The gear used in the inventory was not the type of gill net that is effective on carp. The nets captured 13 gars. No bowfin (dogfish) were collected, but because this fish occurs in Wildwing Lake, it probably also lives in the impoundment.

A limited amount of seining in Kent Lake produced seven kinds of forage fish, of which the bluntnose minnow and sand shiner predominated in number. Seventeen other kinds have been represented in collections taken in previous years from the Huron River within the vicinity of the present lake (Brown, 1945; Cooper, 1954). Conceivably all of these species could also be found in the lake.

On Wildwing Lake, the inventory crew set six gill nets for one night and took one collection with a seine. The composition of the game fish population is similar to that of Kent Lake. Although no northern pike were netted here, pike doubtless are present. If the smallmouth bass is represented at all, it probably is extremely rare because the environment does not favor this species. As in Kent Lake, largemouth bass, bluegills, crappies, and perch are the principal species.

Bullheads appeared to be more abundant in Wildwing than in Kent Lake. With less netting effort, approximately three times as many of these fish were caught in this lake (23) than in the impoundment (8). Carp evidently are plentiful.

Little seining was done in Wildwing Lake because of dense vegetation and soft bottom, so the composition and abundance of the forage fish population cannot be evaluated in this report. A large catch of golden shiners in gill nets indicated an abundance of this minnow.

The kinds of fish that appeared in the collections from Kent and Wildwing lakes are listed in Table 2.

Scale samples collected in 1957 from sport fish of Kent and Wildwing lakes have been examined for information on age and growth. The data are summarized in Table 3. In this table the Roman numerals represent age in years; unenclosed figures under age groups are average total lengths in inches; figures within parentheses are the number of fish in the sample. State-average lengths by age class, based on large samples of fish that were collected from various Michigan lakes (Latta, 1958), are given for sport species to afford comparison with average lengths of fish from Kent and Wildwing lakes.

In growth comparisons, a value within 1.0 inch of the state-average figure for largemough bass and northern pike, and within 0.5 inch for the bluegill, pumpkinseed, crappie, and perch, is customarily regarded as average growth.

Fish of Kent and Wildwing lakes show good growth. Growth rates of bluegills, crappies, and perch are well above state average. The small samples of largemouth bass, pumpkinseeds, and warmouths suggest above-average growth of these fish in both waters. The probable role of fertilization in encouragement of growth has been mentioned earlier in this report.

Table 3.--Age and growth of sport fish in Kent and Wildwing lakes[1]

	I	II	III	IV	V	VI
Largemouth bass						
Kent	7.8(2)	...	...	13.6(1)	...	...
Wildwing	7.8(3)	...	...	...	...	...
State average	6.1	8.7	10.0	12.1	13.7	15.1
Bluegill						
Kent	4.8(35)	6.9(30)	7.3(6)	8.6(2)	...	...
Wildwing	4.2(1)	5.2(7)	6.4(43)	6.9(1)	...	...
State average	2.9	4.3	5.5	6.5	7.3	7.8
Crappie						
Kent	5.8(70)	8.0(11)	8.9(3)	...	...	...
Wildwing	6.1(6)	8.1(12)	8.4(4)	8.6(2)	...	...
State average	...	5.9	8.0	9.0	9.9	10.7
Pumpkinseed						
Kent	4.8(2)	4.7(2)	5.8(2)	...	...	...
Wildwing	3.7(1)	4.7(3)	5.6(6)	...	...	...
State average	2.9	4.1	4.9	5.7	6.2	6.8
Warmouth						
Kent	...	4.8(4)	5.8(3)	8.1(1)	7.3(1)	8.6(1)
Wildwing	4.1(1)	5.0(3)	5.2(5)	...	...	...
State average	2.0	4.2	4.8	5.5	6.1	6.5
Perch						
Kent	6.2(38)	7.4(34)	7.9(7)	...	...	...
Wildwing	5.8(1)	7.3(7)	7.8(2)	8.5(1)	...	...
State average	4.2	5.8	6.8	7.9	8.8	9.8
Northern pike						
Kent	...	...	26.4(1)	28.9(1)	29.4(1)	...
State average	15.5	19.4	22.2	23.9	25.4	27.7

[1]Ages determined by H. F. Dugan.

The scarcity of fish in age groups above III is unusual. Although all species (except pike) concerned in this study are relatively short-lived, age-group IV and V bluegills, pumpkinseeds, crappies, and perch usually are represented more frequently in collections than they were in these collections. Whereas selectivity of the nets may be suspected of having been at least partly responsible for the capture of very few centrarchids beyond the 3-year-old class, this possibility hardly applies to perch.

Management considerations

Authorities of Kensington Metropolitan Park in 1956 requested that the Institute for Fisheries Research explore the practicality of controlling carp in Kent Lake by manipulation of the water level during the spawning season of this fish. Their interest stemmed from an account of the apparent success of a program carried on at Fort Randall Reservoir in South Dakota. The water of this impoundment in South Dakota was drawn down below the level of shallow areas on which carp had recently spawned, thereby destroying the eggs. I was assigned to look into the possibilities of a similar procedure for Kent Lake.

Observations were made on Kent Lake before, during, and after the peak of the spawning season in 1956. Observations were continued in 1957. Carp reproductive activity was at its peak on June 7 and 8, 1956, when it was plainly evident that the impoundment contained a large number of carp. Some of the fish spawned in shallow water (depths of one foot or less), but a considerable number deposited eggs over deeper places (5 to 6 feet). Numerous eggs adhered to vegetation in the latter areas. Some of these eggs were collected and placed in aquaria in the laboratory where they hatched.

Because many carp spawned over relatively deep water, the manipulation of the water level to control this fish in Kent Lake was deemed impracticable. At the time the park authorities proposed control by this means, they stated

they could reduce the water level by one foot during the spawning period. This reduction was to be made by holding the lake six inches above the normal summer level until the drawdown, and then draining the water down six inches below the normal level, leaving this amount to be recovered during June. The subsequent observations on spawning habits indicated that a drawdown of one foot would be of little or no value. Moreover, the park administrators decided later that it would be inadvisable to reduce the level even so much as one foot in springs such as the spring of 1956 when there was much rainfall and flooding of downstream areas.

An inventory of the fish population was included in the plans for the survey of the carp situation in Kent Lake. This study was scheduled for 1956, but could not be done until 1957. The results of this investigation, presented in preceding sections of this report, showed that Kent Lake contained a large, diversified population of fast-growing sport fish. In view of this situation, we see no need at this time for controlling abundance of carp. As this species (which has some value for sport and food) does not adversely affect more desirable species at this time, it does not present a problem now.

Conceivably, though, carp may in the future become much more plentiful in the impoundment than they are presently, and could be detrimental to game and pan fishes by competing strongly for food and living space. If this situation ever develops, carp should be controlled. Treatment of portions of the lake with a toxicant during the spawning season would appear to be an effective measure. The areas favored in 1956 by carp for spawning sites were the large bay on the east side of the lake north of Buno Road, the bay on the west side and just south of the park office, the narrow lagoon that connects the last-named bay with the continuous portion of the lake, and an area off the north shore in the vicinity of the boat rental dock. According

to report, these places have also been favored in other years. Treatment of water having large concentrations of carp with a toxicant such as rotenone during the breeding period probably would eliminate many of the undesired fish. To minimize escapement, it might be necessary to barricade the sites selected for treatment (with chicken wire, for example).

No observations were made on Wildwing Lake during the carp spawning season, but this fish evidently is plentiful here, too. Gill nets caught more carp in Wildwing Lake (5) than in Kent Lake (1). I evaluate the present status of carp in the two lakes as similar.

The Kensington Park administrators are commended for the excellent facilities they have provided for anglers at Kent and Wildwing lakes. A large number of boats are available for rent on Kent Lake, there are good boat launching sites, and several areas have been developed for shore fishermen. A fishing pier was built out from the west shore in 1957, and sheet-piling docks have been provided on the east shore for anglers. Facilities for shore fishermen could well be expanded further on both lakes, but decisions on this subject are under the jurisdiction of the park authorities. Additional facilities for shore anglers on that portion of Kent Lake within the Brighton State Recreation Area might also be considered.

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INSTITUTE FOR FISHERIES RESEARCH

Clarence M. Taube

Approved by G. P. Cooper

Typed by M. S. McClure