

74.9
AR

ANNUAL REPORT

OF THE

New Jersey Board of Fish and
Game Commissioners



For the Fiscal Year
Commencing July 1, 1941
and Ending June 30, 1942

ANNUAL REPORT

OF THE

New Jersey Board of Fish and
Game Commissioners

1941

For the Fiscal Year
Commencing July 1, 1941
and Ending June 30, 1942

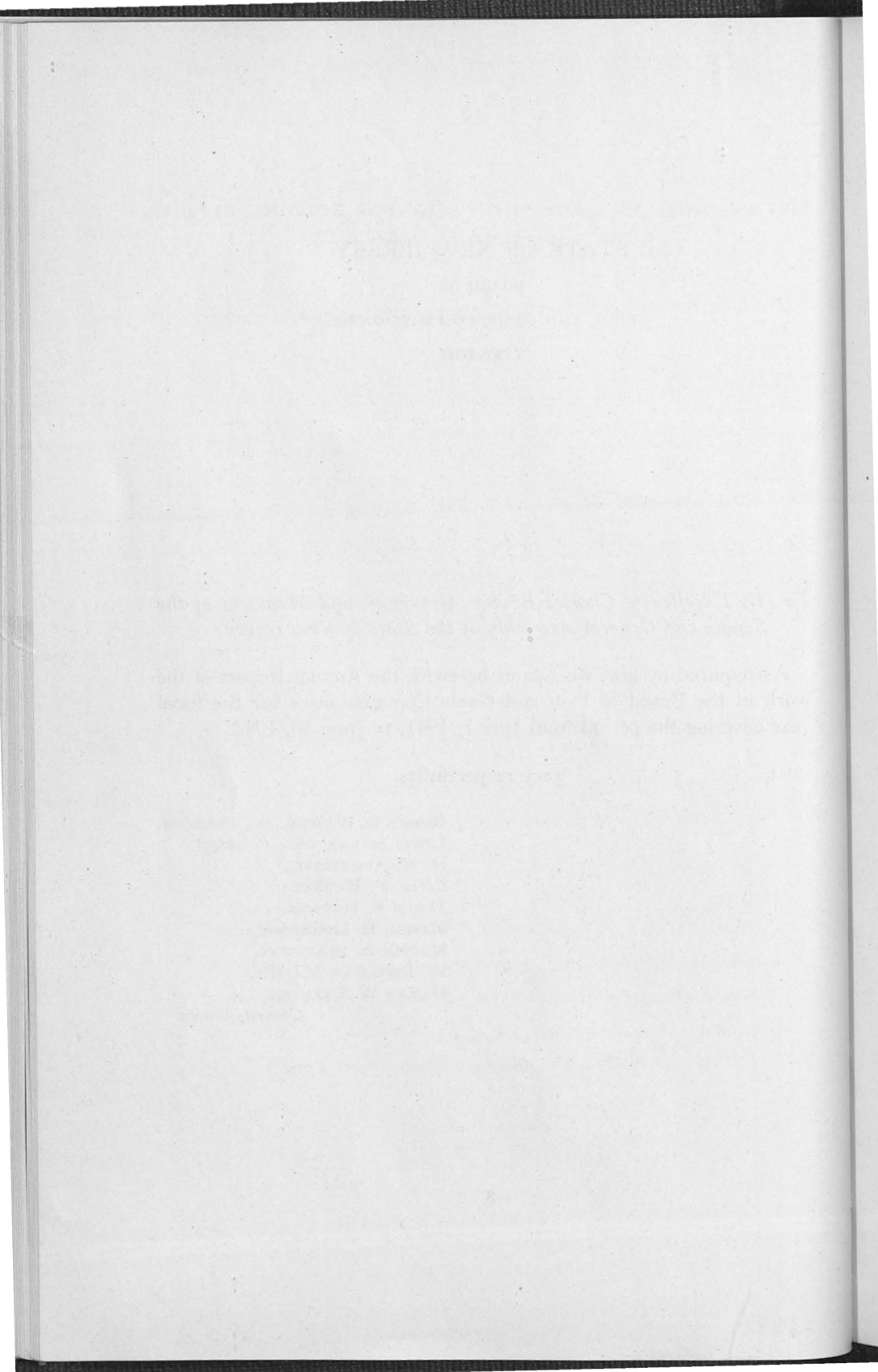
STATE OF NEW JERSEY
BOARD OF
FISH AND GAME COMMISSIONERS
TRENTON

*To His Excellency, Charles Edison, Governor, and Members of the
Senate and General Assembly of the State of New Jersey:*

As required by law, we submit herewith the Annual Report of the work of the Board of Fish and Game Commissioners for the fiscal year covering the period from July 1, 1941, to June 30, 1942.

Very respectfully,

GEORGE C. WARREN, JR., *President,*
LEWIS SPINKS, *Vice-President,*
H. M. ARMSTRONG,
CHAS. F. HUNTER,
JAMES R. HENSLER,
HAROLD E. LONGSDORF,
MARVIN A. SPAULDING,
W. STEELMAN MATHIS,
HAROLD W. LAAUWE,
Commissioners.



**LIST OF FISH AND GAME COMMISSIONERS HOLDING OFFICE
AT THE DATE OF THIS REPORT
June 30, 1942**

GEORGE C. WARREN, JR., <i>President</i>	Summit
LEWIS SPINKS, <i>Vice-President</i>	Nixon
HARRY M. ARMSTRONG.....	Jersey City
CHARLES F. HUNTER.....	Palisade
JAMES R. HENSLER.....	Rumson
HAROLD E. LONGSDORF.....	Mt. Holly
MARVIN A. SPAULDING.....	Trenton
W. STEELMAN MATHIS.....	Toms River
HAROLD W. LAAUWE.....	Paterson

H. J. BURLINGTON, *Executive Secretary*
ANNE E. SULLIVAN, *Assistant Secretary*
OFFICE OF THE BOARD, *State House, Trenton, N. J.*

MALCOLM DUNN, *Superintendent of Game Farm, Forked River*
CHARLES O. HAYFORD, *Superintendent of Fish Hatchery, Hackettstown*
EDWARD H. ROTH, *Superintendent of Quail Farm, Holmansville*
L. G. MACNAMARA, *Superintendent of Game Management, Mercerville*
W. W. WOODFORD, *Confidential Agent, Liberty Corner*

**LIST OF FISH AND GAME WARDENS HOLDING COMMISSIONS
AT THE DATE OF THIS REPORT**

HARRY E. CUDNEY, *Protector*.....Hackettstown
 G. I. HALL, *Assistant Protector*.....Salem
 JAMES H. TRELOAR, *Assistant Protector*.....Newton
 CHARLES C. HILL, *Assistant Protector*.....Toms River
 JOHN R. HUGG, *Assistant Protector*.....West Caldwell

ALFRED F. BAKLEY.....Washington
 WILLIAM C. CARSLAKE.....Columbus
 FRANK T. CLARK.....Hackettstown
 OSCAR CLARK.....Vineland
 HERBERT G. COTTRELL.....Belmar
 FREDERICK C. CRAIG.....Chester
 HAROLD M. CROWLEY.....Tuckerton
 CLIFFORD G. CUDNEY.....Hackettstown
 DAVID L. DALRYMPLE.....Metuchen
 J. HOWARD FERRY.....Jersey City
 WESLEY GIBBS.....Yardville
 JOHN W. GRAHAM.....Swedesboro
 GEORGE E. GROVES.....Bridgeton
 R. K. HALL.....Audubon
 J. LESTER HYDE.....Newton
 ALFRED S. JONES.....Carney's Point
 FRANCIS L. JONES.....Stone Harbor
 JAMES L. KILPATRICK.....Tuckerton
 NORMAN P. KRAEUTER.....Somerville
 BENJAMIN H. LANE, JR.....Red Bank
 CARL W. NEWMAN.....Dover
 THOMAS F. NOLAN.....Mercerville
 JOHN C. O'DOWD.....Trenton
 EUGENE W. O'NEILL.....Clinton
 ALFRED J. PERKINS.....Lakewood
 DANA J. SAXTON.....Absecon
 ANDREW SHRAW.....Springfield
 CHARLES R. SKINNER.....Mays Landing
 THOMAS L. SPENCER.....Hackensack
 GARRET WESTERVELD.....North Haledon
 ROY H. WILLIAMS.....Pcmpton Lakes

FOREWORD

BY

GEORGE C. WARREN, JR., *President*

The year just closed was undoubtedly the most successful in the history of the Fish and Game Commission. There are more game and song and insectivorous birds in the State today than there have been since the original Fish and Game Commission was created.

Every department has cooperated in a highly efficient manner and our staff is perhaps the best rounded organization to be found in our country. I wish to express my deep appreciation of the work of my fellow Commissioners, heads of departments, and employees who helped to make this past year the best in the history of the Commission.

It is gratifying to report that the production and liberation of fish and game from our hatchery and game farms were the greatest ever by our Commission, and there has been a decided increase in the number of feed patches planted on open grounds throughout the State; this environmental improvement has produced a noticeable increase in the quantity of game in these areas and it is pleasing to note that the sportsmen and farmers are showing greater interest in this work.

Our educational department has increased its activities immeasurably and there is an ever-growing demand made upon it by the public. Approximately 325,000 persons have been reached by exhibits, lectures, and motion pictures depicting wild life and our conservation efforts.

An outstanding contribution to the cause of conservation was the creation of the Atlantic States Marine Fisheries Commission. Ten of the Atlantic Coast States, including New Jersey, have entered into an interstate compact, ratified by the Congress of the United States, for the purpose of increasing the quantity of all salt water species. Most of these species are migratory and need the protection of all our coastal states in order to conserve successfully and adequately—it will now be possible to enact legislation that will be of benefit to all.

Our work has become more complex each year. It is no longer an easy task to keep abreast of the demands made upon our Department. While progress seems slow, a review of the accomplishments of the past decade reflects a story that should bring satisfaction to everyone interested in our work.

It is impossible to forecast the effects the war will have upon our activities. Our income probably will be considerably reduced; if it is, we will have to find ways to overcome this possibility. We are determined to maintain those things that have taken years to attain. When our fighting forces return we must show them that their outdoor pleasures have not been neglected. We must and will carry on to preserve this heritage for them.

SUMMARY OF ACTIVITIES 1941-42

The following is a brief summary of conservation of wildlife and the propagation and liberation of fish and game by the New Jersey Fish and Game Commission during the fiscal year beginning July 1, 1941, and ending June 30, 1942.

FISH AND GAME LIBERATION, 1941-42

Pheasants, adult, 44,781; of which 30,914 were propagated and distributed from our own farms, 7,445 purchased for liberation on open lands in the State, 6,093 purchased from the Public Shooting and Fishing Grounds Fund for liberation on State-controlled areas which are open to public hunting, and 329 raised to adult stage by 4-H Club members and liberated by our wardens.

Quail, 20,428; of which 16,244 were propagated and distributed from our own farm, 691 purchased and liberated on open lands, and 3,493 purchased and liberated on Public Shooting Grounds and State-controlled lands.

Rabbits, 19,355; of which 9,408 were purchased and liberated on lands open to public hunting, and 9,947 were purchased and liberated on Public Shooting and Fishing Grounds and State-controlled lands.

Raccoon, 35; which were purchased and liberated on open lands.

Fish, propagated and distributed from the Fish Hatchery at Hackettstown:

Trout over seven inches, 661,674; trout under seven inches, 218,600; large mouth bass from one to five inches, 167,260, from twelve to sixteen inches, 800; small mouth bass from one to five inches, 50,025, from five to sixteen inches, 570; bluegill sunfish, 519,825; catfish, 11,750; yellow perch fry, 84,400,000; tadpoles, 43,500.

Netted from various reservoirs, etc., and distributed throughout the State:

Pickereel, 978; perch, 53,385; white perch, 11,580; yellow perch, 14,022; sunfish, 19,565; bluegill sunfish, 350; catfish, 1,495; pike, 706; bass, 3,829; calico bass, 7,600; alewives and shiners, 31,300; miscellaneous fish, 12,300.

* * *

The market value of all fish and game liberated was.....	\$436,453.27
The receipts from resident and non-resident hunters' and anglers' licenses were	413,453.00

LAW ENFORCEMENT

During the fiscal year ending June 30, there were 764 prosecutions for violations of the fish and game laws. Five of these cases were dismissed by the court.

FUR-BEARING ANIMALS

A tabulation of the 1941 licenses shows that the following fur-bearing animals were taken in 1940 as compared with the previous year:

	1939	1940
Skunk	12,444	12,883
Muskrat	167,535	194,628
Mink	1,052	825
Otter	7	20

DEER—1941

The total number of deer taken during the four-day open season of the year 1941 was 2,182, as compared with 2,622 during the five-day season of 1940. This shows an increase of 23 in the daily average.

PREDATORY VERMIN CONTROL

The following tabulation shows the predatory animals taken by the sportsmen as given on the license stubs of 1941, which figures do not include unprotected hawks, crows, or other vermin taken by farmers who do not need a license to trap or shoot on their own lands:

	1939	1940
Cats	14,979	10,077
Weasels	5,899	4,398
Red Squirrels	2,491	3,149
Foxes	1,385	1,857

In addition to the above, there were 40,855 head of predatory birds and animals taken by our wardens, game conservators, and holders of special vermin permits.

LATEST REPORT OF FISH AND GAME TAKEN

The Commission has completed the tabulation of fish and game taken during the calendar year 1940 as shown below, the total value being \$1,703,520.25. This does not include fish and game taken by occupants of land who do not need a license to hunt and fish on their own property. Reports were made by only 49 per cent of license holders.

A comparison of the 1940 take of fish and game against that of 1939 follows:

	1939	1940
Deer	2,336	2,622
Pheasants	157,103	116,046
Quail	46,675	39,254
Rabbits	803,862	744,759
Gray Squirrels	136,602	178,327
Grouse	11,577	10,292
Woodcock	11,450	7,753
Ducks	111,010	106,910
Geese	706	374
Trout	480,512	531,834
Bass	204,989	232,948
Pickrel	179,254	203,476

The decrease in game taken may be accounted for by a great number of forest fires and the severe floods during the peak of the breeding season in 1940.

FARMER-SPORTSMAN COOPERATIVE PLAN

The total acreage as of June 30 under the Farmer-Sportsman Cooperative Plan is approximately 121,000 acres, which is an increase of 8,000 acres over last year. This increased area is mostly farm land of fertile soil where grain crops are grown, which insures a plentiful grain food supply for game birds.

GAME MANAGEMENT AND PUBLIC SHOOTING AND FISHING GROUNDS

The utilization of the State-owned Public Shooting Grounds by the New Jersey sportsmen reached an all time high during the 1941 small game season. Accurate checking methods in use since 1938 indicate that the utilization of these public areas increases in accordance with the extent and degree of development of the area and appears to be relative to the resulting effects of environmental improvement in producing a better game crop.

It is important to note that the more noticeable increases in wildlife populations and hunter utilization have been made on tracts situated in southern New Jersey that are exemplary of the tax delinquent lands found in that portion of the State. The production of a natural resource in the form of wildlife populations and its resultant economic value on these normally unproductive lands is good conservation and are factors recognized by the Commission.

To the mounting aggregate of State-owned Public Shooting Grounds, this past year brought the addition of the Collier's Mill Tract with an area of 5,500 acres, while considerable acreage in the vicinity of Turkey Swamp, Monmouth County, is in the process of being acquired.

FIELD TRIALS

There were sixty-six field trials held throughout the State during the past year, game being furnished by the Commission where the trials were held on open hunting grounds.

FEED PATCHES AND WINTER FEEDING

There were 1,127 food patches planted by our Game Management Department and the sportsmen's organizations throughout the State.

During the past winter the Commission purchased and distributed through the Wardens' service and sportsmen's organizations 3,020 pounds of food for game, in addition to 803 bushels of corn and 55 sheaves of wheat raised on Public Shooting Grounds. There were also donated for winter feeding 300 bushels of corn and 350 bushels of apples.

EDUCATIONAL PROGRAM

There were thirty-two articles on general conservation sent to the press. Our Commissioners and other members of the Department spoke on conservation in many sections of the State. Under this program, lectures were given and motion pictures shown in schools, sportsmen's organizations, and civic groups, and exhibits of fish and game were made in various places.

NEW LEGISLATION

1. Prohibits hunting in tracking snow in Gloucester, Atlantic, Salem, Cumberland, and Cape May Counties.
2. Provides that New Jersey migratory waterfowl laws coincide with Federal Government on shooting hours.
3. Changes method of measuring length of lobsters which may be legally bought, sold, imported or exported in New Jersey.
4. Makes it unnecessary to wear hunting and fishing license button for the duration of the war.
5. Regulates fees and equipment for net fishing.
6. Memorializes Congress not to enact H.R. 6885, which would set aside all State laws regulating the catching of menhaden.

ORGANIZATION

At the organization meeting of the Board in December, 1941, George C. Warren, Jr., of Summit, was re-elected as President and Lewis Spinks, of Nixon, as Vice-President.

GENERAL

HUNTING AND FISHING CONDITIONS

A brief outline of hunting and fishing conditions throughout the State, taken from the reports of the Assistant Protectors in charge of the different districts, follows:

First District, comprising Sussex, Warren, Passaic, Morris and Hunterdon Counties:

Although the war effort may have cut into the number of anglers on our streams later in the season, it apparently did not deter the usual thousands out to reap the benefits of a year's labor by the Hackettstown hatchery in the distribution of over a quarter of a million trout before the opening day. Wardens throughout the district report many limit catches, and it will be interesting to watch for the prize-winning "big ones" in the Governor's Fishing Tournament. We may also look with anticipation to the tournament for results from the lake fishing, with a pickerel over four pounds taken in the Waterloo section of Warren County for a starter. However, even if all do not win prizes, there is fun and relaxation to be had in fishing along the Delaware River and many of the lakes in the northern district for not only bass and pickerel, but perch, catfish and some very worthwhile bluegills.

The hunting last year varied somewhat; the supply of game was normal, rabbits predominating, with a good supply of pheasants and ducks. The woodcock had rather adverse migrating conditions but supplied a number of days of good shooting. The deer season was excellent all over the district. Grouse hunters from Greenwood Lake through Stokes Forest to the Blue Mountains in upper Warren, and in other sections of Sussex and Morris Counties, had a good year, and, though at times the birds were wild due to dry spells, there was a very good supply.

Second District, comprising Bergen, Essex, Hudson, Middlesex, Somerset, and Union Counties:

The year 1941 was a year of extreme weather conditions, but in spite of long droughts, making very low water and dry uplands, the hunting and fishing was much better than average. The stocking of rabbits and a larger spring stocking of pheasants, followed by heavier stocking of birds in the late summer, the additional food patches, giving feed and cover during the winter, are no doubt the reasons for the additional game during the hunting season. More

and larger bags of game were reported in the district, many reporting twelve to fifteen pheasants and some as high as fifty rabbits for the season.

The amount of game remaining after the hunting season was greater than for a number of years and with the mild winter, it provided a good start for the spring breeding season.

The woodcock hunting was spotty, more than usual in some places and poor in others, which could be accounted for by the dry weather causing the birds to light nearer to the better feeding grounds and by the late opening of the season, there being flights before it opened.

In the southern part of the district where quail hunting is permitted there was a slight increase in the number of birds, but due to the dry weather they were difficult to locate. Raccoon hunting is becoming a more popular sport each year and this year was a little better than preceding years.

Interest in winter feeding is increasing and hunting clubs and individuals are building more shelters, planting feed patches, and furnishing grain and other foods for wildlife.

Third District, comprising Mercer, Monmouth, Ocean, and Burlington Counties:

Upland game hunting was good, due, no doubt, to the fine weather of the previous spring and the lack of heavy rains. Quail hunting was exceptionally good, particularly in Ocean and Burlington Counties, many fine bags being recorded, with a great number of coveys known to be left over at the end of the season. Due to the vast stocking program, the planting of food patches, and a very good nesting period, the supply of this well-hunted game bird was increased.

Winter feeding operations and vermin control, together with the aid of nature's large acorn crop did much to help the game survive the winter. Sportsmen's clubs and individuals in Monmouth County trapped over two hundred rabbits in residential and restricted sections and liberated them on open lands under the supervision of the warden.

Railbird shooting along the Rancocas Creek and the Delaware River at the early stages far exceeded the hunting at Tuckerton, New Gretna and Lower Bank. The latter sections afforded excellent shooting during the last part of the season when strong high tides flooded the meadows. On the whole, it was the best season in years, there being many railbirds and mudhens killed.

Even though there were plenty of ducks, the duck season was a miserable one along the coast and bays, because of unseasonable weather. It was not until the last week of the season, after the weather changed, that the duck hunters enjoyed some real shooting.

The trout season was very successful as the streams and lakes were well stocked; fishermen were pleased with the number and size of their catches, several bag limits having been recorded. Many fine

catches of bass and pike were reported in the fresh water lakes and streams.

Fourth District, comprising Atlantic, Cape May, Camden, Cumberland, Gloucester, and Salem Counties:

Sora, rail and mudhen shooting was fair on most of the tidal creeks, with a slight decrease noted along the upper Delaware River. There was an increase in ducks, geese and brant, particularly of crow ducks, wood ducks, pintail and teal. A long dry summer accounts for a decrease in the number of birds killed. There was a marked increase in shore birds, especially willets, curlew, robin-snipe, Wilson snipe, yellowlegs and black-bellied plover.

Upland game hunting was good throughout the area. There were few woodcock hunters, although the birds were plentiful and there were more local birds than usual. Raccoon increased, as did the number of hunters in pursuit of them. There has been an increase in the deer herds.

The higher price of pelts counteracted the decrease in the fur-bearing animal industry caused by dense tidal water salinity.

Although this district carried out its largest adult trout stocking program, there were many fish left over, due to the smaller number of anglers. There was an increase in bass, as well as the number of anglers, and many streams were made more profitable through reclamation processes.

The mild winter made an extensive feeding program unnecessary, although there was the usual assistance and contributions from interested sportsmen and individuals.

WARDEN SERVICE

We are sorry to report the death of two of our employees who had served long terms with the Commission, Thomas Kelley, Assistant Protector, of Jersey City, and Lewis Larson, Warden, of Bound Brook.

Two wardens were discharged from the service, and one drafted into the army for the duration of the war.

PROSECUTIONS

During the fiscal year ending June 30, there were 764 prosecutions for violations of the fish and game laws, of which 759 resulted in convictions and 5 acquittals.

Sentence was suspended in 95 cases, 31 defendants were committed to jail, 26 given time to raise the penalty imposed, and 21 placed on probation to make payment. There were 8 cases appealed to the Common Pleas Court by the defendants. Eight guns and 2 boats were confiscated and 52 licenses revoked.

The number of arrests made by each Warden, Deputy Warden, and other complainants during the fiscal year is as follows:

Williams	66
A. Jones	48
Graham	47
Newman	35
Carlake	31
Gibbs	26
Coffin	24
Nolan	23
O'Dowd	23
F. Clark	21
Westerveld	21
Craig	21
Groves	21
Skinner	20
R. K. Hall	18
Hyde	17
O. Clark	16
Shraw	16
Cottrell	16
Bakley	15
Spencer	15
O'Neill	11
Kraeuter	11
Doron	11
F. Jones	10
Ferry	9
Lane	9
Crowley	9
Larson	8
Thummel	8
White	8
Saxton	6
Hugg	6
Perkins	4
G. I. Hall	4
Kilpatrick	2
C. Cudney	1
Treloar	1
Mathis	9
Woodlin	9
Game Conservators	2
Deputy Wardens	59
Other complainants	27

764

The number of arrests according to districts is as follows:

First District:

Sussex, Warren, Passaic, Morris, and Hunterdon Counties.. 252

Second District:

Bergen, Essex, Hudson, Middlesex, Somerset, and Union
Counties 84

Third District:

Mercer, Monmouth, Ocean, and Burlington Counties 211

Fourth District:

Camden, Cumberland, Gloucester, Salem, Cape May, and
Atlantic Counties 217

764

The following shows the various offenses for which persons were arrested during the fiscal year:

LICENSE VIOLATIONS: Fishing without license, 106; hunting without license, 53; procuring wrong license, 14; netting without license, 3; refusing to show license, 5; trapping without license, 12; false information, 40; loaning license, 4.

FIREARMS VIOLATIONS: Loaded gun in auto, 67; automatic gun, 36; gun on Sunday, 61; gun in closed season, 35; illegal missile, 14; alien firearms, 7; rifle for deer, 1.

HUNTING VIOLATIONS: Shooting from power boat, 1; hunting after sunset, 21; hunting before sunrise, 35; hunting from auto, 8; shooting waterfowl after 4 p. m., 5; lights in hunting, 18; taking excess bag limit, 1; illegal removal of game, 8; mutilation of game, 1; hunting in refuge, 3; killing game before 9 a. m., 7; shooting into squirrel's nest, 2; hunting deer at night, 2; hunting deer with dog, 1.

ILLEGAL KILL OR POSSESSION: Deer with short horns, 5; possession illegal deer, 5; doe deer, 4; hen pheasant, 5; taking game closed season, 20; wood duck, 20; deer closed season, 13; protected birds, 11.

FISHING VIOLATIONS: Striped bass law violations, 8; purchase undersize, 18; illegal artificial bait, 11; possession closed season, 17; fishing between signs, 4; setting shad net illegally, 2; staked gill net, 1.

TRAPPING VIOLATIONS: Setting snares, 1; shooting muskrat, 1; closed season, 15; illegal trapping, 2; stealing traps, 3; stealing trapped animal, 1.

MISCELLANEOUS: Dynamiting stream, 1; dog at large, 13; running dog at night, 1; possession short lobster, 1; bittersweet for sale, 1; diamond-black terrapin in possession, 1; resisting arrest, 2; interfering with officer, 1; illegal posting, 2; impersonating warden, 2; disturbing muskrat lodge, 1.

PUBLIC SHOOTING AND FISHING GROUNDS

The following tracts were purchased during the fiscal year as additions to the Public Shooting and Fishing Grounds acreage:

Collier's Mills Tract, located in Jackson and Plumstead Townships, Ocean County, comprising 5,500 acres including a large lake.

Turkey Swamp Tract, located in Matawan Township, Monmouth County, comprising 1,056 acres.

An additional 258.99 acres has been added to the Haleyville Tract, and 260.69 acres to the Glassboro Tract.

The total acreage of the Berkshire Valley Tract has been brought to 1,115 acres by the addition of 35.53 acres during the year.

EDUCATIONAL ACTIVITIES

The demands made upon this division are constantly growing and an expansion in all activities has been made with undiminishing vigor. Conservation education for both adult and youth is needed more today because of the added drain that has been and will be made upon both our unrenovable and renewable natural resources.

Education, publicity and public relations are the three categories of this division. It is estimated that in the past fiscal year approximately 325,000 people have been reached through our fourteen major exhibits, which had an aggregate showing of 74 days and a total of 12,600 square feet of space, at County and State Fairs and Sportsmen's Shows. There were 22 displays at lectures and meetings and 8 window displays in major cities. Nineteen schools took advantage of our visual aid material. Lectures and motion pictures were presented to 138 Sportsmen's Clubs, Schools, Garden Clubs, Granges, Civic, Conservation and Nature Clubs, Boy and Girl Scouts, 4-H Clubs, Future Farmers of America. Forums were conducted at rural meetings of Granges and Farm Youths in cooperation with County Agricultural Agents and High School Agricultural Teachers.

A pheasant and quail rearing and wildlife habitat project was inaugurated in cooperation with the Agricultural Extension Service of Rutgers University with 151 participants. Conservation Clubs were started in many Grammar and High Schools.

The entire program of this division has been in cooperation with each division of the Department and with organizations interested in conservation of fish, wildlife, soil, forests, water, rocks and plants. On such cooperation a good restoration program depends. Conservation education definitely is a patriotic duty.

GAME

The total liberation by the Commission was 84,599 head of game, consisting of pheasants, quail, rabbits, and raccoon. The distribution of pheasants, quail and raccoon exceeded any previous year. Thirty thousand rabbits were ordered, but due to war and trapping conditions in the West, only 19,000 were received. This discrepancy was supplemented a great deal by the trapping of rabbits in closed areas and liberating them in open wild habitat.

DEER

The following is the number of deer taken in each County during the four-day open season of 1941:

<i>County</i>	<i>Number Legal Bucks</i>	<i>Illegal Bucks, Does or Fawns</i>
Atlantic	278	4
Bergen	31	4
Burlington	503	25
Camden	62	1
Cape May	44	..
Cumberland	59	4
Essex	10	3
Gloucester	18	..
Hunterdon	19	..
Mercer	16	3
Middlesex	4	1
Monmouth	60	4
Morris	194	12
Ocean	270	15
Passaic	100	2
Somerset	27	1
Sussex	284	7
Union	1	..
Warren	202	11
	2,182	97

The average daily kill during the 1940 season was 522 legal deer, whereas this year the average was 545, so that if there had been a five-day season this year, the probabilities are that the take of deer would have been the greatest in the history of the Commission.

In addition to the above, 420 deer were killed by automobiles, trains, under permits while doing damage, or in various other ways, making a total of 2,699 deer reported taken during the year throughout the State.

HUNTING ACCIDENTS

There were 22 hunting accidents during the past year, 5 of which proved fatal. Four of the accidents were self-inflicted and 18 caused by other persons. The deer season resulted in only four accidents, the others occurring during the waterfowl and small game seasons.

RABBIT TRAPPING

Approximately 1,500 rabbits were trapped in municipalities where no hunting is permitted and liberated in sections where there was good habitat and where hunting is legal. Most of these rabbits were trapped as a result of complaints of damage received from individuals and municipalities. The spring of 1942 was a peak period and more complaints were received than ever before. We are increasing our facilities for trapping rabbits where damage is being done, thus relieving pressure on the Commission and borough officials and increasing the supply of rabbits in open hunting areas.

GAME MANAGEMENT

The activities of the Division of Game Management have been so arranged as to maintain the benefits that have accrued during the past years and to allow a limited amount of new development along the lines of scheduled procedure. The annual increment of environmental improvement has resolved itself into a noticeable aggregate of accomplishment.

Advantage has been taken of the benefits offered by the Federal Aid to Wildlife Act, and the accomplishments under this federal legislation have been practical and profitable. Due to the fact that a great number of trained and qualified workers have been inducted into the armed forces, all projects of an investigational nature were discontinued and only those of a developmental nature maintained.

Ten areas were listed with the Public Work Reserve and plans for subsequent development were drawn and presented.

A field check of hunters utilizing the Public Shooting Grounds located at Clinton, Glassboro and Haleyville was maintained as in former years and it showed an increase of 496 hunters on the areas.

In order that environment be extended and maintained for the benefit of wildlife and the utilization of areas be increased due to improved facilities, the following work was completed during the past year:

Food area clearance	22.95	acres
Brush removal	76.1	acres
Pollarding hedgerows	2,100	feet
Soil preparation	240	acres
Razing undesirable buildings	1	
Soil conservation (terrace construction)	4	
Monument installation	68	
Boundary establishment	40,838	yards
50 ft. firebreak construction	9,250	feet
Soil map	1	
Cover type map	1	
Development plan	1	
Plans for spillway	1	
Fire break maintained	9,800	feet
Pruning and trimming	30,000	plants
Transplanting	6,925	plants
New construction	2	pens

Instruction and assistance was given to several individuals and clubs in overcoming problems pertinent to the conservation of wildlife.

515 rabbits were live-trapped by the Game Management Division and distributed throughout the State, and 5 beavers were removed from areas in which they had reached the nuisance stage and liberated in areas where their presence was desired.

Food patch installation was carried on as in former years with some curtailment occasioned by the present national emergency. The No. 1 food patch mixture was used in the majority of plantings. Some acreage was given over to experimental planting.

The following is a resume of the number of food patches planted on the Public Shooting Grounds and other areas controlled by the State:

<i>Location</i>	<i>Number of Patches</i>	<i>Acreage</i>
Manahawkin	26	10.5
Medford	19	7.5
Haleyville	73	23.8
Berkshire	13	2.5
Wallpack	19	8.58
Roy Tract	13	10.75
Hainesville	16	8.8
Collier's Mills	8	2.0
Vannest Refuge	2	2.0
Glassboro	82	15.3
Tuckahoe	23	7.6
Clinton	83	20.5
Port Republic	23	8.3
Somerset Refuge System	27	6.75
Warren County Refuge System	21	3.75
	<hr/> 448	<hr/> 138.8

During the spring of 1942 the Division of Game Management enjoyed the cooperation of many sportsmen's clubs and regular game wardens in the installation of food patches on open lands throughout the State. The following is a record of county food patch plantings:

<i>County</i>	<i>Number of Patches</i>	<i>Acreage</i>
Atlantic	1	3.0
Bergen	201	28.0
Burlington	15	7.0
Camden	45	9.8
Cumberland	34	8.5
Essex	9	2.5
Gloucester	28	5.7
Hunterdon	44	9.0
Middlesex	53	10.0
Monmouth	28	7.8
Ocean	46	11.5
Somerset	45	9.0
Warren	16	4.3
	565	116.1

In the entire State 1,013 patches, aggregating 254.9 acres, were planted.

Sportsmen's clubs cooperating in the food patch planting program are as follows:

- Burlington County Game League
- Pinewood Deer Club
- 6666 Deer Club
- Buck Run Club
- Hunterdon Rod and Gun Club No. 1
- Hunterdon Rod and Gun Club No. 4
- Essex County Federation of Sportsmen's Clubs
- Oxford Rod and Gun Club
- Warren County Rod and Gun Club, Belvidere
- Somerset Fish and Game Protective Association
- Basking Ridge Protective Association
- Wetempka Gun Club
- South Jersey Sportsmen's League
- Cumberland County Fish and Game Association
- Gloucester County Fish and Game Association
- Camden County Fish and Game Protective Association
- Lower Camden County Fish and Game Protective Association
- Wayside Gun Club
- Twin Sycamore Rod and Gun Club
- Sunrise Rod and Gun Club
- Adelphia Rod and Gun Club
- Ocean County Fish and Game Protective Association
- Metuchen Rod and Gun Club
- Milltown Rod and Gun Club
- New Brunswick Rod and Gun Club
- Allendale Rod and Gun Club
- Bergen County Fish and Game Protective Association No. 9
- Bergen County Fish and Game Protective Association No. 7
- Pascack Rod and Gun Club
- Wortendyke Field and Stream Association
- Glen Rock Rod and Gun Club
- Cooperative Sportsmen's Club
- Saddle River Consolidated Sportsmen's Club
- Camden County Conservation League
- Alpha Gun Club

Predatory birds and animals removed from the Public Shooting Grounds and the properties of clubs and individuals as requested, were as follows:

Owls	54
Cats	99
Crows	165
Rats	46
Snakes	63
Hawks	328
Turtles	17
Dogs	9
Opossum	53
Weasel	27
Fox	8
Skunk	63
	932

FEDERAL AID TO WILDLIFE IN NEW JERSEY

The program of Federal Aid to Wildlife Projects has been highly satisfactory. Project 9-D, Game Management Refuge System, was completed in Somerset County. Project 10-R was postponed due to the lack of suitably trained manpower.

Accomplishments under Project 11-D-1, Improvement of Waterfowl Habitat on the Corbin City-Tuckahoe Area, were as follows:

1. Completion of Pond No. 2, creating a fresh water area of approximately 37 acres having a maximum depth of 10 feet and a minimum depth of a few inches.
2. Completion of one 14-foot spillway allowing the impoundment of Ponds No. 2 and No. 3.
3. Completion of 4,415 feet of earthen dike, having a width of 47 feet at the base and approximately 12 feet at the top, with a height of 3.5 feet. This work was accomplished with a $\frac{3}{4}$ cubic yard dragline and necessitated the moving of approximately 30,000 cubic yards of earth.
4. 1,800 feet of circulation ditches were completed in Pond No. 2, with the earth thus removed piled so as to make nesting and resting islands.
5. In order to facilitate dike construction, 4,940 feet of sod wall was completed.
6. 12 mats, 2 ft. x 28 in. x 7 in., were constructed of hand-hewn sweetgum to furnish a foundation from which the dragline could work on the marsh.
7. A half mile road was constructed and in conjunction with this operation, one gravel pit of one acre was cleared.
8. 216 pilings were cut, hauled and placed where the dike crossed existing naturals and waterways.

The Tuckahoe-Corbin City project has been approved for another year by Federal Aid to Wildlife authorities of the United States Fish and Wildlife Service and is denoted as F. A. W. Project 11-D-2.

Project 12-D has been approved by the same agency and constitutes the restoration of Collier's Mills Lake. This is the first project of its kind in New Jersey.

REPORT OF FORKED RIVER AND ROCKPORT GAME FARMS

There were more pheasants liberated from the Forked River and Rockport Farms than in any previous year in their history as may be seen in the tabulation below.

The duck refuge at Forked River continued to attract wildfowl and has been instrumental in improving gunning along the shore. During the winter months, two days a week were spent in feeding game in the wild, and patrolling was done at the duck refuge during the hunting season to prevent poaching.

Exhibits from the two farms were made at Hackettstown Fair, Morris County Fair, Branchville Fair, Bergen County Sportsmen's Show, Trenton State Fair, Middlesex County Fair, and the Jersey City Automobile Show.

There were killed at the farms during the year 144 hawks, 76 cats, 41 owls, 373 crows, 17 opossum, 7 muskrats, 1 fox, 7 weasels, 28 skunks, and approximately 4,000 rats.

The pheasant records for the calendar year of 1941 are as follows:

Forked River Farm:

Breeding birds on hand January 1, 1941	1,039
Young birds on hand January 1, 1941	3,725
Purchased birds sent to farms	165
Eggs laid	40,779
Eggs set	30,603
Birds hatched	21,608
	26,537
Spring distribution	2,818
Fall distribution	16,720
Breeding birds on hand December 31, 1941	1,154
Birds held for spring distribution	863
Birds died or escaped	4,982
	26,537

Rockport Farm:

Breeding birds on hand January 1, 1941	655
Young birds on hand January 1, 1941	2,589
Eggs laid	33,755
Eggs set	23,500
Birds hatched	17,159
	20,403
Spring distribution	1,735
Fall distribution	13,065
Breeding birds on hand December 31, 1941	1,197
Birds held for spring distribution	439
Birds died or escaped	3,967
	20,403

REPORT OF OCEAN COUNTY QUAIL FARM

Quail propagation during the past fiscal year was the most successful ever experienced. 16,322 birds were reared to maturity. Of this number, 11,922 were liberated in the fall, and 4,225 in the spring. The remaining 185 were used to increase the breeding stock. Ideal weather conditions and improved brooding equipment were directly responsible for the increase over other years.

Brooding and rearing capacities have not been increased, but considerable improvement has been made to the older pens and brooders.

General farm work included planting and harvesting of 110 bushels of soybeans, planting of 17 acres of corn, and the construction of 275 box traps.

The farm record for the calendar year 1941 is as follows:

Breeding birds on hand January 1, 1941	911
Young birds on hand January 1, 1941	3,655
Eggs laid	30,919
Eggs set	28,000
Birds hatched	22,353
	26,919
Spring distribution	3,457
Fall distribution	11,994
Breeding birds on hand December 31, 1941	331
Birds held for spring distribution	5,321
Birds died or escaped	5,816
	26,919

REPORT OF FARMER-SPORTSMAN TRACTS

The total acreage as of June 30, 1942, under the Farmer-Sportsman Cooperative Plan is approximately 121,000 acres, an increase of 8,000 acres over last year. This increased area is mostly farm land of fertile soil where grain crops are grown, which insures a plentiful grain food supply for game birds. This type of farm land is too expensive ever to be purchased for public hunting and fishing ground tracts. It is therefore fortunate that these areas may be utilized for hunting under the Farmer-Sportsman Plan at the low cost of operation of less than three cents per acre.

Different farmer-sportsman plans have been tried out in other states, whereby the farmer has been paid so much per acre for the lease of his land for hunting purposes. These plans have been abandoned by some states as being too costly. Our plan in New Jersey has stood the test over a period of nine years and no serious objections have been raised against it; in fact, the areas can be increased at any time without extra cost of operation.

As has been definitely proven, free use of land or land at low cost on a cooperative plan as provided by the Farmer-Sportsman Cooperative Plan, must continue to be the fundamental principle of supplying sufficient areas for the gunner in order to maintain the present low license fee.

WORK OF SPORTSMEN'S ORGANIZATIONS

Sportsmen's organizations are continuing to cooperate with the Commission in the liberation of game purchased at their own expense, construction of shelters, and planting of food patches throughout the State. There was a small increase over previous years in this work by the sportsmen. Many organizations made no report to the Commission of their work in this line, although all were sent questionnaires.

Good environment for game is the eventual solution to making better hunting, and it is to be hoped that every sportsmen's organization and individual hunter will realize that continued good hunting will depend a great deal on their work along these lines.

A list of clubs cooperating in this work follows, and under "Game Management" will be found a list of organizations who furnished fertilizer and labor in making feed patches in their counties.

Organization	Pheasants	Rabbits	Raccoon	Shelters	Food Patches planted	Food Distributed
en County:						
ona Rod & Gun Club, Inc.	45	144	..	Yes	2	..
wood Rod & Gun Club .....	..	..	..	..	3	25 lbs.
endale Rod & Gun Club	68	100	..	63	10	300 lbs.
ceack Rod & Gun Club	50	124	..	40	Yes	900 lbs.
ngton County:						
dentown Sportsmen Club	10	24	..	2	..	200 lbs.
len County:						
ver Camden Co. Game & Fish Assn. ...	30	60	..	6	15	30 lbs.
k County:						
rview Rod & Gun Club, Inc. ....	..	24	..	6	..	..
inger Rod & Gun Club, Inc. ....	..	150	..	..	..	..
ingston Gun Club	120	72	..	2	..	75 lbs.
mpic Rod & Gun Club, Inc.	50	120	..	10	5	1,130 lbs.
adington Rod & Gun Club	35	216	..	..	..	..
ingdel Game Club .....	..	..	..	Yes	7	..
ng Range Gun Club .....	..	250	..	36	4	2,000 lbs.
cester County:						
odbury Rod & Gun Club .....	..	36	..	10	..	..
on County:						
coln Rod & Gun Club, Inc. ....	..	..	..	5	1	3,200 lbs.
ite Fawn Hunting & Fishing Club ....	..	..	..	9	4	930 lbs.
erdon County:						
ombury Rod & Gun Club No. 4 .....	..	..	..	23	5	2,240 lbs.
nterdon Co. Rod & Gun Club No. 1 ....	..	60	..	10	11	980 lbs.
er County:						
pitol Rod & Gun Club	24	120	..	8	7	700 lbs.
lian-American Sportsmen's Club	21	72	..	12	8	300 lbs.
essex County:						
nmouth Junction Rod & Gun Club	32	48	..	10	8	1,460 lbs.
outh County:						
nmouth County Coonhunters Assn. ...	..	..	4	..	..	..
arise Rod & Gun Club	10	70	..	4	6	..
lderness Club	502	..	..	6	8	600 lbs.
is County:						
orris & Essex Counties Sportsman's Assn.	140	120	..	6	6	300 lbs.
ippany Gun Club	175	..	..	4	6	Yes
ck Brook Game Club	160	..	..	Yes	10	Yes
nton Consolidated Sportsmen, Inc. ...	21	144	..	8	4	650 lbs.
okside Rod & Gun Club	85	..	..	4	5	700 lbs.
ckaway Hunting Club	35	444	..	15	3	..
y Hills Game Assn.	432	..	..	Yes	10	Yes
derwriters' Fish & Game Protect. Assn., Inc.	234	..	..	10	3	Yes

WORK OF SPORTSMEN'S ORGANIZATIONS

Sportsmen's organizations are continuing to cooperate with the Commission in the liberation of game purchased at their own expense, construction of shelters, and planting of food patches throughout the State. There was a small increase over previous years in this work by the sportsmen. Many organizations made no report to the Commission of their work in this line, although all were sent questionnaires.

Good environment for game is the eventual solution to making better hunting, and it is to be hoped that every sportsmen's organization and individual hunter will realize that continued good hunting will depend a great deal on their work along these lines.

A list of clubs cooperating in this work follows, and under "Game Management" will be found a list of organizations who furnished fertilizer and labor in making feed patches in their counties.

<i>Organization</i>	<i>Pheas- ants</i>	<i>Rab- bits</i>	<i>Rac- coon</i>	<i>Shel- ters</i>	<i>Food Patches planted</i>	<i>Food Distrib- uted</i>
Bergen County:						
Corona Rod & Gun Club, Inc.	45	144	..	Yes	2	..
Norwood Rod & Gun Club .....	..	..	..	..	3	25 lbs.
Allendale Rod & Gun Club	68	100	..	63	10	300 lbs.
Pascaek Rod & Gun Club	50	124	..	40	Yes	900 lbs.
Burlington County:						
Bordentown Sportsmen Club	10	24	..	2	..	200 lbs.
Camden County:						
Lower Camden Co. Game & Fish Assn. ...	30	60	..	6	15	30 lbs.
Essex County:						
Fairview Rod & Gun Club, Inc. ....	..	24	..	6	..	..
Heninger Rod & Gun Club, Inc. ....	..	150	..	..	..	..
Livingston Gun Club	120	72	..	2	..	75 lbs.
Olympic Rod & Gun Club, Inc.	50	120	..	10	5	1,130 lbs.
Readington Rod & Gun Club	35	216	..	..	..	..
Springdel Game Club .....	..	..	..	Yes	7	..
Long Range Gun Club .....	..	250	..	36	4	2,000 lbs.
Gloucester County:						
Woodbury Rod & Gun Club .....	..	36	..	10	..	..
Hudson County:						
Lincoln Rod & Gun Club, Inc. ....	..	..	..	5	1	3,200 lbs.
White Fawn Hunting & Fishing Club ....	..	..	..	9	4	930 lbs.
Hunterdon County:						
Bloombury Rod & Gun Club No. 4 .....	..	..	..	23	5	2,240 lbs.
Hunterdon Co. Rod & Gun Club No. 1 ....	..	60	..	10	11	980 lbs.
Mercer County:						
Capitol Rod & Gun Club	24	120	..	8	7	700 lbs.
Italian-American Sportsmen's Club	21	72	..	12	8	300 lbs.
Middlesex County:						
Monmouth Junction Rod & Gun Club	32	48	..	10	8	1,460 lbs.
Monmouth County:						
Monmouth County Coonhunters Assn. ....	..	..	4	..	..	..
Sunrise Rod & Gun Club	10	70	..	4	6	..
Wilderness Club	502	..	..	6	8	600 lbs.
Morris County:						
Morris & Essex Counties Sportsman's Assn.	140	120	..	6	6	300 lbs.
Whippany Gun Club	175	..	..	4	6	Yes
Black Brook Game Club	160	..	..	Yes	10	Yes
Boonton Consolidated Sportsmen, Inc.	21	144	..	8	4	650 lbs.
Brookside Rod & Gun Club	85	..	..	4	5	700 lbs.
Rockaway Hunting Club	35	444	..	15	3	..
Troy Hills Game Assn.	432	..	..	Yes	10	Yes
Underwriters' Fish & Game Protect. Assn., Inc.	234	..	..	10	3	Yes

<i>Organization</i>	<i>Pheas- ants</i>	<i>Rab- bits</i>	<i>Rac- coon</i>	<i>Shel- ters</i>	<i>Food Patches planted</i>
Salem County:					
6666 Deer Club, Inc. ....	..	..	..	..	4
Mallard Meadow Club, Inc. ....	..	..	..	..	4
Somerset County:					
Bound Brook Gun Club .....	..	..	..	4	1
Sunset Fish & Game Club of N. J. ....	..	12	..	1	2
Union County:					
Hickory Gun Club	42	120	..	..	3
Union County Deputy Fish & Game Wardens' Assn., Inc. ....	..	..	..	6	Yes
Warren County:					
Warren County Rod & Gun Club No. 3 ...	50	..	..	75	..
Warren County Rod & Gun Club No. 5 ...	107	48	..	28	10
	<u>2,478</u>	<u>2,578</u>	<u>4</u>	<u>423</u>	<u>175</u>
					<u>18.</u>

FISH

The Hackettstown Fish Hatchery raised and distributed 86,074,004 fish during the 1941-42 fiscal year. In addition to this, there were 157,110 pond fish netted from reservoirs closed to public fishing and distributed in open waters. The Fish and Wildlife Service of the United States distributed 44,425 pond fish and 14,254,000 flounder fry in New Jersey waters.

REPORT OF HATCHERY OPERATIONS

The output of the Hackettstown Hatcheries and the result of netting operations is shown by the following tabulation:

	Inches	Raised July 1, 1941, to June 30, 1942	Disposed of	Estimated Number on Hand
Brook Trout	2-3	42,800	42,800	.....
"	3-4	374,800	109,800	265,000
"	3-5	38,000	38,000	.....
"	4-5	150,000	.....	150,000
"	4-6	5,000	5,000	.....
"	6-8	40,000	.....	40,000
"	7	3,225	3,225	.....
"	7-8	90,475	90,475	.....
"	7-9	95,000	95,000	.....
"	8-10	193,424	193,424	.....
"	8-12	10,000	.....	10,000
"	10-12	33,361	33,361	.....
"	12-14	7,253	7,253	.....
"	12-16	1,360	1,360	.....
"	14-16	1,220	1,220	.....
Brown Trout	2-3	200,000	.....	200,000
"	3-4	113,000	13,000	100,000
"	6-8	40,000	.....	40,000
"	7-9	44,412	44,412	.....
"	8-10	40,150	20,150	20,000
"	9-11	30,173	30,173	.....
"	10-12	14,605	14,605	.....
"	16-20	554	554	.....
Rainbow Trout	1-2	50,000	.....	50,000
"	2-3	200,000	.....	200,000
"	3-4	10,000	10,000	.....
"	3-5	50,000	.....	50,000
"	6-8	100,000	.....	100,000
"	7-10	54,677	54,677	.....
"	8-10	54,338	34,338	20,000
"	10-12	34,351	34,351	.....
"	12-16	2,533	2,533	.....
"	16-20	563	563	.....

<i>Organization</i>	<i>Pheas-ants</i>	<i>Rab-bits</i>	<i>Rac-coon</i>	<i>Shel-ters</i>	<i>Food Patches planted</i>	<i>Food Distrib-uted</i>
Salem County:						
6666 Deer Club, Inc. ....	..	..	..	..	4	..
Mallard Meadow Club, Inc. ....	..	..	..	..	4	..
Somerset County:						
Bound Brook Gun Club .....	..	..	..	4	1	140 lbs.
Sunset Fish & Game Club of N. J. ....	..	12	..	1	2	100 lbs.
Union County:						
Hickory Gun Club	42	120	..	..	3	..
Union County Deputy Fish & Game Wardens' Assn., Inc. ....	..	..	..	6	Yes	..
Warren County:						
Warren County Rod & Gun Club No. 3 ...	50	..	..	75	..	Yes
Warren County Rod & Gun Club No. 5 ...	107	48	..	28	10	1,200 lbs.
	<u>2,478</u>	<u>2,578</u>	<u>4</u>	<u>423</u>	<u>175</u>	<u>18,160</u>

FISH

The Hackettstown Fish Hatchery raised and distributed 86,074,004 fish during the 1941-42 fiscal year. In addition to this, there were 57,110 pond fish netted from reservoirs closed to public fishing and distributed in open waters. The Fish and Wildlife Service of the United States distributed 44,425 pond fish and 14,254,000 flounder fry in New Jersey waters.

REPORT OF HATCHERY OPERATIONS

The output of the Hackettstown Hatcheries and the result of netting operations is shown by the following tabulation:

	<i>Inches</i>	<i>Raised July 1, 1941, to June 30, 1942</i>	<i>Disposed of</i>	<i>Estimated Number on Hand</i>
Brook Trout	2-3	42,800	42,800	.....
" "	3-4	374,800	109,800	265,000
" "	3-5	38,000	38,000	.....
" "	4-5	150,000	.....	150,000
" "	4-6	5,000	5,000	.....
" "	6-8	40,000	.....	40,000
" "	7	3,225	3,225	.....
" "	7-8	90,475	90,475	.....
" "	7-9	95,000	95,000	.....
" "	8-10	193,424	193,424	.....
" "	8-12	10,000	.....	10,000
" "	10-12	33,361	33,361	.....
" "	12-14	7,253	7,253	.....
" "	12-16	1,360	1,360	.....
" "	14-16	1,220	1,220	.....
Brown Trout	2-3	200,000	.....	200,000
" "	3-4	113,000	13,000	100,000
" "	6-8	40,000	.....	40,000
" "	7-9	44,412	44,412	.....
" "	8-10	40,150	20,150	20,000
" "	9-11	30,173	30,173	.....
" "	10-12	14,605	14,605	.....
" "	16-20	554	554	.....
Rainbow Trout	1-2	50,000	.....	50,000
" "	2-3	200,000	.....	200,000
" "	3-4	10,000	10,000	.....
" "	3-5	50,000	.....	50,000
" "	6-8	100,000	.....	100,000
" "	7-10	54,677	54,677	.....
" "	8-10	54,338	34,338	20,000
" "	10-12	34,351	34,351	.....
" "	12-16	2,533	2,533	.....
" "	16-20	563	563	.....

	Inches	Raised July 1, 1941, to June 30, 1942	Disposed of	Estimated Number on Hand
Large Mouth Bass	1-2	300,000	.....	300,000
" " "	2	56,300	56,300	.....
" " "	2-3	53,200	3,200	50,000
" " "	3	100,000	100,000	.....
" " "	3-4	4,500	4,500	.....
" " "	4-5	3,260	3,260	.....
" " "	12-14	600	600	.....
" " "	12-16	200	200	.....
Small Mouth Bass	1-2	10,000	.....	10,000
" " "	2-3	72,250	22,250	50,000
" " "	3-4	21,500	21,500	.....
" " "	3-5	5,475	5,475	.....
" " "	4-5	800	800	.....
" " "	10-12	450	450	.....
" " "	12-16	120	120	.....
Bluegill Sunfish	Fry	350,000	.....	350,000
" " "	2-3	412,000	412,000	.....
" " "	3	96,500	96,500	.....
" " "	3-5	7,550	2,550	5,000
" " "	6-8	1,050	1,050	.....
" " "	8-10	7,725	7,725	.....
Catfish	3-4	11,750	11,750	.....
Tadpoles		43,500	43,500	.....
Yellow Perch	Fry	84,400,000	84,400,000	.....
		88,084,004	86,074,004	2,010,000
Various fish netted in State Reservoirs		.....	157,110	
			86,231,114	

The past year's output of 661,674 legal size trout surpassed any previous year. Unfortunately, due to the low water condition throughout the late summer and fall, the size was not what we had hoped for. It is interesting to note that during the late summer and fall we had the lowest water supply that we have ever had at that time of year in the history of our hatchery. This low water prevented us from sorting, grading, and thinning out the trout in September and October as we have always done in the past. Therefore, 1941-42 was the first year that we did not have twenty of the large trout wintering ponds full of trout in October. Consequently, the normal growth of our trout was reduced by one to one and a half inches in length. However, we do not expect to encounter this difficulty during 1942-43, as we have had an ample water supply since March first and the supply is still abundant.

Because of the increased costs of fish food, labor, and other supplies, we have now reduced our stock of fish on hand and are planning an estimated output of one-half million legal-sized trout for the 1943 spring distribution. If our present fish food contracts can be maintained, the trout should average a better size than in the past year.

The output of fingerling bass and bluegill sunfish was up to our expectations. In view of the stock of young bass and bluegills that we have on hand, next year's output should be another average year.

The perch work was very satisfactory. We had no trouble whatsoever in filling all of our hatching jars with spawn. This we were able to do the previous year.

On August 15, the Civilian Conservation Corps which had been located in Hackettstown for several years was discontinued. At the time the camp left, work was under way on a new dam at the hatchery. This will be completed as soon as funds are available.

Arrangements have been made with an aquatic biologist and parasitologist to spend ten days studying the parasites affecting young bass and to check our methods in the use of chemicals and pond fertilization in order to see whether improvements can be made.

FISH DISTRIBUTED BY FEDERAL GOVERNMENT

The following tabulation shows the fish distributed in New Jersey by the Fish and Wildlife Service:

Black Bass (large mouth)	10,680
Black Bass (small mouth)	3,040
Brook Trout	195
Catfish	80
Crappie	5,750
Bream	23,530
Yellow Perch	1,150
Flounder (fry)	14,254,000
	<hr/>
	14,298,425

POUND FISHERIES SUMMARY

The following is a summary of the pound fisheries' report for the calendar year ending December, 1941:

Approximate value of all pounds	\$973,598.00
Proceeds derived from sale of fish	934,552.97
Number of pounds of fish caught and disposed of	38,334,473

Licenses issued:

Atlantic Ocean	137
Sandy Hook and Raritan Bay	41

	<hr/>
	178
Number of pounds operated	167
Number of men employed	391

MENHADEN AND FOOD FISH LICENSES

There were 41 vessels licensed to take menhaden with purse or shirred nets within the three-mile limit during the calendar year of 1941, and 65 vessels licensed to take food fish with purse or shirred nets and beam trawls beyond the two-mile limit.

	Inches	Raised July 1, 1941, to June 30, 1942	Disposed of	Estimated Number on Hand
Large Mouth Bass	1-2	300,000	.....	300,000
" " "	2	56,300	56,300	.....
" " "	2-3	53,200	3,200	50,000
" " "	3	100,000	100,000	.....
" " "	3-4	4,500	4,500	.....
" " "	4-5	3,260	3,260	.....
" " "	12-14	600	600	.....
" " "	12-16	200	200	.....
Small Mouth Bass	1-2	10,000	.....	10,000
" " "	2-3	72,250	22,250	50,000
" " "	3-4	21,500	21,500	.....
" " "	3-5	5,475	5,475	.....
" " "	4-5	800	800	.....
" " "	10-12	450	450	.....
" " "	12-16	120	120	.....
Bluegill Sunfish	Fry	350,000	.....	350,000
" " "	2-3	412,000	412,000	.....
" " "	3	96,500	96,500	.....
" " "	3-5	7,550	2,550	5,000
" " "	6-8	1,050	1,050	.....
" " "	8-10	7,725	7,725	.....
Catfish	3-4	11,750	11,750	.....
Tadpoles		43,500	43,500	.....
Yellow Perch	Fry	84,400,000	84,400,000	.....
		88,084,004	86,074,004	2,010,000
Various fish netted in State Reservoirs			157,110	
			86,231,114	

The past year's output of 661,674 legal size trout surpassed any previous year. Unfortunately, due to the low water condition throughout the late summer and fall, the size was not what we had hoped for. It is interesting to note that during the late summer and fall we had the lowest water supply that we have ever had at that time of year in the history of our hatchery. This low water prevented us from sorting, grading, and thinning out the trout in September and October as we have always done in the past. Therefore, 1941-42 was the first year that we did not have twenty of the large trout wintering ponds full of trout in October. Consequently, the normal growth of our trout was reduced by one to one and a half inches in length. However, we do not expect to encounter this difficulty during 1942-43, as we have had an ample water supply since March first and the supply is still abundant.

Because of the increased costs of fish food, labor, and other supplies, we have now reduced our stock of fish on hand and are planning an estimated output of one-half million legal-sized trout for the 1943 spring distribution. If our present fish food contracts can be maintained, the trout should average a better size than in the past year.

The output of fingerling bass and bluegill sunfish was up to our expectations. In view of the stock of young bass and bluegills that we have on hand, next year's output should be another average year.

The perch work was very satisfactory. We had no trouble whatsoever in filling all of our hatching jars with spawn. This we were unable to do the previous year.

On August 15, the Civilian Conservation Corps which had been located in Hackettstown for several years was discontinued. At the time the camp left, work was under way on a new dam at the hatchery. This will be completed as soon as funds are available.

Arrangements have been made with an aquatic biologist and parasitologist to spend ten days studying the parasites affecting young bass and to check our methods in the use of chemicals and pond fertilization in order to see whether improvements can be made.

FISH DISTRIBUTED BY FEDERAL GOVERNMENT

The following tabulation shows the fish distributed in New Jersey by the Fish and Wildlife Service:

Black Bass (large mouth)	10,680
Black Bass (small mouth)	3,040
Brook Trout	195
Catfish	80
Crappie	5,750
Bream	23,530
Yellow Perch	1,150
Flounder (fry)	14,254,000
	<hr/>
	14,298,425

POUND FISHERIES SUMMARY

The following is a summary of the pound fisheries' report for the calendar year ending December, 1941:

Approximate value of all pounds	\$973,598.00
Proceeds derived from sale of fish	934,552.97
Number of pounds of fish caught and disposed of	38,334,473

Licenses issued:

Atlantic Ocean	137
Sandy Hook and Raritan Bay	41
	<hr/>
	178
Number of pounds operated	167
Number of men employed	391

MENHADEN AND FOOD FISH LICENSES

There were 41 vessels licensed to take menhaden with purse or shirred nets within the three-mile limit during the calendar year of 1941, and 65 vessels licensed to take food fish with purse or shirred nets and beam trawls beyond the two-mile limit.

STRIPED BASS LICENSES

During the past fiscal year there were 253 licenses issued to 98 persons for the netting of striped bass. Licenses were issued covering the use of 238 gill nets and 15 haul seines.

SPECIAL NETTING LICENSES

Under the 1941 law authorizing licenses for the use of nets in tidal waters, the following special licenses were issued during 1941-42:

29	drifting gill net
12	haul seine
114	flounder fyke
78	fyke
569	miniature fyke
72	shad net
137	staked gill

EELS

Under permits issued by the Board for eel pots and fish baskets, 3,683 pounds of eels were taken during the year 1940.

SHAD

There was a slight increase in shad taken in the Delaware River during 1942 but a decrease in the money value of same due to the smaller size of fish taken in some areas.

In the Hudson River, the total shad caught in 1942 and the value of same was greater than in any year since records have been kept.

There were 53 licenses issued for the taking of shad in the Hudson River.

DELAWARE RIVER SHAD INDUSTRY

County	Boats		Nets		Men Engaged		Number of Shad Caught		Pounds of Shad Caught		Value of Shad Caught		Value of Boats & Nets	
	1941	1942	1941	1942	1941	1942	1941	1942	1941	1942	1941	1942	1941	1942
Cumberland ..	41	46	147	147	41	48	23,713	24,688	102,388	69,133	\$11,791.36	\$6,512.68	\$4,720	\$6,200
Salem	18	19	18	19	36	37	6,140	13,465	30,700	67,325	4,912.00	7,470.50	5,875	6,325
Gloucester ...	4	5	4	5	8	10	2,040	38,900	10,220	17,000	1,022.00	1,457.50	26	24
Camden	1	..	1	..	2	..	577	....	2,308	....	230.80	.....	75	..
Burlington ...	8	5	9	5	12	10	39	325	119	....	20.50	162.50	940	385
83 Mercer	4	5	3	6	8	16	123	293	434	970	100.00	202.67	495	1,058
Hunterdon ...	4	6	5	5	10	18	132	1,020	258	2,860	85.50	642.00	450	1,050
	80	86	187	187	117	139	32,764	78,691	146,427	157,288	\$18,162.16	\$16,447.85	\$12,581	\$15,042
Increase		6				22		45,927		10,861				\$2,461
Decrease											\$1,714.31			

HUDSON RIVER SHAD INDUSTRY

Boats		Nets Owned		Men Engaged		Pounds Caught		Number Shad Caught		Value Shad Caught		Value Boats & Nets	
1941	1942	1941	1942	1941	1942	1941	1942	1941	1942	1941	1942	1941	1942
175	177	122	147	205	197	1,775,174	1,944,638	513,993	572,711	\$106,592.16	\$133,462.38	\$92,636	\$102,150

SUPPLEMENT TO 1940-41 REPORT

Income

Balance as per last printed report \$46,929.19

Expenditures

Chapter 158, Laws of 1940 8,381.64
 To balance 38,547.55

\$46,929.19

REPORT FOR 1941-42

Income

Balance July 1, 1941 \$38,547.55

Hunters' and Anglers' Licenses:

Title 23, Chapter 3:

Sec. 11-12 (Regular) ..	\$323,661.50	
Sec. 3 (Juvenile)	801.00	
Sec. 25 (Woodcock) ..	1,790.00	
Agents' Fees	1,449.10	
Duplicate Licenses ...	477.50	
Delinquencies	40.00	
Protest Fees .....	.65	
		\$328,219.75

Title 52, Chapter 18, Section 21:

Menhaden Licenses	\$20,660.00	
Food Fish Licenses	2,700.00	
Shad Licenses	1,325.00	
Pound Licenses	7,180.00	
Breeder Licenses	1,730.00	
Striped Bass Licenses ...	388.00	
Net Licenses	1,413.50	
Sales and Sundries	2,775.71	
Deputy Fees	410.00	
Carp Permits	340.00	
Map Sales	7.10	
Book Sales	89.10	
		\$39,018.41

Fines, Title 23, Chapter 10, Sec. 19 ...	17,255.15	
Trespass, Title 23, Chap. 7, Sec. 5	278.00	
Refunds on Purchasing Agent service charge	22.70	
		\$384,794.01

\$423,341.56

Expenditures

Chapter 129, Laws of 1941 *342,285.50

Cash Balance July 1, 1942 \$81,056.06
 Requisitions outstanding against this balance 6,897.11

Account Balance on July 1, 1942 \$74,158.95

*** Analysis of Expenditures**

Personal Administration	\$427.08
Wardens' Salaries	80,739.41
Wardens' Expenses	2,926.13
Stocking Expenses	9,202.13
Snagging Streams	2,622.00
Office Expenses	22,144.81
Publicity	900.00
Printing, Stationery, etc.	2,885.94
Hunting and Fishing Licenses and Buttons	1,469.76
Legal Expenses	676.50
Gasoline and oil for autos	6,436.88
Tires and tubes for autos	668.68
Gasoline and oil for boats	2,089.42
Maintenance autos	6,444.64
Maintenance boats	10,257.50
Purchase of autos, trucks and boats	3,540.76
Postage, telephone, telegraph and insurance	5,693.64
Refunds	656.70
Forked River Farm, pheasant raising, food, exhibits, duck refuge, general upkeep	25,028.18
Rockport Farm, pheasant raising, food, exhibits, general upkeep	19,073.90
Quail Farm, quail raising, food, exhibits, general upkeep	15,626.77
Hackettstown Hatchery, fish propagation, food, exhibits, general upkeep	86,278.93
Purchase of game from outside sources	26,853.41
Miscellaneous expenses	6,939.94
Paid to Purchasing Agent for above purchases	2,702.39
	<hr/>
	\$342,285.50

PUBLIC SHOOTING AND FISHING GROUNDS FUND

Income

Balance as per last printed report	\$67,822.84
--	-------------

Expenditures

Bills paid after June 30, 1941, for	
Purchase of land 1939-40	\$13,750.98
Purchase of land 1940-41	24,750.00
Federal Aid 1940-41	605.21
Other Bills 1940-41	3,402.63
	<hr/>
	42,508.82
To balance	25,314.02
	<hr/>
	\$67,822.84

REPORT FOR 1941-42

Income

Balance July 1, 1941	\$25,314.02	
Receipts from Government for Federal Aid Account 1940-41	\$3,331.26	
Receipts from Government for Federal Aid Account 1941-42	14,329.60	
Receipts from Hunters' and Anglers' Licenses	95,116.50	
Miscellaneous Receipts	1,596.00	
Interest	1.20	
	<u>\$114,374.56</u>	\$139,688.58

Expenditures

Expenditures		*88,997.80
Cash Balance July 1, 1942	\$50,690.78	
Requisitions outstanding against this balance	7,054.39	
Account Balance on July 1, 1942		\$43,636.39

* Analysis of Expenditures

Purchase of Land	\$11,430.53
Expenses for Game Management	25,323.32
Expenses for Deer Damage	2.25
Expenses for Farmer-Sportsman Plan	5,558.47
Administrative Expenses	2,974.66
Game Purchased for Farmer-Sportsman Land	16,655.75
Game Purchased for Public Shooting and Fishing Grounds ..	3,933.66
Expenditures under the Federal Aid to Wildlife Bill	22,115.38
Paid to Purchasing Agent for above purchases	1,003.78
	<u>\$88,997.80</u>

STOCKING OF NEW JERSEY WATERS

By the New Jersey Board of Fish and Game Commissioners
for the Fiscal Year Ending June 30, 1942

Total Number of Fish Planted from All Sources—100,485,114

KEY TO ABBREVIATIONS

Bt.	Brook Trout	Pic.	Pickereel
Brnt.	Brown Trout	S.	Sunfish
Rt.	Rainbow Trout	C.	Catfish
Lmb.	Large Mouth Bass	Cb.	Calico Bass
Smb.	Small Mouth Bass	Ob.	Oswego Bass
Bs.	Bluegill Sunfish	P.	Pike
Yper.	Yellow Perch	R.	Roach
Wper.	White Perch	Per.	Perch
Shad.	Shad	Cr.	Crappie
Pw.	Pollywog	F.	Flounder
B.	Bass	Misc.	Miscellaneous
H.	Herring	Sh.	Shiners

Size

a.	Adult
fg.	Fingerlings
f.	Fry

ATLANTIC COUNTY

(Great Egg Harbor System)

Abel's Run—Absecon—1000 Bsfg, 210 Bta, 60 Brnta, 10 Rta.
Babcocks Creek—Mays Landing—150 Bta.
Bargaintown Lake—Bargaintown—1250 Lmbfg, 1,800,000 Yperf.
English Creek—Pleasantville—1000 Btfg, 1910 Bta.
Lenape Lake—Mays Landing—500 Bsfg, 500 Lmbfg.
Makepiece Reservoir—Mays Landing—500 Bsfg, 500 Lmbfg.
Mays Landing Clay Hole—Mays Landing—1000 Bsfg, 500 Lmbfg, 250 Bta.
Pancoast Mills Lake—Buena—1000 Bsfg, 200 Smbfg.
Pleasant Mills Lake—Pleasant Mills—1000 Bsfg, 1,400,000 Yperf.

(Mullica River System)

Demarios Bog—Hammonton—500 Bsfg.
Hammonton Lake—Hammonton—2500 Bsfg, 1250 Lmbfg, 100 Bta, 4900
Rta, 3,000,000 Yperf.
Indian Cabin Lake—Mays Landing—1500 Bsfg, 1,400,000 Yperf.
Northfield Clay Hole—Northfield—1000 Bsfg, 1000 Lmbfg, 800 Bta.
Port Republic Pond—Port Republic—1000 Bsfg.

BERGEN COUNTY

(Hackensack River System)

Bear Creek—Oakland—4000 Btfg, 350 Bta, 50 Brnta.
Boiling Spring Brook—Old Tappan—500 Bta.
Budd Lake—Little Ferry—1500 Bsf.
Cooper's Pond—Bergenfield—400,000 Yperf.
Electric Light Pond—Montvale—1075 Bta, 400 Brnta, 925 Rta, 600,000 Yperf.
Hackensack River—Oradell—1125 Bta, 3300 Brnta, 600 Rta.
Hackensack Brick Co. Pit—Hackensack—1500 Bsf.
South Hackensack Pit—South Hackensack—1500 Bsf.
Morrow Lake—Englewood—25 Bta, 200 Brnta, 1300 Rta, 200,000 Yperf.
Nerhoff Lake—Little Ferry—1500 Bsf, 200,000 Yperf.
Norwood Brook—Norwood—500 Bta.
Pascack Creek—Montvale—1600 Bta, 200 Brnta, 300 Rta.
Passaic River—East Paterson—6500 Bsf.
Roosevelt Common Pond—Tenafly—400,000 Yperf.
Tenakill Creek—Closter—625 Bta, 900 Rta.
Washington Spring Brook—Paramus—200 Bta, 300 Brnta, 300 Rta.
Willow Lake—Little Ferry—75 Bta, 2425 Rta.

(Passaic River System)

Bogart's Pond—Westwood—600,000 Yperf.
Musquasink Creek—Westwood—200 Bta.
Ramapo River—Oakland—5750 Bta, 4886 Brnta, 1910 Rta.
Saddle River—Saddle River—5475 Bta, 850 Brnta, 206 Rta.
Valentine Brook—Hawthorne—2000 Btfg, 550 Bta, 325 Brnta, 325 Rta.

(Ramapo River System)

Glen Gray Boy Scout Pond—Oakland—1000 Bsf.
Waw Paw Boy Scout Pond—Oakland—1000 Bsf.

(Saddle River System)

Babbitts Brook—Wyckoff—2000 Btfg, 1450 Bta, 150 Brnta, 100 Rta.
Pond Brook—Oakland—1000 Btfg, 100 Bta, 75 Brnta, 75 Rta.

BURLINGTON COUNTY

(Delaware River System)

Moorestown Lake—Moorestown—2000 Lmbfg.
Sylvan Lake—Burlington—2000 Lmbfg, 2504 Rta, 5000 Bsf, 800,000 Yperf.

(Mullica River System)

Atsion Lake—Atsion—2000 Lmbfg.
Brass Castle State Forest Lake—New Gretna—7500 Bsf.

(Rancocas Creek System)

Bread and Cheese Run—Tabernacle—300 Bta.
Bridgeboro Lake—Bridgeboro—500 Bsf.
Brown's Mills Lake—Brown's Mills—2000 Lmbfg, 500 Bsf.
Olympic Lake—Florence—25 Bta, 100 Brnta, 2510 Rta, 800,000 Yperf.
Oswego Lake—Harrisville—7500 Bsf.
Smithville Lake—Smithville—2000 Lmbfg.

CAMDEN COUNTY

(Cooper Creek System)

Bridgewood Lake—Bridgewood—650 Lmbfg, 1000 Bsf, 1112 Bta, 4 Brnta.
Ellisburg Creek—Ellisburg—2213 Bta, 300 Brnta, 163 Rta.
Evans Lake—Haddonfield—650 Lmbfg, 1000 Bsf.
Gibbsboro Lake—Gibbsboro—650 Lmbfg, 1000 Bsf.
Woodcrest Creek—Woodcrest—750 Bta.

(Delaware River System)

Cooper River Park Lake—Cooper Lake—7300 Lmbfg, 450 Lmba, 27,550 Bsf, 700 Bsa, 300 Smbfg, 450 Smba, 550 Bta, 1,400,000 Yperf.

(Great Egg Harbor System)

New Brooklyn Lake—New Brooklyn—650 Lmbfg, 1000 Bsf.

(Mullica River System)

Atco Lake—Atco—650 Lmbfg, 1000 Bsf, 756 Bta, 50 Rta, 4 Brnta.

(Pensauken Creek System)

Columbia Lake—Maple Shade—1000 Bsf, 1219 Bta, 4 Brnta, 163 Rta.

(Big Timber Creek System)

Back Run—Berlin—450 Bta.
Blackwood Lake—Blackwood—650 Lmbfg.
Bottomley's Lake—Clementon—1000 Bsf.
Clementon Lake—Clementon—650 Lmbfg.
Big Lebanon Run—Turnersville—2262 Bta, 212 Rta.
Overbrook Lake—Clementon—1000 Bsf.
Overbrook Creek—Clementon—100 Bta, 100 Rta.
Pillings Lake—Clementon—650 Lmbfg, 2000 Bsf.
Rowands Pond—Clementon—1474 Bta, 274 Rta.

CAPE MAY COUNTY

(Delaware River System)

Alms House Pond—Near Cape May Court House—500 Lmbfg, 1000 Bsf.
Dennisville Lake—Dennisville—1000 Lmbfg, 1000 Bsf.
Ludlam's Lake—Dennisville—1000 Lmbfg, 1000 Bsf.
Nummy Lake—Belleplaine State Forest—1000 Bsf.
Pickles Pond—Eldora—1000 Bsf.
Wildwood Water Works Lake—Rio Grande—500 Lmbfg.
Belleplaine St. Forest Lake—Belleplaine—2000 Lmbfg.

CUMBERLAND COUNTY

(Cohansey Creek System)

Cedar Lake—Cedarville—500 Lmbfg, 1500 Bsf, 1400 Ypera, 70 Pa, 30 Oba, 600 Cba, 900 Wpera.
Clarks Lake—Bridgeton—1000 Lmbfg, 1500 Bsf, 100 Pa, 40 Oba, 700 Cba, 1500 Wpera, 2160 Ypera.

East Lake Stream—Bridgeton—500 Lmbfg.
Mary Elmer Lake—Bridgeton—500 Lmbfg, 12 Lmba, 750 Cba, 150 Bsa, 200
Oba, 25 Ca, 26 Pa, 1300 Wpera, 1800 Ypera.
Sunset Lake—Bridgeton—1000 Lmbfg, 2020 Cba, 25 Ca, 327 Pa, 2000 Bsf, 100
Smbfg, 2330 Wpera, 5650 Ypera, 150 Oba.

(Maurice River System)

Laurel Lake—Millville—500 Lmbfg, 3000 Bsf.
Manatco River—Kimble Bridge—2050 Bta, 150 Brnta, 600 Rta.
Muddy River—Jessie Bridge—1150 Bta, 150 Brnta, 600 Rta.
Union Lake—Millville—1000 Lmbfg, 280 Cba, 25 Ca, 177 Pa, 3000 Bsf, 100
Smbfg, 2150 Wpera, 2912 Ypera, 40 Oba.

ESSEX COUNTY

(Passaic River System)

Branch Brook Park Lake—Newark—1800 Lmbfg, 3000 Bsf, 1025 Bta, 250
Brnta, 625 Rta.
Cedar Grove Reservoir—Cedar Grove—5000 Bsf, 200 Bsa, 100 Smba, 185
Lmbfg, 50 Lmba, 435 Ba, 100 Pica.
Clark's Pond—Bloomfield—3000 Bsf, 625 Bta, 200 Brnta, 525 Rta.
Notch Brook—Bloomfield—300 Bta, 200 Brnta.
Verona Lake—Verona—1800 Lmbfg, 30 Lmba, 8000 H, 1500 Bta, 500 Brnta, 1950
Rta, 1,600,000 Yperf.
Weequahic Park Lake—Newark—4000 Lmbfg, 3000 Bsf, 1,600,000 Yperf, 76
Ba, 5 Pica, 432 Pera, 218 Sa.

(Rahway River System)

Diamond Mill Pond—South Mountain Reservation—3000 Bsf.
South Mountain Reservation—South Orange—4137 Bta, 606 Brnta, 500 Rta.

GLOUCESTER COUNTY

(Big Timber Creek System)

Almonesson Lake—Almonesson—1550 Lmbfg, 2000 Bsf.
Hopkins Lake—Woodbury—500 Lmbfg.

(Delaware River System)

Woodbury Heights Lake—Woodbury Heights—1500 Lmbfg, 2500 Bsf.

(Mantua Creek System)

Wenonah Lake—Wenonah—500 Lmbfg, 3000 Bsf, 425 Bta, 150 Brnta, 375
Rta, 800,000 Yperf.

(Maurice River System)

Iona Lake—Iona—750 Lmbfg.
Malaga Lake—Clayton—750 Lmbfg, 1000 Bsf.
Oberst Lake—Gibbsboro—1500 Lmbfg, 425 Bta, 150 Brnta, 375 Rta, 800,000
Yperf.
Wilson Lake—Clayton—700 Lmbfg, 1000 Bsf.

(Raccoon Creek System)

Gilman Lake—Ewan—2250 Lmbfg, 200 Smbfg, 1500 Bsf, 600 Bta, 310 Brnta, 2000 Rta.

HUDSON COUNTY

Hudson County Park Lake—North Bergen—875 Bta, 2656 Rta, 1,200,000 Yperf.

HUNTERDON COUNTY

(Delaware River System)

Everittstown Brook—Everittstown—1000 Btfg, 450 Bta, 100 Rta.

Frenchtown Creek—Frenchtown—350 Bta, 50 Rta.

Holland Brook—Holland—150 Bta.

Little York Brook—Little York—803 Bta, 100 Brnta, 10 Rta.

Lockatong Creek—Stockton—625 Bta, 306 Brnta, 100 Rta.

Milford Creek—Milford—700 Bta, 450 Rta.

Mt. Pleasant Brook—Mt. Pleasant—3400 Btfg, 200 Bta.

Musconetcong River—Penwell to Asbury—2000 Btfg, 14,000 Bta, 4700 Brnta, 6220 Rta.

Sweet Hollow Brook—Near Clinton—1800 Btfg, 403 Bta.

Wickcheoche Run—Sergeantsville—1025 Bta, 306 Brnta, 100 Rta.

(Lamington River System)

Cold or Skillman Brook—Near Germantown—200 Bta.

(Musconetcong River System)

Beaty or Penwell Brook—Penwell—3600 Btfg, 2025 Bta, 250 Brnta, 106 Rta.

Bloomsbury Heights Brook—Bloomsbury—250 Brnta.

Creveling Brook—West Portal—100 Bta, 100 Rta.

(Raritan River System)

Alexauken Brook—Lambertville—1000 Btfg, 1225 Bta, 2000 Brntfg, 600 Brnta, 320 Rta.

Beaver Brook—Clinton—1153 Bta, 50 Brnta.

Black Brook—Near Clinton—225 Bta.

Camp Brett Pond—Lebanon—200 Bta.

Capoulin Creek—Princeton—3600 Btfg, 575 Bta.

Clinton Pond—Clinton—1,000,000 Yperf.

Conover Brook—Clinton—400 Btfg.

Cramer Creek—Allerton—3400 Btfg, 400 Bta, 1000 Brntfg.

Dairy Run—Changewater—3000 Btfg.

Dalrymple Creek—Pattensburg—2000 Btfg.

Grandin Brook—Grandin—3200 Btfg, 1028 Bta, 100 Rta.

Knolls Pond—Clinton—200 Bta.

Lingert's Pond—Clinton—583 Bta, 400 Brnta.

Mulhockaway Creek—Van Syckles—2000 Btfg, 1925 Bta, 350 Brnta, 803 Rta.

Neshanic Brook—Flemington—2000 Btfg, 2000 Brntfg.

Norton Brook—Norton—350 Bta, 150 Rta.

Philhower Brook—Califon—500 Bta, 200 Brnta.

Pittstown Creek—Pittstown—2000 Btfg, 475 Bta.

Prescott Brook—Lebanon—2000 Btfg, 1375 Bta, 50 Brnta.

South Branch Raritan River—Middle Valley to High Bridge—17,910 Bta, 8170 Brnta, 6713 Rta.

Rocky Run—Glen Gardner—4200 Btfg.

Sally Kings Brook—Near Changewater—3000 Btfg.

Schonze Brook—Perryville—1000 Btfg, 553 Bta.
Solitude Lake—High Bridge—1,000,000 Yperf.
Spring Mills Brook—Spring Mills—3000 Btfg, 100 Bta, 50 Brnta.
Spruce Run—Glen Gardner—4400 Btfg, 6813 Bta, 1320 Brnta, 1071 Rta.
Stanton Creek—Stanton—2000 Brntfg.
Sydney Brook—Sydney—200 Bta.
Tetertown Brook—Tetertown—1612 Bta, 203 Rta.
Willowby Brook—High Bridge—1200 Btfg.
Woodglen Brook—Woodglen—4000 Btfg.

(Rockaway River System)

Cushetunk Lake—White House—1,000,000 Yperf.
Hoover Pond—Clinton—885 Bta.
South Branch Rockaway River—Lebanon to White House—1075 Bta, 150
Brnta, 129 Rta.
North Branch Rockaway River—New Germantown to White House—2325
Bta, 100 Brnta.

MERCER COUNTY

(Delaware River System)

Assumpink Creek—Lawrence Station—2525 Bta, 575 Brnta, 600 Rta.
Doctor's Creek—Yardville—1025 Bta, 275 Brnta, 200 Rta.
Gropp's Lake—White Horse—800,000 Yperf.

(Millstone River System)

Carnegie Lake—Princeton—2500 Lmbfg, 10,000 Bsfg, 1,200,000 Yperf.
Etra Lake—Etra—1250 Lmbfg, 800,000 Yperf.
Peddie Lake—Hightstown—1250 Lmbfg, 1500 Bsfg, 800,000 Yperf.
Stoney Brook—Woodsville—3050 Bta, 800 Brnta, 750 Rta.

MIDDLESEX COUNTY

(Manalapan River System)

Bennetts Brook—Little Texas—1200 Btfg.
Jamesburg Lake—Jamesburg—1200 Lmbfg, 2500 Bsfg.
Sand Wash Pond—Jamesburg—150 Bta.
Second Pond—Jamesburg—200 Bta, 25 Brnta, 25 Rta.

(Millstone River System)

Brainard's Brook—Cranbury—450 Bta, 75 Brnta, 175 Rta.
Cranbury Lake—Plainsboro—4500 Bsfg.

(Rahway River System)

Roosevelt Park Lake—Metuchen—2650 Bta, 622 Brnta, 1156 Rta, 2500 Bsfg.
Sage or Sucker Brook—Metuchen—1200 Btfg.

(Raritan River System)

Bonhampton Lake—Bonhampton—807 Bta, 158 Brnta, 595 Rta.
Duhernal Lake—Spotswood—1900 Lmbfg, 2500 Bsfg.
Farrington Lake—Near New Brunswick—1900 Lmbfg, 2500 Bsfg, 600,000
Yperf, 85 Ba, 3 Pica, 632 Pera, 318 Sa.

Lawrence Brook—Near New Brunswick—206 Bta.
Manalapan River—Jamesburg—350 Bta, 27 Brnta, 275 Rta.
Matchponix River—Spotswood—1300 Bta, 240 Brnta, 777 Rta.
Middlesex Work House Pond—Middlesex—150 Bta, 50 Brnta.
Oakey Brook—Milltown—756 Bta, 91 Brnta, 341 Rta.
Silver Lake—Silverton—556 Bta, 91 Brnta, 291 Rta.
Spotswood Lake—Spotswood—3000 Bsf, 600,000 Yperf.
Weston's Mill Lake—Near New Brunswick—2500 Bsf.

MONMOUTH COUNTY

(Atlantic Ocean System)

Atlantic Ocean—Long Branch to Manasquan—14,254,000 Flounder Fry.
Como Lake—Como—600,000 Yperf, 2000 Lmbfg, 3000 Bsf.
Deal Lake—Allenhurst—8000 Bsf.
Old Mill Pond—Villa Park—400,000 Yperf, 2000 Lmbfg, 3000 Bsf, 150 Bta,
453 Rta.
Osborne's Pond—Bailey's Corner—150 Rta.
Poplar Brook—Deal—200 Bta.
Roschen Pond—Bailey's Corner—100 Bta, 100 Brnta.
Shark River—Hamilton—1429 Bta, 275 Brnta, 3 Rta.
Spring Lake—Spring Lake—400,000 Yperf, 2000 Lmbfg, 3000 Bsf, 450 Bta,
100 Brnta, 506 Rta.
Sunset Lake—Asbury Park—800 Btfg, 325 Bta, 100 Brnta, 50 Rta.
Takanassee Lake—Long Branch—2000 Bsf.
North Branch Wreck Pond Brook—Bailey's Corner—200 Bta, 50 Brnta.
South Branch Wreck Pond Brook—Bailey's Corner—100 Bta.

(Delaware River System)

Doctor's Creek—Imlaystown—100 Bta, 104 Brnta.
Lahaway Creek—Prosperstown—100 Bta, 104 Brnta.

(Manalapan River System)

Black Mills Pond—Millhurst—300 Bta.
Gander Brook—Millhurst—100 Bta.
Matchponix Brook—Englishtown—250 Bta.
McGalliards Brook—Englishtown—150 Bta.
Molly Pitcher's Brook—Tennent—100 Bta.
Orr's Brook—Tennent—200 Bta.
Topenemus Lake—Freehold—600,000 Yperf, 7500 Bsf, 1200 Btfg, 753 Bta,
125 Brnta, 529 Rta.

(Manasquan River System)

Barr Brook—Buckshootem—100 Brnta.
Bennetts Pond—Allaire—2000 Lmbfg, 400,000 Yperf.
Birdsall's Brook—Farmingdale—100 Bta.
Cattail Brook—Buckshootem—100 Brnta.
Manasquan River—Ardena—1954 Bta, 2450 Brnta, 475 Rta.
Manassie Brook—Oak Glen—100 Bta.
Marsh Bog Brook—Farmingdale—100 Bta.
Mengamhone Brook—Farmingdale—300 Bta.
Nicholas Pond—Allaire—2000 Lmbfg, 304 Bta.
Passaquanaqua Creek—Adelphia—200 Bta.
Squankum Brook—Squankum—100 Bta.

(Millstone River System)

Millstone River—Manalapan—75 Brnta.

(Metedeconk River System)

Clear Brook—North of Lakewood—50 Bta.
Hannabrand Brook—Villa Park—125 Bta.
Haystack Brook—North of Lakewood—100 Bta.
North Branch Metedeconk River—North of Lakewood—450 Bta, 700 Brnta.
Muddy Fork Brook—North of Lakewood—50 Bta.

(Navesink River System)

Garvey's Pond—Navesink—800 Btfg, 850 Bta, 150 Brnta, 375 Rta.

(Raritan River System)

Leffert's Lake—Matawan—2000 Bsf.
Manalapan River—Millhurst—600 Bta, 154 Brnta.

(Shark River System)

L. Y. Brook—Hamilton—50 Bta.
Mason's Brook—Hurley's Corner—150 Bta.
Tintern Lake—Lyncroft—2000 Bsf.

(Shrewsbury River System)

Franklin Park Lake—West Long Branch—2000 Bsf, 706 Bta, 25 Brnta,
75 Rta.
Sunrise Lake—Red Bank—400 Bta, 75 Brnta, 206 Rta.

(Swimming River System)

Cross Run—Holmdel—800 Btfg.
Hockhocks Brook—Tinton Falls—875 Bta, 50 Brnta, 279 Rta.
Hop Brook—Colts Neck—400 Btfg, 1000 Bta, 224 Rta, 50 Brnta.
Lewis Brook—Colts Neck—400 Bta.
Little Brook—Holmdel—800 Bta.
Mine Brook—Colts Neck—540 Bta, 60 Rta.
Pine Brook—Tinton Falls—810 Bta, 85 Rta.
Ramenessin Brook—Holmdel—300 Bta.
Willow Brook—Holmdel—100 Bta, 50 Brnta.
Yellow Brook—Colts Neck—1653 Bta, 185 Rta, 125 Brnta.

MORRIS COUNTY

(Black River System)

Chester Mine Hole—Chester—200 Brnta, 200 Rta.
Crystal Lake—Chester—750 Bta, 100 Brnta, 150 Rta.
Hunter Brook—Succasunna—50 Bta.
Rinhart Brook—Hacklebarney—1200 Btfg.

(Delaware River System)

Mine Brook—Hackettstown—525 Bta, 255 Brnta, 350 Rta.
Musconetcong River—Guard Lock to Penwell—16,285 Bta, 4537 Brnta,
4332 Rta.

(Musconetcong River System)

Bungalow Brook—Schooley's Mt.—400 Bta.
Musconetcong Lake—Netcong—2,400,000 Yperf, 4000 Lmbfg, 9000 Bsf, 400 Bsa, 125 Pica, 868 Sa, 6732 Pera, 250 Ba, 600 Mis.
Ranger Lake—Woodport—4000 Bsf.
Sand Pit—Stanhope—200 Bta, 150 Rta.
Schooley's Mt. Brook—Schooley's Mt.—1025 Bta, 100 Brnta.
Stephensburg Brook—Stephensburg—2000 Btfg.
Weldon Brook—Weldon—800 Btfg, 250 Bta.
Weona Lake—Hurdstown—3000 Bsf.
Wills Brook—Netcong—400 Bta.

(Passaic River System)

Asylum Pond—Morris Plains—1075 Bta, 200 Brnta, 10 Rta.
Brick Yard Pond—Whippany—800 Bta, 50 Brnta, 300 Rta.
Canatta Brook—Mt. Freedom—300 Bta.
Cobb Brook—New Foundland—800 Btfg.
Den Brook—Denville—6500 Btfg, 1050 Bta, 50 Rta.
East Ditch—Pompton Plains—375 Bta, 100 Brnta.
Hibernia Brook—Hibernia—700 Bta.
Hibernia Pond—Hibernia—2000 Bsf.
Jones Brook—Taylortown—800 Btfg.
Kikeout Brook—Butler—500 Bta, 925 Brnta, 475 Rta.
Malapardis Brook—Malapardis—600 Bta, 50 Brnta, 300 Rta.
Passaic River—Below Bernards Water Co.—250 Bta, 100 Brnta.
Pequannock River—Butler—1200 Bta, 400 Brnta, 400 Rta.
Primrose Brook—McAlpin—250 Bta, 100 Brnta.
Reservoir Brook—Brookside—200 Bta.
Rockaway River—Wharton to Boonton—7000 Btfg, 21,359 Bta, 6387 Brnta, 3497 Rta.
Saw Mill Brook—Kinnelon—800 Btfg.
Speedwell Pond—Morris Plains—300 Bta.
Spring Brook—Pequannock—525 Bta.
Sterling Pond—Sterling—750 Bta, 300 Brnta, 250 Rta.
Troy Brook—Parsippany—800 Btfg, 612 Bta, 350 Brnta.

(Raritan River System)

Black River—Milltown to Pottersville—4400 Bta, 1100 Brnta, 408 Rta.
Budd Lake—Budd Lake—4,400,000 Yperf, 2500 Lmbfg, 12,500 Bsf, 500 Bsa, 1275 Smbfg, 5084 Pera, 41 Sa, 29 Pica, 200 Ba, 1400 Wpera, 200 Mis.
Burnett Brook—Ralston—4000 Btfg, 2375 Bta, 450 Brnta, 675 Rta.
Camp Morris Lake—Budd Lake—130 Ba, 17 Pica, 168 Sa, 332 Pera.
Drakes Brook—Naughtright—428 Bta, 650 Brnta, 108 Rta.
Electric Brook—Schooley's Mt.—650 Bta.
Flanders Brook—Flanders—200 Bta.
Indian Brook—Ironia—4000 Btfg, 2125 Bta, 300 Brnta.
Ledgewood Brook—Ledgewood—400 Bta.
South Branch Raritan River—Budd Lake to Naughtright—9930 Bta, 4524 Brnta, 2750 Rta.
Skunk Misery Brook—Chester—4000 Btfg.
Turkey Brook—Flanders—275 Bta.

(Rockaway River System)

Beaver Brook—Rockaway—1600 Bta, 150 Brnta, 7 Rta.
Cooks Lake—Denville—900 Lmbfg, 100 Smbfg, 2500 Bsf.
Crooked Brook—Montville—800 Btfg.
Fayson Lake—Taylortown—81 Ba, 19 Pica, 666 Pera, 334 Sa.
Green Pond Brook—New Foundland—25 Brnta.

Green Pond—New Foundland—2500 Lmbfg, 12,500 Bsfg, 100 Bsa, 4000 Smbfg, 12 Pica, 500 Sa, 500 Pera, 812 Rta, 25 Ba.
 Lake Hopatcong—Lake Hopatcong—9,000,000 Yperf, 11,500 Lmbfg, 25,000 Bsfg, 325 Bsa, 102 Ba, 32 Pica, 850 Pera, 425 Sa.
 Longwood Lake—Longwood—600,000 Yperf, 3500 Lmbfg, 2500 Bsfg, 50 Bsa, 800 Smbfg.
 Meriden Brook—Meriden—700 Bta, 4 Rta.
 Mill Brook—Shaytown—2000 Btfg, 250 Bta, 100 Brnta.
 Millbrook Brook—Millbrook—4500 Btfg, 1000 Bta, 406 Rta.
 Minisink Mt. Brook—Berkshire—800 Btfg.
 Moosepack Pond—Oak Ridge—600,000 Yperf, 2500 Lmbfg, 1500 Bsfg, 50 Bsa.
 Mt. Hope Brook—Mt. Hope—300 Brnta, 400 Rta.
 Rainbow Lake—Denville—900 Lmbfg, 100 Smbfg, 2500 Bsfg.
 Stephen's Brook—Wharton—800 Btfg, 250 Bta.
 Stickles Brook—Rockaway Valley—800 Btfg, 200 Bta, 400 Brnta, 225 Rta.
 Towaco Brook—Towaco—800 Btfg, 250 Bta, 100 Brnta.

(Whippany River System)

Burnham Park Lake—Morristown—750 Bta, 304 Brnta, 100 Rta.

OCEAN COUNTY

Barnegat Lake—Forked River—500 Lmbfg, 5000 Bsfg, 100 Bsa.
 Carasaljo Lake—Lakewood—1000 Lmbfg, 5500 Bsfg, 100 Bsa.
 Cold Water Run—Waretown—2306 Bta.
 Deerhead Lake—Forked River—500 Lmbfg, 5000 Bsfg, 100 Bsa.
 Horican Lake—Lakehurst—2000 Lmbfg, 200 Bta, 200 Rta, 7500 Bsfg, 200 Bsa.
 Jackson Mills Lake—Jackson Mills—1000 Lmbfg, 2500 Bsfg.
 Manahawkin Lake—Manahawkin—2000 Lmbfg, 2500 Bsfg, 200 Bsa.
 Manetta Lake—Lakewood—500 Lmbfg, 2500 Bsfg, 100 Bsa.
 Metedeconk River—Lakewood—3306 Bta, 12 Rta.
 South Branch Metedeconk River—Lakewood—1425 Bta, 500 Brnta, 3 Rta.
 North Branch Metedeconk River—Lakewood—1050 Bta, 2 Rta, 350 Brnta.
 New Egypt Lake—New Egypt—1500 Lmbfg.
 Painless Brook—Lakehurst—400 Bta, 100 Brnta.
 Pinewald Lake—Pinewald—400 Rta.
 Quail Farm Lake—Holmansville—2500 Bsfg.
 North Branch Toms River—Holmansville—1075 Bta, 150 Brnta, 105 Rta.
 Tuckerton Lake—Tuckerton—1000 Lmbfg, 2500 Bsfg, 200 Bsa.
 Willis Mill Brook—Holmansville—2500 Bsfg.

PASSAIC COUNTY

(Greenwood Lake System)

Belcher's Creek—West Milford—2800 Btfg, 400 Bta, 2000 Brntfg, 200 Brnta.
 Cooley's Brook—Greenwood Lake—2800 Btfg, 200 Bta, 2000 Brntfg, 200 Brnta.

(Passaic River System)

Barbour's Pond—Paterson—250 Ba, 125 Pica, 1000 Ca, 1932 Pera, 968 Sa.
 Goffle Brook—Hawthorne—600 Bta, 100 Brnta.
 Nosenzo Lake—Near Macopin—7000 Bsfg, 1375 Bta, 75 Brnta, 175 Rta, 2400 Smbfg.
 Pompton River—Pompton Plains—4200 Bta, 1200 Brnta, 2518 Rta.
 Simon's Pond—Pompton—40 Ba, 26 Pica, 175 Sa, 350 Pera.

Singac Brook—Singac—950 Bta, 400 Brnta, 206 Rta.
Star Lake—Bloomingdale—2500 Bsf.
West Brook—Macopin—2000 Btfg, 1825 Bta, 2000 Brntfg, 125 Brnta, 325 Rta.

(Pompton River System)

Pompton Lakes—Pompton Lakes—7200 Mis, 1,000,000 Yperf, 5200 Lmbfg,
5200 Smbfg, 12,000 Bsf, 400 Bsa.

(Wanaque River System)

Greenwood Lake—Greenwood Lake—1,000,000 Yperf, 3000 Lmbfg, 75
Lmba, 6600 Smbfg, 12,000 Bsf, 400 Bsa, 50 Pica, 2000 Pera.
Lindy's Lake—Macopin—600,000 Yperf, 7500 Bsf, 1375 Bta, 75 Brnta,
175 Rta.
Post Brook—Macopin—400 Btfg, 150 Bta, 50 Brnta.
Ringwood Brook—State Park—400 Btfg, 1250 Bta, 50 Brnta, 200 Rta.
Sauerbutt's Sand Pond—Pompton—39 Ba, 25 Pica, 334 Pera, 166 Sa.
Twin Lakes—Near Pompton—4500 Bsf, 1,000,000 Yperf.
Wanaque River—Pompton—8025 Bta, 1640 Brnta, 1631 Rta.

SALEM COUNTY

(Alloway Creek System)

Alloway Lake—Alloway—1000 Lmbfg, 2500 Bsf, 20 Oba, 6 Pa, 60 Ca, 100
Ypera, 100 Wpera, 100 Bsa, 3250 Cba.
Ballinger's Mill Lake—Aldine—500 Lmbfg, 2000 Bsf, 100 Smbfg.
Camp Carnegie Lake—Woodstown—750 Lmbfg.
Cocked Hat Pond—Near Alloway—1600 Btfg, 325 Rta.
Camp Roosevelt Lake—Aldine—500 Lmbfg.

(Maurice River System)

Elmer Lake—Elmer—1000 Lmbfg, 2000 Bsf, 100 Smbfg.
Rainbow Lake—Norma—500 Lmbfg, 2000 Bsf.
Willow Grove Lake—Willow Grove—750 Lmbfg, 2000 Bsf.

(Salem Creek System)

Avis Lake—Woodstown—500 Bsf.

(Stoe Creek System)

Cedar Run—Quinton—400 Bta, 75 Rta.

SOMERSET COUNTY

(Passaic River System)

Indian Graves Brook—Bernardsville—100 Bta, 150 Rta.
Jockey Hollow Brook—Jockey Hollow—200 Brnta.
Lindaberry Pond—Bernardsville—200 Bta, 300 Brnta, 100 Rta.
Lloyds Pond—Bernardsville—100 Bta, 150 Rta.
Passaic River—Millington—1000 Bta, 200 Brnta, 200 Rta.

(Raritan River System)

Bernardsville Pond—Bernardsville—100 Bta, 150 Rta.
Black River—Pottersville—4050 Bta, 1100 Brnta, 1150 Rta.
Cedar Brook—South Bound Brook—300 Bta, 200 Brnta, 212 Rta.
Green Brook—North of Plainfield—500 Bta, 100 Brnta, 100 Rta.
Middle Brook—Bound Brook—250 Bta, 100 Brnta.
Parker Brook—Parker—1200 Btfg.
Peapack Brook—Gladstone—1550 Bta, 100 Brnta, 650 Rta.
Peter Brook—Somerville—250 Bta, 100 Brnta.
Raritan River, South Branch—Far Hills—2250 Bta, 20 Brnta, 250 Rta.
Raritan River, North Branch—Far Hills—1650 Bta, 500 Brnta, 750 Rta.

SUSSEX COUNTY

(Big Flat Brook System)

Biers Kill Brook—Hainesville—350 Bta, 25 Brnta.
Dempsey's Brook—Hainesville—500 Bta, 50 Rta.
Forked River—Stokes Reservation—200 Bta.
Fox Trail Lake—State Park—134 Sa, 266 Pera, 300 H.
Madeline Mulford Lake—In the Reservation—550 Bta, 150 Brnta.
Nomanock Brook—Stokes Reservation—200 Bta.
Parker Brook—Stokes Reservation—300 Bta.
Stoney Brook—Tuttles Corner—850 Bta, 200 Brnta.
Tuttles Corner Brook—Tuttles Corner—200 Bta.

(Delaware River System)

Delaware River—Flatbrookville—1500 Smbfg.
Big Flat Brook, Upper—Tuttles Corner—6000 Btfg, 7285 Bta, 1100 Brnta, 880 Rta.
Big Flat Brook, Lower—Haney's Mills—5095 Bta, 2622 Brnta, 3918 Rta.
Little Flat Brook—Layton—4425 Bta, 975 Brnta, 486 Rta.
Mill Brook—Montague Twp.—675 Bta, 75 Brnta.
Musconetcong River—Waterloo—775 Bta, 550 Brnta, 506 Rta.
Paulinskill River—Lafayette to Stillwater—9650 Bta, 1800 Brnta, 1704 Rta.
Pequest River—Brighton to Springdale—4400 Bta, 800 Brnta, 1065 Rta.
Shimers Brook—Millville—575 Bta, 75 Brnta.

(Hudson River System)

Wallkill River—Sparta to Franklin—2975 Bta, 300 Brnta, 4 Rta.

(Musconetcong River System)

Bear Pond—Lake Hopatcong—2300 Smbfg, 6500 Bsfg, 600,000 Yperf.
Cranberry Lake—Cranberry Lake—1,600,000 Yperf, 6264 Pera, 1536 Sa, 3000 Lmbfg, 379 Ba, 6500 Bsfg, 750 Bsa, 1250 Cfg, 60 Ca, 800 Sh, 1300 Wpera, 1275 Smbfg.
Forge Pond—Waterloo—1,600,000 Yperf, 5000 Pw, 2000 Bsfg.
Lake Hopatcong—Lake Hopatcong—3,600,000 Yperf, 5000 Lmbfg, 100 Ba, 1000 Sa, 2000 Pera.
Lackawanna Lake—Andover—600,000 Yperf, 700 Rta, 900 Smbfg, 2500 Bsfg, 450 Bsa.
Lubbers Run—Cranberry Lake—1170 Bta, 227 Brnta, 350 Rta.
Lake Musconetcong—Stanhope—800,000 Yperf, 900 Smbfg.
Waterloo Pond—Waterloo—5000 Pw.

(Paulinskill River System)

Alms House Brook—Myrtle Grove—2000 Btfg, 920 Bta.
Brick Kiln Brook—Lafayette—1200 Btfg.
Culvers Lake—Culvers Lake—800,000 Yperf, 3000 Pera, 1600 Sa, 3000
Lmbfg, 100 Ba, 3875 Smbfg, 10 Pica, 600 Wpera, 250 Mis, 7500 Bsf, 200
Bsa, 1250 Cfg.
Culvers Lake Brook—Culvers Lake—950 Bta, 200 Brnta.
Dry Brook—Near Stillwater—100 Bta.
Fairview Lake—Near Hardwick—2500 Lmbfg, 900 Smbfg, 5000 Bsf, 800,000
Yperf.
Glen Brook—Stillwater—225 Bta, 100 Brnta, 100 Rta.
Kemah Lake Outlet—Halsey—2800 Btfg.
Kemah Lake—Halsey—2000 Lmbfg, 5000 Bsf, 107 Ba, 183 Pica, 393 Sa,
782 Pera.
Laurel Grove Brook—Near Newton—2000 Btfg.
Morris Brook—Fredon—650 Bta, 400 Brnta.
Neldon Brook—Benevolence—250 Bta, 14 Rta.
Outlet Bear Swamp—Long Bridge—4000 Btfg.
Lake Owassa—Near Culvers—3000 Lmbfg, 3875 Smbfg, 200 Lmba, 20
Smba, 5000 Bsf, 200 Bsa.
Pond Brook—Middleville—1150 Bta, 50 Brnta, 100 Rta.
Quicks Pond—North of Swartswood—2000 Lmbfg, 600 Smbfg, 5000 Bsf.
Roys Brook—Stillwater—125 Bta.
Swartswood Lake—Swartswood—2,800,000 Yperf, 3000 Pera, 2400 Sa,
3000 Lmbfg, 15,500 Bsf, 650 Bsa, 3000 Cfg, 1875 Smbfg, 50 Ca, 300 Ba,
5000 Sh.
Trout Brook—Middleville—1075 Bta.
Umbrian Farm Pond—Lafayette—100 Bta, 100 Brnta, 7 Rta.

(Pequannock River System)

Lake Gerard—Stockholm—8000 H, 1332 Pera, 668 Sa, 300 Ba, 100 Pica.
Margerum Brook—Stockholm—233 Bta, 60 Brnta.
Pacock Brook—Stockholm—233 Bta, 60 Brnta.

(Pequest River System)

Andover Junction Brook—Andover—2805 Bta, 500 Brnta, 2 Rta.
Dark Moon Brook—Fredon—2000 Btfg, 2610 Bta.
Dragon Brook—Andover—2175 Bta, 400 Brnta, 300 Rta.
Gardner's Pond—Andover Junction—2500 Bsf, 250 Bsa, 1250 Cfg.
Hendershots Pond—Huntsburg—210 Bta, 80 Brnta.
Hibler Brook—Greendell—2400 Btfg.
Hiff Lake—Andover Junction—2500 Bsf, 250 Bsa, 1250 Cfg.
Kymers Brook—Andover—300 Bta.
Lake Lenape—Andover—1,000,000 Yperf, 35 Ba, 300 Sa, 50 Ca, 2000 Lmbfg,
5000 Bsf, 250 Bsa, 1250 Cfg, 1275 Smbfg.
Panther Lake—Andover—800 Sh, 30 Ba, 100 Sa, 50 Ca.
Tar Hill Brook—Tar Hill—500 Bta.
Wawayanda Lake—Andover Junction—1,000,000 Yperf, 2600 Lmbfg, 5000
Bsf, 1250 Cfg.

(Rockaway River System)

Aquackaquunk Lake—Edison Mt.—200 Bta.
Madonna Lake—Edison—650 Smbfg.

(Walkill River System)

Baskers Brook—Sparta—300 Bta.
Beaver Run—Beaver Run—900 Bta, 200 Brnta.
Black Brook—Beaver Run—8000 Btfg, 234 Bta, 80 Brnta.
Clove Brook—Montague—1200 Bta, 100 Brnta, 200 Rta.
Clove Acres Lake—Sussex—8000 H, 115 Ba, 400 Sh, 150 Ca, 25 Pica, 800 Sa.
Franklin Pond—Franklin—1200 Pera, 600 Sa.
Lake Grinnell—Monroe—800,000 Yperf, 3600 Pera, 1800 Sa, 3500 Lmbfg,
1000 Smbfg.
Lusscroft State Farm Lake—Beemerville—325 Sa, 650 Pera.
Owens Brook—Owens—2800 Btfg.
Papakating Creek—Sussex—325 Bta, 75 Brnta.
Papakating Creek, West Branch—Sussex—300 Bta.
Sparta Glen Brook—Sparta—550 Bta.
Sparta Junction Brook—Sparta Junction—900 Bta.
Winding Brook—Papakating—200 Bta, 25 Brnta.

UNION COUNTY

(Arthur Kill System)

Tamaques Lake—Westfield—400,000 Yperf, 300 Bta, 100 Brnta, 150 Rta.
Warinanco Lake—Borough of Roselle—2500 Bsf.

(Rahway River System)

Bryant Lake—Summit—600,000 Yperf.
Echo Lake—Mountainside—1,000,000 Yperf.
McGillvary's Pond—Linden—2500 Bsf.
Mindowaskin Lake—Westfield—200,000 Yperf, 53 Ba, 7 Pica, 283 Pera,
142 Sa.
Nomehegan Park Lake—Cranford—5000 Bsf, 200,000 Yperf.
Rahway River—Springfield to Rahway—7375 Bta, 2050 Brnta, 1954 Rta.
Springfield Lake—Springfield—1000 Bsf.

(Raritan River System)

Cedar Brook Park Lake—Plainfield—3000 Bsf.
Green Brook—Scotch Plains—200 Bta, 50 Brnta.
Leland Avenue School Pond—Plainfield—1000 Bsf.

WARREN COUNTY

(Delaware River System)

Buckhorn Creek—Belvidere—625 Bta, 50 Brnta, 15 Rta.
Columbia Dam—Columbia—600,000 Yperf, 3000 Bsf.
Delaware Brook—Delaware—400 Bta.
Delaware River—Dunnfield—5000 Smbfg.
Dunnfield Creek—Dunnfield—2000 Bta, 525 Brnta, 950 Rta.
Lomison's Glen Brook—Summerfield—406 Bta.
Lopatcong Creek—Above Phillipsburg—1200 Bta.
Musconetcong River—Guard Lock to Penwell—27,000 Btfg, 17,920 Bta,
5550 Brnta, 10,000 Rtfg, 6414 Rta.
Paulinskill River—Stillwater to Paulina—8495 Bta, 4712 Brnta, 4999 Rta.
Pequest River—Southtown to Belvidere—23,005 Bta, 8050 Brnta, 7082 Rta.
Pophandusing Brook—Belvidere—725 Bta.
Pohatcong Creek—Mt. Bethel—8341 Bta, 1535 Brnta, 3350 Rta.
Round House Pond—Mt. Bethel—320 Bta, 50 Brnta, 10 Rta.
Van Campens Brook—Millbrook—1100 Bta, 100 Brnta, 100 Rta.

(Musconetcong River System)

Allen's Pond—Hackettstown—400 Bta, 112 Rta.
Andersontown Brook—Andersontown—1000 Btfg.
Gruendykes Mill Pond—Hackettstown—1,000,000 Yperf, 300 Brnta, 226
Rta, 4050 Mis, 500 Pica.
Guard Lock—Saxton Falls—3,400,000 Yperf, 3500 Bsf, 1450 Bsa, 1250 Cfg,
5000 Pica, 7600 Lmbfg, 2025 Smba, 5025 Pera.
Hance's Brook—Beatystown—2000 Btfg, 75 Bta, 250 Brnta, 400 Rta.
Port Murray Pond—Port Murray—800 Bta.
Springtown Brook—Port Colden—2000 Btfg.
Vanatta Brook—Penwell—400 Bta.

(Paulinskill River System)

Blairs Creek—Blairstown—4625 Bta, 1367 Brnta, 2090 Rta.
Catfish Pond—Blairstown—500 Lmbfg, 5000 Bsf, 1500 Pw.
Cedar Lake—Blairstown—2000 Bsf, 400,000 Yperf.
Ebenezer Brook—Ebenezer—200 Bta.
Jacksonburg Brook—Jacksonburg—3325 Bta, 400 Brnta, 333 Rta.
Kalarama Brook—Vail—375 Bta, 102 Rta.
Mingles Pond—Paulina—975 Bta, 137 Brnta.
Susquehanna Lake—Blairstown—600,000 Yperf, 6500 Bsf, 750 Smbfg,
4000 Pw, 35 Lmbfg, 25 Lmba.
White Lake—Marksboro—600,000 Yperf, 6000 Bsf, 180 Lmbfg, 25 Lmba,
8000 Pw.
Yards Creek—Hainesburg—675 Bta, 100 Brnta.

(Pequest River System)

Bacon Run—Vienna—150 Bta, 100 Brnta.
Barker's Brook—Vienna—250 Bta.
Bear Creek—Johnsonburg—6000 Btfg, 1535 Bta, 306 Brnta, 200 Rta.
Beaver Brook—Hope—6125 Bta, 1875 Brnta, 2275 Rta.
Buckaloo Swamp Brook—Mt. Herman—225 Bta, 100 Brnta, 100 Rta.
Cecconia's Pond—Blairstown—585 Bta, 330 Brnta.
County House Pond—Townsbury—270 Bta, 250 Brnta.
Dark Moon Brook—Johnsonburg—2725 Bta.
Furnace Brook—Oxford—400 Bta.
Honey Run—Hope—400 Bta.
Mountain Lake—Near Buttzville—800,000 Yperf, 8500 Bsf, 280 Lmbfg,
25 Lmba, 750 Smbfg, 7000 Pw.
Mud Pond—Yellow Frame—200 Bta.
Silver Lake—Hope—600,000 Yperf, 8500 Bsf, 280 Lmbfg, 26 Lmba, 750
Smbfg, 8000 Pw.
Trout Brook—Hope—800 Bta, 4 Brnta.

(Pohatcong Creek System)

Mill Brook—Broadway—2850 Bta, 200 Rta.
Mill Pond—Oxford—400 Bta, 1800 Rta.
Roaring Rock Brook—Brass Castle—800 Bta.

