

XXXII.—REPORT OF THE DIVISION OF DISTRIBUTION OF THE UNITED STATES FISH COMMISSION FOR THE YEAR 1883.

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I.—OFFICE SERVICE.

All applications made to the United States Fish Commission for fish or eggs go to the division of distribution. Here they are filed, indexed, and all particulars embodied in the applications entered into the serial register, which constitutes a part of the permanent records of the office. The action taken upon each is also entered in the register, so that this furnishes a complete history of every application reaching the office of the United States Fish Commission. All applications are acknowledged by a postal card informing the applicant when to expect his fish.

In the register the applications are entered seriatim in the order in which they are received. For convenience of reference and to facilitate the distribution, the applications are classified by States and counties; all the counties in the same Congressional district are grouped together to form what are known as Congressional lists. These are always ready for inspection or reference, and a Congressional Representative can learn at a glance the number and names of all applicants for carp in his district and the status of their applications.

When the date of distribution to a particular section of the country is determined upon, information is mailed to each applicant who is to receive fish, of the time at which to expect them and the destination to which they will be sent.

For the guidance of the messengers engaged in making the distribution, transcripts of the Congressional lists are made, and specific instructions are prepared prescribing the route to be traversed, the points from which distribution by express is to be made, and regulating all the details of the work.

For each State a central point for distribution is selected, to which the fish are sent in charge of messengers. Preliminary to the distribution the messenger in charge sends to each applicant a postal notice, informing him at what date the fish will be forwarded from the depot or center of distribution, and to what express office they will be consigned. The shipping tag attached to each pail is doubled, and in the fold is placed a blank postal receipt, to be signed and mailed to the office of the Commission. Usually this is promptly done, and by the

time a messenger gets back to headquarters most of the receipts showing the safe delivery of the fish have reached the files of the division of distribution.

The total number of applications for carp filed since the inauguration of the work of distribution is about 25,000. These are numbered seriatim in the order of date of reception, and the receipts are numbered to correspond with the applications to which they belong.

The total number of applications filed during the year 1883 was 10,060, classified by months, as follows:

January, 800; February, 820; March, 860; April, 800; May, 200; June, 500; July, 580; August, 560; September, 1,380; October, 1,920; November, 800; December, 840. Total, 10,060.

The preparation of the correspondence relating to distribution, or incidental to it, and the replies to the numerous and diversified inquiries relating to fish culture in general, is also one of the duties of the chief of the division of distribution.

Much of the correspondence relates to routine matters, and is prepared by Mr. J. J. O'Connor, the very efficient corresponding clerk in the division of distribution.

Much of it, however, relates to the general administration of the division or other matters necessitating the personal attention of the chief of the division, and in many cases much time is consumed in preparing the necessary data upon which to base satisfactory replies.

Under the instructions of the Commissioner, the chief of the division of distribution is charged with the direction and control of the *Central Station* of the Commission, in Washington, and of the trout-breeding station at Wytheville, Va.

The former, if its importance is to be measured by the results obtained, is the principal station for the production of shad fry for transplanting to new or depleted waters, while the latter is the only station devoted to the raising of the rainbow trout for transplanting to suitable streams in the Atlantic and Gulf States.

Separate reports for each station will be found elsewhere in this volume.

II.—CAR AND MESSENGER SERVICE.

After the completion of the carp distribution of 1882, Fish Commission cars Nos. 1 and 2 were sent to the shops and were thoroughly overhauled and put in complete repair in preparation for the spring work. Early in February car No. 1, in charge of J. F. Ellis, was put in commission and ordered to Northville, Mich., to report to F. N. Clark, superintendent of Northville Station, and make the distribution of white-fish fry from there. An account of this work and a tabular summary of the distribution will be found in the report of the United States Fish Commission for 1882.

Car No. 1 was held in reserve for the shad work. This was delayed for ten days or more beyond the usual period, in consequence of the

abnormally low temperature which prevailed in the Potomac River, the effect being to retard greatly the ripening of the fish. The first messenger shipment was made to the Monocacy, a tributary of the Potomac, on April the 30th.

The first car shipment, consisting of 238,000 shad and 4,300,000 herring, was made May 10; the shad being planted in the Scioto River at Chillicothe, and the herring in the Ohio River in the vicinity of Cincinnati.

The second trip of car No. 2 was with 1,350,000 shad for James River. These were planted in fine condition in the river several miles above Bosher's Dam. Dr. W. M. Hudson, the Commissioner of Fisheries for Connecticut, accompanied the car as the guest of the Commission, he having been designated by the United States Commissioner to inspect and make a report upon the working of the McDonald fishway at Bosher's Dam.

Car No. 2 completed the white fish distribution May 10 and shortly afterwards reported at headquarters in Washington, in readiness for the shad work.

Being fitted with the necessary machinery and appliances for maintaining a regular circulation of water, it was determined to test its efficiency in shad work. The entire shipment of 1,200,000 shad destined for the Savannah and the Congaree Rivers was divided, one-half being placed in ordinary transportation cans, the other in the automatic circulating cans. The fish in the latter proved a total loss. This experiment, while discouraging, does not give occasion to doubt eventual success, when we shall have studied and better understand the conditions upon which success depends. An interesting feature of the season's work is the large plant of herring (4,300,000) made in the Ohio in the vicinity of Cincinnati. This and the plant of 2,000,000 made in the Colorado River of Texas, in 1882, would seem sufficient to test the probability of acclimating this important species in the rivers tributary to the Gulf of Mexico.

The total number of shad and herring fry distributed through Central Station for the season of 1883 is as follows:

	Shad.	Herring.
Susquehanna River: Battery Station.....	1,275,000	.....
Potomac River: Fish Hawk Station	1,684,000	6,850,000
Central Station	9,449,000	.....
Total	12,408,000	6,850,000

A tabular summary of the distribution of shad and herring for the season of 1882 will be found in Table I. This summary is based upon the reports of messengers in charge of shipments, and gives the number actually planted. The discrepancies between Table I and the tables of distribution, given under the head of propagation in the report of Central Station, indicate the losses in transportation.

TABLE I.—SHAD AND HERRING FRY DEPOSITED IN WATERS OF THE UNITED STATES DURING THE SEASON OF 1883.

Date.	Number of shad.	Number of herring.	Stream.	Point of deposit.	Where hatched.	Messenger in charge.
Apr. 30	250,000	.....	Monocacy	Frederick City Junction, Md.	Central Station	Frank L. Donnelly.
May 3	175,000	.....	do	do	do	Do.
6	111,000	.....	Potomac	Little Falls, Md.	Central Station and steamer Fish Hawk	Joseph Mace.
10	228,000	.....	Scioto	Chillicothe, Ohio	Steamer Fish Hawk	G. H. H. Moore.
	4,300,000	.....	Ohio	Cincinnati, Ohio	Central Station	Do.
10	410,000	.....	Potomac	Little Falls, Md.	do	Joseph Mace.
14	300,000	.....	Shenandoah	Strauburg, Va.	do	Harry Quinn.
14	247,000	.....	Potomac	Mouth of Savage River, Md.	do	G. G. Davenport.
16	277,000	.....	Dan	Richmond, Va.	do	Harry Quinn.
17	1,300,000	.....	James	Strasburg, Va.	do	G. H. H. Moore.
	175,000	.....	Shonandoah	Laurel, Md.	do	G. G. Davenport.
18	175,000	1,700,000	Potomac	do	do	Gus Stewart.
	19	552,000	Illinois	Peoria, Ill.	Central Station	Do.
19	552,000	.....	do	do	do	G. H. H. Moore.
19	850,000	.....	do	Steamer Fish Hawk	Do.	Do.
19	250,000	.....	Bolton	Union Depot, Chattanooga, Tenn.	Central Station and steamer Fish Hawk	Harry Quinn.
19	250,000	.....	Savannah	Tugoo, Ga.	Central Station	G. G. Davenport.
22	300,000	.....	Waters of South Carolina	Columbia, S. C.	do	C. J. Hurke.
22	150,000	.....	Jamea	Lynchburg, Va.	Steamer Fish Hawk	William F. Page.
24	360,000	.....	Potomac	Cambridge, Md.	do	Harry Quinn.
25	1,560,000	.....	Hudson	Troy, N. Y.	Central Station	G. H. H. Moore.
26	329,000	.....	Potomac	Cumberland, Md.	do	Harry Quinn.
27	300,000	.....	South	Waynesboro, Va.	do	G. G. Davenport.
28	150,000	.....	Ohio	Marietta, Ohio	Steamer Fish Hawk	Harry Quinn.
29	800,000	.....	Savannah	Near Toccoa City, Ga.	Central Station	J. Frank Ellis.
29	350,000	.....	Kentucky	Columbia, S. C.	do	Do.
31	232,000	.....	do	High Bridge, Ky.	Central and Battery Stations	G. H. H. Moore.
31	230,000	.....	Green	Frankfort, Ky.	do	Do.
31	230,000	.....	Salt	Shepherdsville, Ky.	do	Do.
31	230,000	.....	Barren	Bowing Green, Ky.	do	Do.
June 4	200,000	.....	Potomac	South Branch Depot, West Virginia.	Battery Station	Harry Quinn.
4	165,000	.....	Oconee	Milledgeville, Ga.	Central Station	J. Frank Ellis.
4	356,000	.....	Ocmulgee	Macon, Ga.	do	Do.
8	270,000	.....	Bayou	Pass Manchac, La.	do	G. H. H. Moore.
8	270,000	.....	do	La Fourche, La.	do	Do.
8	270,000	.....	do	Vernon, La.	do	Do.
9	50,000	.....	Smoky Hill	Near Junction City, Kans.	Battery Station	Harry Quinn.
9	30,000	.....	Republican	do	do	Do.
13	200,000	.....	Hudson	Van Wagner, N. Y.	Central and Battery Stations	William F. Page.
	12,403,000	6,850,000				

The last car shipment of shad was made June 8 by car No. 1, in charge of G. H. H. Moore, to streams in Louisiana, 270,000 fry being deposited in Pass Manchac, a bayou draining the waters of Lake Maurepas into Lake Pontchartrain, and a like number in Bayou La Fourche and Vermilion River.

The work of shad distribution closed with a messenger shipment of 200,000 fry to the Hudson River. These were planted in good condition at Van Wagner, N. Y., by Mr. W. F. Page, the messenger in charge.

Upon the completion of the shad distribution, the Fish Commission cars Nos. 1 and 2 were, as usual, refitted and repaired so as to be ready for the opening of the carp work in October, and the messenger force furloughed without pay, subject to call when needed.

CARP DISTRIBUTION OF 1883.

Preparation for this began October 21, J. F. Ellis and G. H. H. Moore, messengers in charge, being ordered to duty, and directed to equip their cars in readiness for immediate service.

The actual work of distribution did not begin, however, until the last of October, in consequence of the delay in drawing the ponds. The first shipment was made October 30, car No. 2, in charge of J. F. Ellis, being dispatched to Louisville with 15,000 carp for the supply of applicants in Kentucky.

The distribution by express was made from the Exposition grounds in compliance with the request of the Commissioners, who desired the car and the methods of distribution to be made a part of the Government exhibit.

Apprehending an early closure of the waters in the Northwest by ice, and consequent interruption of the work, should there be delay in sending the carp, car No. 1, in charge of G. H. H. Moore, was dispatched November 5 with 20,000 carp for the supply of all applicants in Iowa, Wisconsin, Minnesota, Dakota, Oregon, and Washington Territory. The liberal concession of free transportation over the line of the Northern Pacific between Saint Paul, Minn., and Portland, Oreg., which was so generously afforded by Mr. Villard, the president, made possible this work, so important in the interests of fish culture.

The departure of car No. 1 for the supply of the Northwest and North Pacific coast States was followed November 8 by the dispatch of car No. 2 with 13,000 fish for the supply of applicants in Canada, Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, and Northern New Jersey. The distribution to New York and New Jersey was made by express from New York City, Mr. E. G. Blackford, commissioner of fisheries for New York, as usual, affording every facility for the convenience of the work. The distribution to the Northeastern States and Canada was made by express from Boston.

The experience of several seasons having demonstrated that a satisfactory distribution of carp could be made only in the fall and early

winter the work was planned so as to bring it to a close by the 1st of January.

To accomplish this, recourse was had to express shipments on a large scale with the result of reducing considerably the cost of the distribution.

On November 8, 15,000 carp, destined for the supply of applicants in Illinois, were forwarded by express from Washington to Dr. Bartlett, State commissioner of fisheries at Quincy, Ill. Mr. Newton Simmons, messenger, accompanied the shipment to see that the crates were properly handled in transferring. The fish received no change of water en route, and reached their destination in fine condition. The distribution to applicants was made through the agency of Dr. Bartlett, the State commissioner of Illinois.

This movement of 15,000 carp a distance of 1,000 miles in charge of a single messenger forcibly illustrates the improvement in methods of transportation introduced since 1881. By the methods in vogue prior to that date it would have required ten messenger shipments to have accomplished the same work, and would have involved tenfold the cost.

On November 14, 5,000 carp were forwarded by express to Indianapolis, for the supply of applicants in Indiana. Mr. Simmons was instructed by telegram to meet the fish at that point, and after sending the usual messenger notices in advance to make the distribution by express. This being accomplished, he was ordered to Columbus, Ohio, to await the arrival of the carp for the supply of applicants in Ohio and Michigan. On November 20 the 5,000 carp required for this purpose were forwarded by express. They arrived at Columbus in good condition and a satisfactory distribution was shortly accomplished. The total number of fish distributed to the four States above named was 24,000, equal in number to the entire crop of 1880, and this work was accomplished at little more than the cost of a single messenger shipment of 1,500 fish made under the system of distribution employed prior to 1881.

On November 13 car No. 2, having completed the Northeastern distribution, was dispatched with 17,000 carp for the supply of applicants in Kansas, Nebraska, Colorado, Utah, Wyoming, Montana, Idaho, Nevada, and California.

On December 4 car No. 1, having completed the distribution along the line of the Northern Pacific, was sent with 17,000 carp for the supply of applicants in Arizona, Arkansas, Indian Territory, Louisiana, Mississippi, Missouri, New Mexico, Tennessee, and Texas.

On December 7 a depot of distribution was established at Atlanta, Ga., for the supply of applicants in Alabama, Georgia, and Florida. Mr. F. L. Donnelly was placed in charge of the work, the distribution to applicants being made by express from Atlanta. To supply applicants in North Carolina and South Carolina carp were sent in bulk to Raleigh and Columbia, and delivered to the State commissioners, S. G. Worth and C. J. Huske. The distribution was made by them in accord-

ance with lists furnished from the office of the United States Fish Commission. The States of Virginia, West Virginia, Maryland, Pennsylvania, and Southern New Jersey were supplied by express from Washington. Details of the carp distribution for 1883 will be found in Table II.

A review of this gives as the result of the season's work the following:

TABLE II.—SUMMARY OF CARP DISTRIBUTED IN THE UNITED STATES AND CANADA DURING THE YEAR 1883.

[Average distance of applicants from Washington, 805 miles.]

State or Territory.	Number of Congressional districts supplied.	Number of counties.	Number of applicants.	Number of fish.	Point of distribution.	Date of distribution.	Messenger in charge.
Alabama	8	41	168	2,100	Birmingham, Ala . . .	1884. Jan. 3 1863.	F. L. Donnelly.
Arizona	5	14	274	Yuma, Ariz	Dec. 4	George H. H. Moore.	
Arkansas	4	16	70	1,154	do	Do.	J. F. Ellis.
California	4	12	18	Saint Louis, Mo	Nov. 13	Newton Simmons.	
Colorado	10	33	655	San Francisco, Cal . . .	Nov. 13	George H. H. Moore.	
Connecticut	4	8	41	Denver, Colo	Nov. 5	Express company.	
Dakota	18	36	1,151	Boston, Mass	Nov. 24	Individual orders.	
Delaware	3	5	445	Saint Paul, Minn	1883-84	George H. H. Moore.	
District of Columbia		7	82	Washington, D. C	1883	do	
Florida	2	13	38	550	Atlanta, Ga	Dec. 7	F. L. Donnelly.
Georgia	9	64	311	6,045	do	Dec. 7	Do.
Idaho	4	9	183	Yuma, Ariz	Nov. 13	J. F. Ellis.	
Illinois	17	73	467	15,000	Odgen, Utah	Nov. 8	Newton Simmons.
Indiana	13	58	220	4,302	Quincy, Ill	Nov. 14	Do.
Indian T	3	3	3	50	Indianapolis, Ind . . .	Dec. 4	George H. H. Moore.
Iowa	11	66	172	5,000	Hillsborough, Tex . . .	Nov. 5	Do.
Kansas	3	70	371	7,652	Anamosa, Iowa	Nov. 15	J. F. Ellis.
Kentucky	11	48	193	15,040	Topeka, Kans	Oct. 30	Do.
Louisiana	5	17	41	788	Louisville, Ky	Dec. 4	George H. H. Moore.
Maine	8	12	252	New Orleans, La	Nov. 8	J. F. Ellis.	
Maryland	6	14	63	3,182	Boston, Mass	Nov. 20	Express company.
Massachusetts	12	8	16	4,300	Washington, D. C . . .	Nov. 8	J. F. Ellis.
Michigan	10	28	41	407	Boston, Mass	Nov. 20	Newton Simmons.
Minnesota	4	19	31	6,650	Columbus, Ohio	Nov. 5	George H. H. Moore.
Mississippi	6	42	194	2,878	Saint Paul, Minn	Dec. 4	Do.
Missouri	14	36	90	1,580	Jackson, Miss	Dec. 4	Do.
Montana		5	7	300	Saint Louis, Mo	Nov. 13	J. F. Ellis.
Nebraska	3	14	26	2,320	Ogdon, Utah	Nov. 13	Do.
Nevada		13	46	2,285	Omaha, Nebr	Nov. 13	Do.
New Hampshire	2	5	10	2,000	Belmont, Nev	Nov. 13	Do.
New Jersey	7	20	62	1,041	Boston, Mass	1883-84	Express company.
New Mexico		7	12	199	Washington, D. C . . .	1883	do
New York	30	36	113	4,290	Deming, N. Mex	Dec. 4	George H. H. Moore.
North Carolina	8	69	978	15,313	New York City, N. Y . .	Nov. 8	J. F. Ellis.
Ohio	20	68	328	4,000	Raleigh, N. C	Nov. 23	S. G. Worth.
Oregon		18	107	4,265	Columbus, Ohio	Nov. 20	Newton Simmons.
Pennsylvania	26	54	384	5,783	Portland, Oreg	Nov. 5	George H. H. Moore.
Rhode Island	1	1	2	32	Washington, D. C . . .	Nov. 16	Express company.
South Carolina	7	32	704	15,380	Boston, Mass	Nov. 8	J. F. Ellis.
Tennessee	11	57	284	3,959	Columbia, S. C	Nov. 12	C. J. Huske.
Texas	11	73	435	5,700	Milan, Tenn	Dec. 4	George H. H. Moore.
					Dallas, and other points.	Dec. 4	Do.
Utah		17	93	2,133	Salt Lake City, Utah . .	Nov. 13	J. F. Ellis.
Vermont	2	10	32	1,441	Boston, Mass	Nov. 8	Do.
Virginia	9	73	492	6,222	Washington, D. C . . .	Nov. 5	Express company.
Washington		11	47	1,616	Portland, Oreg	Nov. 5	George H. H. Moore.
West Virginia	4	19	67	815	Washington, D. C . . .	Nov. 20	Express company.
Wisconsin	8	17	26	1,060	Saint Paul, Minn . . .	Nov. 5	George H. H. Moore.
Wyoming		5	27	560	Laramie City, Wyo . . .	Nov. 13	J. F. Ellis.
Canada			1	100	New York City, N. Y .	Nov. 14	Do.
Total	292	1,308	7,015	162,000			

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

ALABAMA.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	2	6	63	3—Cont'd	Henry.....	1	10
2.....	8	34	365		Lee.....	5	50
3.....	7	30	308		Russell.....	3	30
4.....	5	31	321	4.....	Dallas.....	6	60
5.....	6	15	165		Hale.....	9	91
6.....	1	1	11		Lowndes.....	1	20
7.....	9	36	375		Perry.....	14	140
8.....	3	9	120		Wilcox.....	1	10
Unaccounted for.....			312		Chambers.....	4	40
Total.....	41	168	2,100		Clay.....	2	20
					Coosa.....	2	14
					Elmore.....	3	40
					Macon.....	1	10
					Tallapoosa.....	3	41
					Greene.....	1	11
					Blount.....	5	60
					Calhoun.....	16	168
					Cherokee.....	1	10
					Cleburne.....	6	80
					Etowah.....	1	9
					Randolph.....	4	30
					Saint Clair.....	1	9
					Shelby.....	1	10
					Talladega.....	1	9
					Lauderdale.....	1	10
					Lawrence.....	3	30
					Madison.....	5	80
					Total.....	168	1,788
					Number of fish sent to be distributed in the State for which no returns have yet been made.....		312
					Grand total.....	168	2,100

ARIZONA.

Congressional district.	No. of counties.	No. of applicants.	No. of fish.	Congressional district.	Counties.	No. of applicants.	No. of fish.
At large.....	5	14	274	At large.....	Apache.....	1	20
Total.....	5	14	274		Cochise.....	1	20
					Maricopa.....	9	180
					Pima.....	2	34
					Yuma.....	1	20
				Total.....		14	274

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.
ARKANSAS.

Congressional districts.		No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....		1	1	15	2.....	Columbia	1	10
2.....		8	55	865		Hempstead	17	281
3.....		5	8	174		Hot Spring	1	16
4.....		2	6	100		Howard	7	165
Total		16	70	1,154		Nevada	7	93
						Ouachita	6	95
						Searcy	6	90
						Union	10	116
						Clark	3	60
						Garland	1	15
						Pulaski	1	20
						Sebastian	1	15
						Yell	2	64
						Benton	4	80
						Boone	2	20
					Total		70	1,154
Congressional districts.		Counties.	No. of applicants.	No. of fish.				
1.....	Phillips		1	15				

CALIFORNIA.

Congressional districts.		No. of conn- ties.	No. of appli- cants.	No. of fish.	Congressional districts.	Counties.	No. of appli- cants.	No. of fish.
1		1	4	80	2	Alameda	1	20
2		2	2	45		Contra Costa	1	25
3		3	6	103	3	Cotusa	2	38
4		6	6	109		Lassen	3	60
Total		12	18	337	4	Plumas	1	5
						Los Angeles	1	20
						Merced	1	20
						Santa Barbara	1	20
						Santa Clara	1	20
						Santa Cruz	1	20
						Ventura	1	9
Congressional district.	Counties.	No. of appli- cants.	No. of fish.	Total			18	337
1	San Francisco	4	80					

— COLORADO

Congressional district.		No. of conn- ties.	No. of appli- cants.	No. of fish.	Congressional district.	Counties.	No. of appli- cants.	No. of fish.
At large		10	33	655	At large	Elbert	1	22
Total		10	33	655		El Paso	2	43
						Huerfano	1	26
						Jefferson	3	60
						Larimer	2	40
						Las Animas	1	7
						Pueblo	1	23
						Weld	2	40
Congressional district.	Counties.	No. of appli- cants.		No. of fish.	Total		88	655
At large	Arapahoe	19		380				
	Bent.....	1		20				

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

CONNECTICUT.

Congressional districts.	No. of conn- ties.	No. of appli- cants.	No. of fish.	Congressional districts.	Counties.	No. of appli- cants.	No. of fish.
1.....	2	8	190	1.....	Hartford.....	4	110
2.....	2	7	140		Tolland.....	4	80
3.....	2	6	120	2.....	Middlesex.....	1	20
4.....	2	28	400		New Haven.....	6	120
Total	8	41	850	3.....	New London.....	2	40
					Windham.....	4	80
				4.....	Fairfield.....	15	300
					Litchfield.....	5	100
				Total		41	850

DAKOTA.

Congressional district.	No. of counties.	No. of applicants.	No. of fish.	Congressional district.	Counties.	No. of applicants.	No. of fish.
At large	18	36	1,151	At large	Custer	1	20
Total	18	36	1,151		Day	7	310
					Douglas	1	50
					Hanson	1	18
					Hughes	2	100
					Kidder	2	70
					Kingbury	1	25
					Lake	1	20
					Lawrence	5	130
					Miner	2	40
					Nelson	1	10
					Pennington	4	100
					Richland	1	50
					Stutsman	1	50
					Yankton	1	25
At large	Beadle	1	6	Total		36	1,151
	Brule	3	77				
	Cass	1	50				

DELAWARE.

Congressional district.	No. of conn- ties.	No. of appli- cants.	No. of fish.	Congressional district.	Counties.	No. of appli- cants.	No. of fish.
At large	3	5	45	At large	New Castle	1	8
Unaccounted for			400		Sussex	1	8
Total	3	5	445		Total	5	45
Number of fish shipped to State Commissioner for distribution unaccounted for							400
Grand total						5	445

DISTRICT OF COLUMBIA

Number of applicants 4 7
Number of fish 82 82

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1863—Continued.

FLORIDA.

Congressional districts.		No. of counties.	No. of applicants.	No. of fish.	Congressional district.	Counties.	No. of applicants.	No. of fish.
1.....		4	4	80	2.....	Alachua	3	23
2.....		9	34	470		Baker	1	12
Total		13	38	550		Brevard	1	5
						Duval	4	80
						Marion	3	60
						Orange	15	150
						Putnam	1	20
						Sumter	4	80
						Volusia	2	40
					Total		38	550
Congressional districts.		Counties.	No. of applicants.	No. of fish.				
1.....		Gadsden	1	20				
		Hernando	1	20				
		Levy	1	20				
		Polk	1	20				

GEORGIA

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

IDAHO.

Congressional district.	No. of conn- ties.	No. of appli- cants.	No. of fish.	Congressional district.	Counties.	No. of appli- cants.	No. of fish.
At large.....	4	9	183	At large.....	Ada	4	80
Total	4	9	183		Alturas.....	1	23
					Idaho.....	1	20
					Oneida.....	3	60
				Total		9	183

ILLINOIS.

Congressional districts.		No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of counties.	No. of fish.
1.		1	16	920	11—Cont'd.	Mercer	1	20
5.		3	25	541		Schnyler	2	40
6.		2	7	140		Warren	11	220
7.		4	21	440	12.	Adams	55	1,100
8.		4	26	620		Brown	1	20
9.		5	13	260		Cass	5	140
10.		4	26	540		Greene	2	40
11.		6	34	680		Pike	17	340
12.		6	82	1,682	13.	Scott	2	40
13.		5	27	540		Christian	2	40
14.		2	3	60		Mason	3	60
15.		4	19	380		Morgan	1	20
16.		6	43	890		Sangamon	12	240
17.		5	35	720		Tazewell	9	180
18.		5	45	940	14.	McLean	1	20
19.		7	22	440		Piatt	2	40
20.		4	23	460	15.	Champaign	6	120
Number of fish unaccounted for				5,347		Coles	2	40
Total		73	467	15,000	16.	Douglas	1	20
Congressional districts.		Counties.		No. of applicants.	No. of fish.	Vermillion	10	200
1.	Cook	16	320	17.	Clark	4	80	
5.	De Kalb	4	80		Clay	4	100	
	Kane	20	441		Cumberland	8	160	
	McHenry	1	20		Jasper	16	320	
6.	Ogle	5	100		Lawrence	5	110	
	Stephenson	2	40		Richland	6	120	
7.	Bureau	12	240		Effingham	3	60	
	Henry	5	120		Macoupin	18	360	
	Lee	1	20		Montgomery	1	20	
	Whiteside	3	60		Moultrie	3	80	
8.	Du Page	10	200		Shelby	10	200	
	Kendall	1	20		Bond	6	120	
	La Salle	10	280		Madison	7	140	
	Will	5	120		Monroe	4	80	
9.	Iroquois	6	120		Saint Clair	13	300	
	Kankakee	2	40		Washington	15	300	
	Livingston	2	40		Clinton	4	80	
	Marshall	2	40		Franklin	4	80	
	Woodford	1	20		Hamilton	5	100	
10.	Fulton	6	120		Jefferson	2	40	
	Knox	6	120		Marion	3	60	
	Peoria	12	240		Saline	1	20	
11.	Stark	2	60		White	3	60	
	Hancock	10	200		Johnson	1	20	
	Henderson	2	40		Perry	9	180	
	McDonough	8	160		Randolph	12	240	
					Union	1	20	
				Total		467	9,653	
				Number of fish shipped to State commissioner for distribution unaccounted for			5,347	
				Grand total		467	15,000	

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

INDIANA.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	2	2	26	4—Cont'd.....	Union.....	12	40
2.....	5	11	240	5.....	Bartholomew.....	5	20
3.....	4	18	300		Kendricks.....	5	100
4.....	7	23	460		Johnson.....	1	20
5.....	5	17	340		Morgan.....	3	60
6.....	6	50	1,000		Putnam.....	7	140
7.....	3	16	320	6.....	Delaware.....	1	20
8.....	5	12	240		Fayette.....	20	400
9.....	4	6	120		Henry.....	2	40
10.....	7	38	760		Randolph.....	5	100
11.....	4	9	180		Rush.....	4	80
12.....	3	10	200		Wayne.....	18	360
13.....	3	8	146	7.....	Hancock.....	1	20
Total.....	58	220	4,392		Marion.....	7	140
					Shelby.....	8	160
					Clay.....	2	40
					Montgomery.....	3	60
					Vermillion.....	3	60
					Vigo.....	3	60
					Warren.....	1	20
					Clinton.....	1	20
					Hamilton.....	2	40
					Madison.....	1	20
					Tipppecanoe.....	2	40
					Cass.....	5	100
					Carroll.....	7	140
					Fulton.....	3	60
					Lake.....	15	300
					Newton.....	1	20
					Porter.....	6	120
					White.....	1	20
					Jay.....	2	40
					Miami.....	3	60
					Wabash.....	2	40
					Wells.....	2	40
					Allen.....	8	160
					Lagrange.....	1	20
					Noble.....	1	20
					Elkhart.....	2	26
					Kosciusko.....	3	60
					Saint Joseph.....	3	60
				Total.....		220	4,392

INDIAN TERRITORY.

Congressional district.	No. of counties.	No. of applicants.	No. of fish.	Congressional district.	Counties.	No. of applicants.	No. of fish.
At large.....	3	3	80	At large.....	Cherokee.....	1	20
Total.....	8	3	80		Choctaw.....	1	20
					Kiowa.....	1	40
				Total.....		3	80

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

IOWA.

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

KANSAS.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	24	99	2,022	2—Cont'd	Crawford	46	920
2.....	14	161	3,300		Douglas	3	64
3.....	19	80	1,681		Franklin	14	340
Not given	13	31	640		Johnson	3	60
Total	70	371	7,652		Labette	31	620
					Linn	4	80
					Miami	4	100
					Montgomery	6	120
					Neosho	6	122
					Wilson	1	20
				3.....	Barton	2	40
					Butler	4	91
					Chase	1	20
					Chautauqua	1	20
					Coffey	13	260
					Cowley	2	40
					Ford	4	80
					Harvey	3	60
					Lyon	14	280
					McPherson	4	80
					Marion	4	80
					Osage	3	60
					Pawnee	1	20
					Reno	4	80
					Rico	2	40
					Shawnee	6	190
					Sumner	7	140
					Waubaunee	1	20
					Woodson	4	80
				Not given	Barbour	7	140
					Decatur	2	40
					Elk	3	60
					Finney	1	20
					Gove	1	20
					Graham	1	20
					Harper	6	120
					Hodgeman	1	20
					Kingman	2	60
					Morris	1	20
					Ness	1	20
					Thomas	1	20
					Trego	4	80
2.....				Total		371	7,652

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

KENTUCKY.

Congressional districts.	No. of counties.	No. of applications canis.	No. of fish.	Congressional districts.	Counties.	No. of applications canis.	No. of fish.
1.....	8	8	160	4—Cont'd.....	Marion	2	40
2.....	5	12	240		Meade	2	40
3.....	6	27	540		Nelson	2	40
4.....	6	11	220		Washington	1	20
5.....	1	52	1,067	5.....	Jefferson	52	1,067
6.....	2	4	85	6.....	Kenton	3	65
7.....	3	28	560		Trimble	1	20
8.....	6	14	280		Bourbon	1	20
9.....	5	13	276	7.....	Fayette	5	100
10.....	2	6	200		Franklin	4	80
11.....	4	18	360		Henry	7	140
Unaccounted for.....			11,052		Oldham	6	120
Total.....	48	193	15,640		Owen	2	40
					Scott	1	20
					Woodford	1	40

Congressional districts.	Counties.	No. of applicants.	No. of fish.	Garrard	1	20
				Lincoln	1	20
				Mercer	1	20
				Shelby	8	160
				Spencer	2	40
				Fleming	1	20
				Hart	4	80
				Lawrence	2	40
				Lewis	3	76
				Mason	3	60
				Clark	5	180
				Montgomery	1	20
				Benton	15	300
				Green	1	20
				Pulaski	1	20
				Taylor	1	20
				Total	193	3,988
				Number of fish shipped to State commissioner for distribution unaccounted for		11,052
				Grand total	193	15,040
1.....	Ballard	2	40			
	Caldwell	5	100			
	Marshall	1	20			
2.....	Christian	1	20			
	Davies	2	40			
	Henderson	6	120			
	Hopkins	1	20			
	Union	2	40			
3.....	Butler	1	20			
	Logan	5	100			
	Muhlenburg	1	20			
	Simpson	1	20			
	Todd	2	40			
4.....	Warren	17	340			
	Bullitt	3	60			
	Hardin	1	20			

LOUISIANA.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1 and 2.....	1	2	28	2.....	Saint John Baptist	1	14
2.....	2	2	34		Saint Charles	1	20
3.....	2	3	60	3.....	Saint Martin's	1	20
4.....	6	18	346		Saint Mary's	2	40
5.....	6	16	320	4.....	Bienvenue	2	40
Total	17	41	788		Bossier	2	40
					Caddo	11	220
					Natchitoches	1	20
					Red River	1	20
					Webster	1	8
				5.....	Clairborne	3	80
					Jackson	1	20
					Ouachita	1	20
					East Baton Rouge	1	20
					East Feliciana	2	40
					Saint Landry	8	160
Congressional districts.	Counties.	No. of applicants.	No. of fish.	Total		41	788
1 and 2.....	Orleans	12	28				

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

MAINE.

Congressional district.	No. of counties.	No. of applicants.	No. of fish.	Congressional district.	Counties.	No. of applicants.	No. of fish.
At large	8	12	252	At large—Continued.....	Knox	1	20
Total	8	12	252		Lincoln	40	40
					Penobscot	40	40
					Piscataquis	1	20
					Somerset	1	20
					Waldo	2	40
					York	1	20
Congressional district.	Counties.	No. of applicants.	No. of fish.	Total		12	252
At large	Cumberland	2	52				

MARYLAND.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	3	7	70	1—Cont'd	Queen Anne	30	
2.....	8	88	2		Cecil	70	
2, 3, 4, and 5	15	150	Harford	18			
5.....	5	7	100	2, 3, 4, and 5	Baltimore	150	
6.....	3	26	274	5.....	Anne Arundel	20	
Number of fish unaccounted for			2,500		Calvert	1	20
Total	14	63	3,182		Charles	2	30
					Prince George	1	20
					Saint Mary's	1	10
					Frederick	7	70
					Montgomery	10	104
					Washington	9	100
Congressional districts.	Counties.	No. of applicants.	No. of fish.	Total		63	682
1.....	Caroline	20	Number of fish shipped to State commissioner for distribution unaccounted for				2,500
Kent		20					
				Grand total		63	3,182

MASSACHUSETTS.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	1	1	20	1.....	Barnstable	1	20
4, 5, and 6	1	1	20	4, 5, and 6	Suffolk	1	20
6.....	2	30	5		Middlesex	12	30
10 and 11	1	120	10 and 11	Worcester	6	120	
11.....	2	4	80		Franklin	3	60
12.....	2	30	11.....	Hampshire	1	20	
Unaccounted for		4,000	12.....	Berkshire	1	10	
Total	8	16	4,300		Hampden	1	20
				Total		16	300
				Number of fish shipped to the State commissioner for distribution unaccounted for			4,000
				Grand total			4,300

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

MICHIGAN.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.	1	3	50	3.	Calhoun	1	8
2.	2	5	50	Eaton	1	10	
3.	3	4	38	Jackson	2	20	
4.	5	9	110	Berrien	2	21	
5.	3	4	40	Cass	1	10	
6.	2	2	21	Kalamazoo	1	9	
7.	1	1	10	Saint Joseph	2	20	
8.	1	1	20	Van Buren	3	50	
9.	4	5	60	Allegan	1	10	
10.	4	4	40	Kent	1	10	
Not given	2	3	28	Muskegon	2	20	
Total	28	41	467	Genesee	1	10	
				Oakland	1	11	
				Lapeer	1	10	
				Gratiot	1	20	
				Charlevoix	1	20	
				Lake	1	10	
				Manistee	1	10	
				Newaygo	2	20	
				Alpena	1	10	
				Clare	1	10	
				Ogemaw	1	10	
				Osceola	1	10	
				Total	2	18	
					41	467	
Congressional districts.	Counties.	No. of applicants.	No. of fish.				
1.	Wayne	3	50				
2.	Monroe	1	10				
	Washtenaw	4	40	Not given			
				Total			

MINNESOTA.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.	4	6	140	2—Cont'd.	Lyon	1	20
2.	3	4	80		Pipestone	1	20
4.	5	6	120		Hennepin	1	20
5.	7	15	300		Kanabec	1	20
Unaccounted for			6,010		Pine	1	20
Total	10	31	6,650		Ramsey	1	20
					Washington	2	40
					Becker	2	40
Congressional districts.	Counties.	No. of applicants.	No. of fish.		Clay	6	120
1.	Fillmore	3	80		Douglas	1	20
	Houston	1	20		Morrison	1	20
	Steele	1	20		Otter Tail	3	60
	Winona	1	20		Popo	1	20
2.	Faribault	2	40		Stevens	1	20
				Total		31	640
				Number of fish shipped to State commissionery for distribution unaccounted for.			
							6,010
				Grand total		31	6,650

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

MISSISSIPPI.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	7	15	272	2--Cont'd.....	Tate.....	6	72
2.....	8	55	809		Tippah.....	1	12
4.....	9	69	955		Union.....	3	36
5.....	8	28	386	4.....	Carroll.....	4	48
6.....	4	12	216		Chickasaw.....	5	68
7.....	6	15	240		Choctaw.....	4	80
Total.....	42	194	2,878		Clay.....	3	36
					Grenada.....	1	12

Congressional districts. **Counties**

Congressional districts.	Counties.	No. of applicants.	No. of fish.	Holmes	40
1.....	Alcorn.....	5	100	Leake	44
	Lee.....	12	40	Newton	60
	Lowndes.....	1	12	Smith	12
	Monroe.....	1	10	Wayne	48
	Oktibbeha.....	2	24	Yazoo	60
	Prentiss.....	2	29	Anite	3
	Tishomingo.....	2	57	Hancock	12
2.....	De Soto.....	3	60	Pike	44
	Lafayette.....	19	292	Wilkinson	160
	Marshall.....	11	181	Claiborne	34
	Panola.....	11	136	Copiah	12
	Tallahatchee.....	1	20	Hinds	108
			Total	194	2,878

MISSOURI.

Congressional districts.

Congressional districts.		No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	4	17	265	24	Cont'd.....	Livingston.....	1	15
2.....	5	17	300			Monroe.....	4	60
3.....	2	7	115			Randolph.....	7	140
4.....	1	1	15	3.....		Clifton.....	6	100
5.....	2	7	105			Worth.....	1	15
6.....	3	19	300	4.....		Holt.....	1	15
7.....	3	6	95	5.....		Johnson.....	6	90
8, 9, and 10.....	1	3	35	6.....		Lafayette.....	1	15
10.....	2	2	35			Cooper.....	6	100
11.....	2	2	30			Howard.....	9	140
12.....	4	6	105			Saline.....	4	60
13.....	4	9	135	7.....		Audrain.....	4	60
14.....	2	2	30			Montgomery.....	1	15
Not given.....	1	1	15			Saint Charles.....	1	20
Total.....	36	99	1,580	8, 9, and 10.....		Saint Louis.....	3	35
				10.....		Iron.....	1	20
						Madison.....	1	3

Congressional

Congressional districts.	Counties.	No. of applicants.	No. of fish.		
1.	Knox	5	83	14	Cass 15
	Lewis	1	15		Saint Clair 50
	Marion	9	135	Jasper 2	
	Scotland	2	30	Newton 4	30
	Carroll	1	20	Taney 2	60
	Linn	4	65	Wobster 1	30
2.				Dunklin 1	15
				Howell 1	15
				Preston 1	15
			Total 99		1,580

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

MONTANA.

Congressional district.	No. of comm. ties.	No. of appl. licants.	No. of fish.	Congressional district.	Counties.	No. of appl. licants.	No. of fish.
At large.....	5	7	300	At large	Deer Lodge.....	1	50
Total	5	7	300		Lewis and Clark.....	1	50
					Meagher.....	1	50
					Scott.....	1	50
					Silver Bow.....	3	100
				Total		7	300

NEBRASKA.

Congressional districts.		No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.		4	9	355	2.	Adams...	1	20
2.		4	9	180		Hitchcock...	1	20
3.		6	8	160		Jefferson...	6	120
Unaccounted for.				1,625		York...	1	20
Total		14	26	2,320	3.	Antelope...	3	60
						Brown...	1	20
						Cherry...	1	20
						Holt...	1	20
						Platt...	1	20
						Washington...	1	20
					Total		26	695
Congressional districts.		Counties.		No. of applicants.	Number of fish shipped to State commissioner for distribution unaccounted for			1,625
1.		Douglas		4	80			
		Lancaster		1	20			
		Otoe		3	235			
		Pawnee		1	20	Grand total	26	2,320

NEVADA.

Congressional district.	No. of counties.	No. of applicants.	No. of fish.	Congressional district.	Counties.	No. of applicants.	No. of fish.	
At large	13	46	945	At large—Continued.	Humboldt	3	60	
Unaccounted for			1,340		Lander	4	80	
Total	18	46	2,285		Lincoln	1	20	
					Lyon	3	60	
					Nye	6	120	
					Ormsby	7	140	
					Storey	1	20	
					Washoe	5	100	
					White Pine	4	95	
Congressional district.	Counties.	No. of applicants.	No. of fish.	Total .....	.	46	945
At large	Churchill	1	11	Number of fish sent out for distribution for which no returns have yet been made				
	Elko	6	139					1,340
	Esmeralda	3	60	Grand total				
	Eureka	2	40			46	2,285	

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1863—Continued.

NEW HAMPSHIRE.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1 and 2.....	2	6	163	2.....	Cheshire.....	2	40
2.....	3	4	97		Grafton.....	1	20
Unaccounted for.....			1,740		Sullivan.....	1	37
Total	5	10	2,000	Total		10	260
Number of fish shipped to State commissioner for distribution unaccounted for.....							
1,740							
Grand total							
10							
2,000							
.							
Congressional districts.	Counties.	No. of applicants.	No. of fish.				
1 and 2.....	Hillsborough..... Merrimac.....	2 4	55 108				

NEW JERSEY.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	4	7	56	1—Cont'd	Gloucester.....	2	16
2.....	4	10	151		Salem.....	2	16
3.....	3	9	188	2.....	Atlantic.....	4	39
4.....	4	15	270		Burlington.....	3	55
5.....	3	11	183		Mercer.....	2	47
6.....	1	9	185		Ocean.....	1	10
7.....	1	1	8	3.....	Middlesex.....	1	20
Total	20	62	1,041		Monmouth.....	5	100
.							
Congressional districts.	Counties.	No. of applicants.	No. of fish.	4.....	Union.....	3	68
1.....	Camden..... Cumberland.....	2 1	16 8		Hunterdon.....	1	20
.					Somerset.....	3	60
.					Sussex.....	10	180
.				5.....	Warren.....	1	10
.					Bergen.....	4	62
.					Morris.....	3	60
.					Passaic.....	4	61
.				6.....	Essex.....	9	185
.					Hudson.....	1	8
.				7.....	Total	62	1,041

NEW MEXICO.

Congressional district.	No. of counties.	No. of applicants.	No. of fish.	Congressional district.	Counties.	No. of applicants.	No. of fish.
At large.....	7	12	199	At large	Bernalillo.....	1	16
Total	7	12	199		Colfax.....	1	20
.					Dofia Aña.....	1	15
.					Grant.....	4	82
.					Rio Arriba.....	2	20
.					Santa F6.....	2	40
.					Valencia.....	1	6
.					Total	12	109

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

NEW YORK.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	3	16	320	12.....	Westchester.....	1	20
2, 3, and 4.....	1	5	105	13.....	Columbia.....	2	30
5, 6, 7, 8, 9, 10, and 11.....	1	7	180	14.....	Dutchess.....	3	65
12.....	1	1	20	15.....	Orange.....	10	200
13.....	2	5	95	16.....	Rockland.....	8	160
14.....	3	24	470	17.....	Sullivan.....	6	110
15.....	2	3	60	18.....	Schoharie.....	1	20
16.....	1	2	40	19.....	Ulster.....	2	40
17.....	2	2	42	20.....	Albany.....	2	40
18.....	1	1	40	21.....	Rensselaer.....	1	20
20.....	3	8	200	22.....	Washington.....	1	22
21.....	2	4	80	23.....	Warren.....	1	40
22.....	2	7	120	24.....	Fulton.....	2	40
23.....	1	10	170	25.....	Montgomery.....	2	40
24.....	1	2	40	26.....	Saratoga.....	4	120
25.....	1	2	30	27.....	Chenango.....	1	20
26.....	3	4	75	28.....	Otsego.....	8	60
27.....	2	3	60	29.....	Herkimer.....	4	70
28.....	2	2	40	30.....	Lewis.....	3	50
29.....	1	1	20	31.....	Oneida.....	10	170
32.....	1	4	60	32.....	Madison.....	2	40
Unaccounted for.....			2,023	33.....	Onondaga.....	2	30
Total.....	36	113	4,290	34.....	Cayuga.....	2	40
Congressional districts.	Counties.	No. of applicants.	No. of fish.	35.....	Seneca.....	1	15
				36.....	Wayne.....	1	20
				37.....	Livingston.....	2	40
				38.....	Ontario.....	1	20
				39.....	Broome.....	1	20
				40.....	Tompkins.....	1	20
				41.....	Steuben.....	1	20
				42.....	Erie.....	4	60
				Total.....		113	2,267
1.....	Queens.....	5	100	Number of fish shipped to State commissioner for distribution unaccounted for.....			
	Richmond.....	1	20				
	Suffolk.....	10	200				
2, 3, and 4.....	Kings.....	5	105				2,023
5, 6, 7, 8, 9, 10 and 11.....	New York.....	7	180	Grand total.....		113	4,290

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

NORTH CAROLINA.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	4	6	87	4—Cont'd.....	Johnston	58	912
2.....	9	82	1,345		Nash	5	84
3.....	8	85	1,383		Orange	11	179
4.....	9	218	3,587		Vance	26	400
5.....	8	270	4,458		Wake	33	566
6.....	9	62	763	5.....	Alamance	59	1,064
7.....	9	182	2,794		Caswell	1	10
8.....	13	73	896		Davidson	9	150
Total	60	978	15,313		Guilford	133	2,163
Congressional districts.	Counties.	No. of applicants.	No. of fish.	6.....	Anson	3	31
					Cabarrus	2	26
					Catawba	16	235
					Gaston	7	85
				7.....	Lincoln	20	180
					Mecklenburg	8	100
					Richmond	1	16
					Robeson	1	16
					Union	4	68
1.....	Beaufort.....	1	16		Alexander	5	54
	Hertford.....	3	35		Ashe	1	16
	Hyde.....	1	16		Davie	4	52
	Pasquotank.....	1	20		Forsyth	04	1,445
2.....	Edgecombe.....	13	192		Iredell	25	378
	Greene.....	12	211		Rowan	14	214
	Halifax.....	11	199		Surry	15	260
	Jones.....	1	20		Wilkes	8	123
	Lenoir.....	5	81		Yadkin	16	252
	Northampton.....	4	64		Buncombe	4	42
	Warren.....	2	40		Burke	4	43
	Wayne.....	19	805		Caldwell	3	52
	Wilson.....	15	233		Clay	4	46
3.....	Carteret.....	2	30		Cleveland	7	102
	Cumberland.....	7	124		Haywood	1	10
	Duplin.....	20	368		Henderson	10	116
	Harnett.....	14	228		McDowell	3	56
	Moore.....	15	240		Madison	12	96
	New Hanover.....	1	12		Mitchell	12	140
	Pender.....	9	135		Rutherford	6	90
	Sampson.....	17	248		Transylvania	3	30
4.....	Chatham.....	47	704		Yancey	4	64
	Durham.....	19	424		Total	978	15,313
	Franklin.....	14	282				
	Granville.....	5	86				

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

OHIO.

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

OREGON.

Congressional district.	Counties.	No. of appl. cants.	No. of fish.	Congressional district.	Counties.	No. of appl. cants.	No. of fish.
At large.....	Benton	8	65	At large—C'd..	Marion	17	855
	Clackamas	11	470		Multnomah	28	1,310
	Clatsop	1	50		Polk	4	145
	Douglas	2	100		Umatilla	1	20
	Tillamook	1	50		Union	1	.....
	Jackson	2	70		Wasco	1	50
	Klickitat	1	50		Washington	10	310
	Lake	2	.....		Yam Hill	17	495
	Lane	1	50	Total		107	4,265
	Linn	4	175				

PENNSYLVANIA.

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

RHODE ISLAND.

Congressional district.	No. of counties.	No. of applicants.	No. of fish.	Congressional district.	County.	No. of applicants.	No. of fish.
2.....	1	2	32	2.....	Providence	2	32
Total	1	2	32	Total		2	32

SOUTH CAROLINA.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	2	108	2,160	2—Cont'd.....	Hampton	3	60
2.....	5	147	2,040	3.....	Abbeville	23	460
3.....	5	253	5,060		Anderson	100	2,000
4.....	5	162	3,362		Newberry	17	340
4 and 5.....	1	4	80		Oconee	86	1,720
5.....	4	16	320		Pickens	27	540
6.....	5	17	345	4.....	Fairfield	6	122
7.....	4	40	782		Greenville	24	580
Not given.....	1	17	340		Laurens	40	800
Total	32	764	15,389		Richland	16	320
					Spartanburg	76	1,540
					Union	4	80
				4 and 5.....	Chester	5	100
				5.....	Chesterfield	1	20
					Kershaw	5	100
					Lancaster	5	100
				6.....	Clarendon	2	40
					Darlington	10	205
					Marion	2	40
					Marlborough	2	40
				7.....	Williamsburg	1	20
					Beaufort	1	20
1.....	Charleston	3	60		Berkley	6	102
	Lexington	105	2,100		Orangeburg	28	560
2.....	Aiken	10	200	Not given.....	Sumter	5	100
	Barnwell	27	540		York	17	340
	Colleton	3	60	Total		764	15,389
	Edgefield	104	2,080				

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1863—Continued.

TENNESSEE.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	9	86	970	3--Cont'd.....	Hamilton	1	8
2.....	6	27	507		James	2	12
3.....	7	25	233		McLinn	2	20
4.....	6	24	239		Marion	3	44
5.....	5	8	117		White	7	60
6.....	5	13	212	4.....	Fentress	1	8
7.....	3	17	267		Robertson	2	24
8.....	3	11	180		Smith	3	19
9.....	7	26	415		Sumner	2	30
10.....	3	38	676		Trousdale	6	39
11.....	1	4	64		Wilson	10	119
Not given	2	5	79	5.....	Bedford	1	20
Total	57	284	3,959		Coffee	1	15
Congressional districts.	Counties.	No. of applicants.	No. of fish.	6.....	Lincoln	3	37
1.....	Carter	4	34		Marshall	2	30
	Claiborne	4	42		Rutherford	1	15
	Cooke	4	42		Chatham	1	12
	Greene	14	104		Davidson	7	115
	Hamilton	2	25		Houston	1	15
	Hawkins	5	44		Humphrey	1	15
	Sullivan	12	28		Montgomery	3	55
	Unicoi	5	49		Giles	7	110
	Washington	40	602		Maury	4	70
2.....	Anderson	2	8		Williamson	6	87
	Bjount	11	128		Carroll	3	50
	Jefferson	5	44		Hardin	1	15
	Knox	4	47		Madison	7	115
	Loudon	3	260		Crockett	2	26
	Sovier	2	20		Dyer	3	60
3.....	Bradley	8	76		Gibson	1	20
	Cumberland	2	13		Haywood	7	99
					Lauderdale	3	55
					Tipton	1	20
					Weakley	9	135
					Payette	17	274
					Hardeman	1	15
					Shelby	20	387
					Henry	4	64
					Danphian	1	6
					Henderson	4	73
				Total		284	3,959

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

TEXAS.

Congressional districts.	No. of comm. ties.	No. of appli- cants.	No. of fish.	Congressional districts.	Counties.	No. of appli- cants.	No. of fish.
1.....	8	15	181	5.....	Archer	2	40
2.....	5	50	753		Clay	7	82
3.....	6	29	370		Collin	29	483
4.....	6	52	778		Cook	2	20
5.....	10	154	1,839		Denton	6	59
6.....	7	45	535		Grayson	99	1,003
7.....	4	6	106		Matagora	3	60
8.....	5	20	238		Montague	4	70
9.....	7	28	389		Wichita	1	13
10.....	3	16	268		Wise	1	9
11.....	12	20	323		Dallas	9	132
Total	73	435	5,790		Ellis	7	74
					Galveston	1	12
					Hill	1	20
					Johnson	4	56
					Coffman	20	221
					Tarrant	3	20
					DeWitt	2	40
					Duval	1	20
					Fort Bend	1	20
					Nueces	2	26
					Colorado	2	24
					Fayette	13	139
					Hays	3	35
					Karnes	1	20
					Live Oak	1	20
					Bell	2	24
					Burleson	1	12
					Limestone	5	45
					McLennan	5	50
					Milan	1	7
					Navarro	13	239
					Washington	1	12
					Bastrop	2	25
					Travis	3	52
					Williamson	11	191
					Brown	2	30
					Comanche	1	13
					Donley	1	20
					Eastland	4	25
					El Paso	3	42
					Howard	1	100
					Parker	1	12
					Palo Pinto	1	8
					Somervell	1	10
					Stephens	3	31
					Wheeler	1	20
					Young	1	12
				Total		435	5,790

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

UTAH.

Congressional district.	No. of counties.	No. of applicants.	No. of fish.	Congressional district.	Counties.	No. of counties.	No. of fish.
At large	17	93	1,833	At large—C'd.	Kane	6	120
Unaccounted for.....			300		Millard	25	500
Total	17	93	2,133		Morgan	1	20
					Salt Lake	15	260
					San Pete	1	20
					Sevier	1	20
					Tooele	4	80
					Summit	6	120
					Utah	6	120
					Washington	3	60
					Weber	7	140
				Total		93	1,833
					Number of fish sent out for distribution for which no returns have yet been made		300
					Grand total	93	2,133
At large	Beaver	2	40				
	Box Elder	6	123				
	Cache	4	80				
	Garfield	2	40				
	Iron	2	40				
	Juab	2	40				

VERMONT.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	4	13	260	1.....	Addison	1	20
2.....	6	19	381		Bennington	3	60
Unaccounted for.....			800		Franklin	3	60
Total	10	82	1,441		Rutland	6	120
					Caledonia	3	60
					Orange	1	20
					Orleans	6	121
					Washington	3	60
					Windham	4	80
					Windsor	2	40
				Total		32	641
					Number of fish shipped to State Commissioner for distribution unaccounted for		800
					Grand total	32	1,441

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

VIRGINIA.

Congressional districts.	No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
1.....	9	23	228	4—Cont'd.....	Greenville.....	1	8
2.....	7	22	309		Lunenburg.....	9	73
3.....	6	29	293		Mecklenburg.....	1	10
4.....	11	60	850		Nottoway.....	3	51
5.....	5	32	410		Powhatan.....	4	35
6.....	8	49	821		Prince Edward.....	9	180
7.....	8	109	1,417	5.....	Floyd.....	1	20
8.....	11	131	1,398		Franklin.....	3	60
9.....	8	37	496		Halifax.....	8	86
Total.....	73	492	6,222		Henry.....	1	20
				6.....	Pittsylvania.....	19	224
					Amherst.....	1	10
					Appomattox.....	2	30
					Bedford.....	11	164
					Botetourt.....	5	80
					Buckingham.....	3	50
					Campbell.....	19	346
					Nelson.....	3	49
					Rockbridge.....	5	92
					Albemarle.....	27	307
					Augusta.....	23	258
					Fluvanna.....	3	40
					Green.....	3	23
					Highland.....	1	10
					Page.....	4	33
					Rockingham.....	48	616
					Shenandoah.....	15	130
					Alexandria.....	3	60
					Clark.....	1	12
					Culpeper.....	5	44
					Fairfax.....	6	63
					Fauquier.....	38	384
					Frederick.....	6	51
					Loudoun.....	6	71
					Madison.....	9	127
					Orange.....	32	334
					Rappahannock.....	23	232
					Warren.....	2	20
					Craig.....	1	20
					Montgomery.....	3	60
					Roanoke.....	5	65
					Russell.....	1	10
					Smythe.....	1	10
					Tazewell.....	1	10
					Washington.....	17	205
					Wythe.....	8	116
				Total.....		492	6,222

WASHINGTON.

Congressional district.	No. of counties.	No. of applicants.	No. of fish.	Congressional district.	Counties.	No. of applicants.	No. of fish.
At large.....	11	46	1,616	At large.....	Clark.....	4	170
Total.....	11	47	1,616		Cowlitz.....	3	150
					Columbia.....	2	70
					Garfield.....	1	20
					Pierce.....	1	50
					San Juan.....	1	20
					Snohomish.....	1	20
					Spokane.....	6	210
					Thurston.....	5	185
					Walla Walla.....	21	685
					Whatcom.....	2	36
				Total.....		47	1,616

DISTRIBUTION OF CARP IN THE UNITED STATES IN 1883—Continued.

WEST VIRGINIA.

Congressional districts.		No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
					1—Cont'd.			
1.		3	9	83	2.	Ohio	2	17
2.		10	52	670	3.	Berkeley	2	36
3.		5	5	54	4.	Hampshire	3	28
4.		1	1	8		Hardy	3	23
Total		10	67	815		Jefferson	23	395
						Marion	5	54
						Mineral	1	8
						Monongahela	1	8
						Morgan	17	17
						Preston	11	93
						Taylor	1	8
						Greenbrier	1	10
						Kanawha	1	8
						Mercer	1	8
						Monroe	1	1
						Summers	1	20
						Roane	1	8
						Total	67	815

WISCONSIN.

Congressional districts.		No. of counties.	No. of applicants.	No. of fish.	Congressional districts.	Counties.	No. of applicants.	No. of fish.
					2.	Fond Du Lac	2	70
1.		2	3	150	3.	Washington	1	100
2.		3	5	220	4.	Waukesha	1	50
3.		2	4	140	5.	Green	3	90
4.		1	3	150	6.	Lafayette	1	50
5.		2	2	100	7.	Milwaukee	3	150
6.		1	2	100	8.	Calumet	1	50
7.		3	4	110	9.	Sheboygan	1	50
8.		2	2	70	10.	Winnebago	1	100
Not given.		1	1	20	11.	Monroe	1	50
Total		17	26	1,068	12.	Sauk	1	40
					13.	Vernon	1	20
					14.	Jackson	1	20
					15.	Trempealeau	1	50
					16.	Dane	1	20
					Total		26	1,060

Congressional districts.		Counties.	No. of applicants.	No. of fish.		
1.		Rock	1	100	Total	
		Walworth	50			

WYOMING.

Congressional district.		No. of counties.	No. of applicants.	No. of fish.	Congressional district.	Counties.	No. of applicants.	No. of fish.
					At large	Albaley	2	60
At large		5	27	560		Carbon	9	180
Total		5	27	560		Johnson	1	20
						Laramie	12	260
						Uintah	2	40
					Total		27	560

DISTRIBUTION OF CARP IN CANADA IN 1883.

CANADA.

Province.	No. of applicants.	No. of fish.
Ontario	1	100
Total	1	100

As incidental to the distribution of carp, and in conjunction with it, a moderate number of the gold orfe and fancy gold fish have been sent to applicants in the various States and Territories of the United States. A summary of the number distributed in 1882 and 1883 will be found in Tables III and IV.

TABLE III.—DISTRIBUTION OF GOLD FISH DURING THE YEARS 1882-84.

State.	Number of applicants.	Number of fish.	State.	Number of applicants.	Number of fish.
Alabama.....	1	6	Missouri.....	1	6
Arizona Territory ¹	2	36	Mississippi.....	1	6
California.....	1	12	Nebraska.....	5	15
Connecticut.....	1	20	New Hampshire.....	1	3
Delaware ²	4	116	New Jersey.....	8	39
District of Columbia ³	317	2,058	New York.....	5	30
Florida.....	1	4	North Carolina.....	18	76
Georgia ⁴	47	271	Ohio.....	15	89
Illinois.....	5	34	Pennsylvania.....	5	32
Indiana.....	203	862	Rhode Island.....	2	14
Indian Territory.....	1	6	Tennessee.....	3	21
Iowa.....	2	12	Texas ⁶	7	315
Kansas.....	3	41	Utah Territory.....	5	12
Kentucky.....	17	58	Virginia ⁷	59	510
Maryland ⁵	16	95	West Virginia.....	4	19
Massachusetts.....	16	46	Wyoming Territory.....	7	14
Michigan.....	19	123	Total	802	5,001

¹ Thirty-six delivered to State Commissioner John J. Gospers for distribution.² One hundred delivered to Commissioner Enoch Moore, Jr., for distribution.³ One hundred and sixty delivered to George H. H. Moore for distribution to Baltimore and Potomac Railroad employees. Two hundred delivered to Col. A. F. Rockwell for public fountains. Twenty-five delivered to C. A. Stewart for fountain in National Museum. Twelve delivered to Mrs. T. L. Frecker for exhibit at Garfield Memorial Fair.⁴ Twelve expressed to Messenger G. G. Davenport at Atlanta for distribution. Seventy-five expressed to Messenger F. L. Donnelly at Atlanta for distribution. Fifty delivered to Commissioner J. T. Henderson, Atlanta, for distribution.⁵ Twenty delivered to J. F. Legge for public fountains in Cumberland.⁶ Two hundred delivered to Commissioner R. R. Robertson, Austin, Tex., for distribution. Fifty delivered to Commissioner John B. Lubbock, Austin, Tex., for distribution.⁷ Twenty delivered to W. H. Dulany for public fountains in Lynchburg, Va. Three hundred and fifty expressed to George A. Seagle, Wytheville, Va., for distribution.

TABLE IV.—DISTRIBUTION OF GOLD ORFE DURING THE YEARS 1882-'84.

Name.	Post-office address.	Number of fish.
Col. A. F. Rockwell.....	Washington, D. C.....	0
J. H. Rathbone.....	Washington, D. C.....	2
W. Williams.....	Washington, D. C.....	2
Henry P. Farrow.....	Atlanta, Ga.....	12
Dr. H. H. Cary.....	La Grange, Ga.....	12
Hon. J. Fred. C. Talbott.....	Lutherville, Md.....	6
Martin Metcalf.....	Battle Creek, Mich.....	6
J. G. W. Steedman.....	Saint Louis, Mo.....	12
B. E. B. Kennedy.....	Omaha, Nebr.....	30
E. D. Sturtevant.....	Bordentown, N. J.....	4
E. G. Blackford.....	New York City.....	4
Kemp Gaines.....	Springfield, Ohio.....	5
B. V. Moore.....	Rix's Mills, Ohio.....	4
W. H. Aiken.....	New Castle, Pa.....	4
M. S. Carty.....	San Antonio, Tex.....	4
Nat. Mitchell.....	do.....	4
Total .....	.....	117

Car No. 2, having completed the distribution of carp to the States traversed by the Union Pacific Railroad, reported at headquarters in Washington December 10, and having been overhauled and the necessary repairs completed, was dispatched to Northville, Mich., to report to F. N. Clark, superintendent of the Northville Station, for service in making the whitefish distribution.

It was engaged continuously in this work from February 21, when the first shipment of 3,000,000 fry was made to Lake Michigan, to April 8, when the work closed with a shipment of 1,000,000 whitefish fry to Lake Erie. A subsequent trip was made April 11, with 75,000 salmon trout, which were deposited as follows:

In Crooked Lake, Michigan.....	20,000
In Cranberry Lake, Michigan.....	20,000
In Star Lake, Michigan	35,000

On the same trip 10,000 fry of the European trout, *Salmo fario*, were transported to and planted in the headwaters of the Pere Marquette River. The ova from which these fry were hatched were donated by the Deutsche Fischerei-Verein. The results of the experiment will be looked for with a great deal of interest, as it is believed that the European trout will be found to do well in many streams in which our common brook trout do not thrive.

A statement of the whitefish distribution, so far as accomplished by car and messenger service, will be found in Table V. A summary of the entire distribution of ova and frey from the Northville and Alpena Stations will be found in the report of F. N. Clark, superintendent of these stations.

TABLE V.—STATEMENT OF WHITEFISH FRY PLANTED IN WATERS OF THE UNITED STATES DURING THE SEASON OF 1883-'84.

Date.	Waters stocked.	Place of deposit.	Number of fish.
1884.			
Feb. 21	Lake Michigan.....	Manistee, Mich.....	3,000,000
23	.....do.....	Grand Haven, Mich.....	3,000,000
23	Potomac River.....	West Virginia Junction, W. Va.....	500,000
26	.....do.....	Near Keyser, W. Va.....	500,000
27	Lake Erie.....	Erie, Pa.....	3,000,000
Mar. 5	Lake Michigan.....	Traverse City, Mich.....	3,000,000
11	Lake Ontario.....	Oswego, N. Y.....	3,000,000
14	Lake Huron.....	Port Huron, Mich.....	3,000,000
17	Lake Ontario.....	Oswego, N. Y.....	3,000,000
21	Lake Michigan.....	Ludington, Mich.....	3,000,000
22	Lake Huron.....	Fort Gratiot, Mich.....	3,000,000
25	Lake Erie.....	Monroe, N. Y.....	3,000,000
26	.....do.....	North Bass Island, Ohio.....	1,500,000
26	.....do.....	Put-in-Bay Island, Ohio.....	1,500,000
Apr. 1	Lake Michigan.....	Racine, Wis.....	1,000,000
1	.....do.....	Milwaukee, Wis.....	2,000,000
1	.....do.....	Sheboygan, Wis.....	1,000,000
8	Lake Erie.....	Put-in-Bay Island, Ohio.....	1,000,000
8	.....do.....	North Bass Island, Ohio.....	1,000,000
24	Lake Superior.....	Ashland, Wis.....	4,000,000
May 6	Lake Michigan.....	Escanaba, Mich.....	4,000,000
Apr. 8	Lake Erie.....	Ottawa City, Ohio.....	1,000,000
		Total	49,000,000

Of the above, the 1,000,000 planted in tributaries of the Potomac River were hatched at Central Station and planted under the direction of Mr. J. E. Brown; all the rest were obtained from Northville and taken to destination by J. F. Ellis, messenger in charge.

One million whitefish eggs were sent to Alfred Greenfield for Acclimatization Society, New Zealand, by F. N. Clark, from Northville, Mich., January 5, 1884, and were received in good condition.

Car No. 1, in charge of George H. H. Moore, did not complete the distribution of carp to Louisiana, Texas, Arizona, and New Mexico and report at headquarters until January 10, 1884. Mr. Carswell, messenger attached to the car, was immediately sent to the trout-breeding station at Wytheville, Va., to assist in the work at the hatchery; and as soon as the necessary repairs were completed, the car was ordered to Wytheville to distribute the different *Salmonidae* that had been bred at the station during the seasons of 1882 and 1883. A summary of the distribution of *Salmonidae* for the season of 1883, from Wytheville, Va., Northville, Mich., and Central Station, Washington, D. C., will be found in Table VI.

TABLE VI.—SUMMARY OF DISTRIBUTION OF SALMONIDÆ FOR 1883.

Date.	Station furnish- ing the fish.	Variety of fish.		Salmon trout, try.	Raggedy trout, one year old.	Germfisch, trout, (8. färto), try.	Mature salmon, try.	Water stocked.	Point of deposit.
		California trout.	Brook trout.						
Apr. 18	W. Asheville	50							
10	do	100							
10	do	100							
10	do	100							
10	do	350							
10	do	100							
18	Central								
17	do								
17	Northville								
11	do								
11	do								
Mar. 19	W. Asheville								
19	do	350							
19	do	824							
19	do	100							
19	do	300							
19	do	388							
19	do	387							
19	do	390							
19	do	400							
19	do	370							
19	do	400							
19	do	388							
5	do	150							
Feb. 26	do	5,000							
25	do	4,500							
Apr. 10	do	6,500							
		6							
Total.....	480	3,839	6	16,000	50	105,500	\$6	18,000	50,000

NOTE.—The ova of the *Salmo fario* were donated by the Deutsche Fischer-Verein.

The distribution of California trout, two years old, marks a new departure in the work of the Fish Commission, and one which promises most important results. The rainbow trout (*Salmo irideus*) sent out were from 5 to 7 inches long, and in weight ranged from 5 to 8 ounces. Being protected by their size from the attacks of the predaceous fishes occupying the waters in which they were placed, it is believed that the plants of four hundred fish, made in a number of the South Atlantic and Gulf streams will be more effective in colonizing those waters than plants of 50,000 fry made before the absorption of the sack has been completed, when they are alike helpless to resist attack and have not the vigor or activity to escape danger by running away from it.

As heretofore, the railroads have been liberal in granting free transportation for our cars. This is especially true of the great trunk lines beyond the Mississippi, and we have thus been enabled to extend the benefits of the work of the Commission to remote sections of the country, which otherwise would have been inaccessible by reason of the cost of transportation.

Statement of free transportation furnished the United States Fish Commission in 1883.

TO CAR NO. 1 AND MESSENGERS.

Name of company.	From—	To—	Distance.
Saint Louis, Iron Mountain and Southern.	Saint Louis, Mo	Toxarkana, Ark., and return	Miles. 980
Texas and Pacific	Texarkana, Ark	El Paso, Tex., and return	1,738
Burlington and Missouri	Omaha, Nebr	South Bend, Nebr., and return	46
Richmond and Alleghany	Richmond, Va	Lorraine, Va., and return	24
Northern Pacific	Saint Paul, Minn	Wallula Junction, Wash., and return.	3,366
Oregon Railway and Navigation Company.	Wallula Junction, Wash	Portland, Oreg., and return	428
Do	do	Walla Walla and return	96
Texas and Pacific	New Orleans, La	Marshall, Tex	368
Missouri Pacific	Tyler, Tex	Dallas, Tex	104
International and Great Northern	Palestine, Tex	Austin, Tex., thence to Tyler	412
Atchison, Topeka and Santa Fe	Albuquerque, N. Mex	Kansas City, Mo	918
Total			8,510

TO CAR NO. 2 AND MESSENGERS.

Saint Louis and Iron Mountain	Saint Louis, Mo	Texarkana, Ark	490
Do	Texarkana, Ark	Saint Louis, Mo	490
Texas Pacific	do	Fort Worth, Tex	244
Do	Fort Worth, Tex	Dallas, Tex	32
Do	Dallas, Tex	Fort Worth, Tex., and return	64
Do	Long view, Tex	Texarkana, Ark	97
Houston and Texas Central	Dallas, Tex	Hearne, Tex	144
International and Great Northern	Hearne, Tex	Austin, Tex	91
Do	Austin, Tex	Laredo, Tex	234
Do	Laredo, Tex	Long View, Tex	496
Flint and Pere Marquette	Toledo, Ohio	Northville, Mich., and return	124
Do	do	Northville, Mich	62
Do	Northville, Mich	Detroit, Mich., and return (3 trips)	180
Do	do	Toledo, Ohio, and return, (2 trips)	248
Do	do	Detroit, Mich	30
Do	Detroit, Mich	Northville, Mich., and return	60
Do	do	Bay City, Mich	121
Do	do	Holly, Mich., and return	128
Do	do	Ludington, Mich., and return	298
Do	do	Reed City, Mich., and return	196
Do	do	Flint, Mich	46
Lake Shore and Michigan Central	Toledo, Ohio	Cleveland, Ohio, and return	226

Statement of free transportation furnished United States Fish Commission in 1883—Cont'd.

TO CAR NO. 2 AND MESSENGERS—Continued.

Name of company.	From—	To—	Dis-tance.
Michigan Central	Grand Trunk Junction, Mich.	Detroit, Mich., and return	Miles. 20
Great Western of Canada	Detroit, Mich.....	Niagara, Ontario, and return (3 trips).	1,380
Rome, Watertown and Ogdensburg Do	Charlotte, N. Y.....	Oswego, N. Y. (2 trips)	280 24
Detroit, Grand Haven and Milwau- kee.	Around Oswego (2 trips). Holly, Mich	Grand Haven, Mich., and re- turn.	248
Do	Around Detroit, Mich. (3 trips).	.....	19
Grand Rapids and Indiana	Reed City, Mich	Harbor Springs and return	260
Chicago and Grand Trunk	Flint, Mich.....	Chicago, Ill.....	269
Do	Around Chicago .....	.....	16
Marquette, Houghton and Onton- agon.	Negaunee, Mich	Marquette, Mich	12
Do	Marquette, Mich	Michigan City, Mich	126
Do	do	L'Anse, Mich	26
Do	Michigan City, Mich	Negaunee, Mich., and return	300
Detroit, Mackinac and Marquette..	Marquette, Mich	Saint Ignace, Mich., and return (3 times).	900
Utah Central.....	Ogden, Utah.....	Salt Lake City, Utah, and re- turn.	74
Total.....	.....	.....	8,429

TO DETACHED MESSENGERS.

Oregon Railway and Navigation Company.	San Francisco, Cal	Portland, Oreg., and return	*1,200
Utah Central Railroad	Ogden, Utah	Salt Lake, Utah, and return	74
Atlantic and Pacific	Albuquerque, N. Mex	Laguna, N. Mex., and return	132
Atchison, Topeka and Santa Fe	Kansas City, Mo	Albuquerque, N. Mex., and re- turn.	694
Texas Pacific	Texarkana	Paris, Tex	91
Do	do	Shreveport, La	114
Do	Shreveport, La	Longview, Tex	63
Do	Mineola, Tex	Dallas, Tex	78
Houston and Texas Central	Dallas, Tex	Corsicana, Tex., and return	108
International and Great Northern	Palestine, Tex	Mineola, Tex	90
Do	Longview, Tex	Palestine, Tex	81
Total.....	.....	.....	2,725

* Estimated.