Fish and Fish Egg Distribution Report

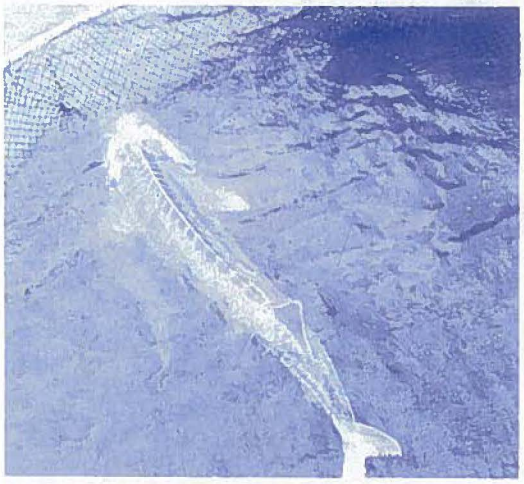
OF THE NATIONAL FISH HATCHERY SYSTEM

Fiscal Year 1992/Report No.27

UNITED STATES DEPARTMENT OF INTERIOR
FISH AND WILDLIFE SERVICE

GARRISON DAM NATIONAL FISH HATCHERY

The cover photo features the Garrison Dam National Fish Hatchery (NFH) which is located in west central North Dakota, midway between Minot and Bismarck. The hatchery site encompasses 224 acres of fill soil which was placed during the construction of the dam. The hatchery lies one mile southeast of the powerhouse, and midway between the powerhouse and the spillway channel directly below the dam. The hatchery is located on a flat area on the east bank of the Missouri River.



A pallid and shovelnose sturgeon

Hydroelectric generation, flood control and related water development on the main stem Missouri River were authorized by the Flood Control Act of 1944. This act resulted in six major dams and reservoirs including Garrison Dam. As each reservoir filled, tremendous fish populations became established and then declined as the reservoirs aged. It was recognized that if the fishery potential of these vast waters were to be realized, special management efforts, including fishstocking, would be required. The Garrison Dam NFH was authorized by Congress in 1957 under the Amended Coordination Act (71 Stat. 264).

The primary objective of the hatchery is to produce fish for Missouri River waters impacted by dam construction. A secondary objective is the distribution of fish for waters on federal and Indian lands in North Dakota, South Dakota, and Montana. These areas include several National Wildlife Refuges, Indian Reservations, and federally constructed reservoirs.

In 1986, the North Dakota Game and Fish Department proposed expanding the hatchery to meet stocking needs. Through a cooperative effort a new high tech salmon and trout facility was completed in the spring of 1988 and a pond expansion was completed in the fall of 1989. The FWS operates the expanded hatchery with the assistance of the ND Game and Fish Department.

Continued on inside of back page.

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16 USC 742D; PL 84-1024; 70 Stat 1121

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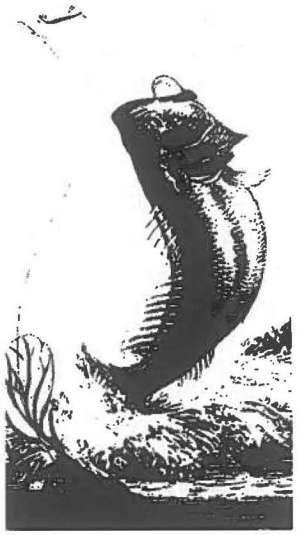
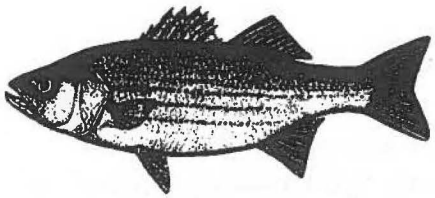
INTRODUCTION

Federal responsibilities for stewardship of the Nation's diverse and valuable fishery resources date back to 1871 when Congress established the position of U.S. Commissioner of Fish and Fisheries in response to the decline of domestic food fish supplies. These declines in specific fish populations during the past two centuries can be attributed to several factors, such as, over-fishing, degraded fishery habitat, water pollution, dam construction, and other natural and manmade phenomena. The artificial propagation of fish was recognized early on as an essential tool for the restoration of depleted fish stocks. As a part of the National Fish Hatchery System, facilities such as the Craig Brook NFH in Maine and the Leadville NFH in Colorado have been involved in the artificial propagation of fish species for over 100 years. While in many cases, significant progress has been made in restoring specific fish populations, resource managers face ever changing challenges to provide a stable fishery for species of interest nationwide.

One such challenge is to protect and where necessary, restore existing fisheries while providing the public an opportunity for a quality fishing experience. Today, fish provide sport to over 34.8 million U.S. anglers 16 years old and older each of who spend an average of 14.5 days fishing annually. These anglers pump 25 billion dollars into the economy annually and are directly responsible for creating over 700,000 full-time jobs nationally. Experts predict that by the year 2030, recreational fishing in the United States will increase by 40%.

The U.S. Fish and Wildlife Service recognizing the increasing demand on recreational fisheries was instrumental in developing the National Recreational Fisheries Policy. The Service recreational fisheries policy, Fisheries - USA, was developed under the umbrella of the National Policy. On November 25, 1991, the Director signed the Service's implementation plan for Fisheries - USA, "Action for Angling". The plan provides direction to all elements of the Service for developing field programs that reflect the guiding principles, goals, and objectives of both the National Recreational Fisheries Policy and Fisheries - USA. The plan has served as a cornerstone for the Department of Interior's "Enjoy Outdoors America" initiative, which stresses the need to enhance citizen partnerships and participation in the recreational opportunities found on Interior lands. Consistent with its 100 year history, the National Fish Hatchery System will play a major role in assisting the Service to achieve the goals set forth in "Action for Angling".





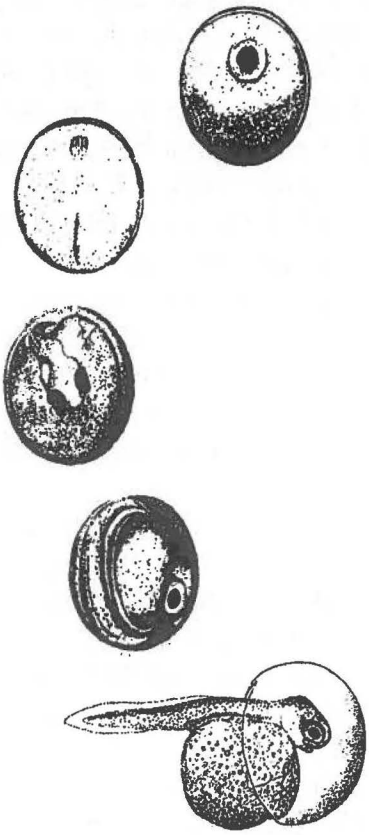
Striped Bass Restoration:

Historically, striped bass were one of America's most important recreational and commercial fisheries with millions of pounds of stripers being landed each year. However, by the mid- to late 1970s there was a significant decline in the landings of striped bass, and the need to better manage the resource became obvious. From 1974 through 1980 this decline cost the Atlantic Coast region 7,000 jobs and 200 million dollars in lost economic activity.

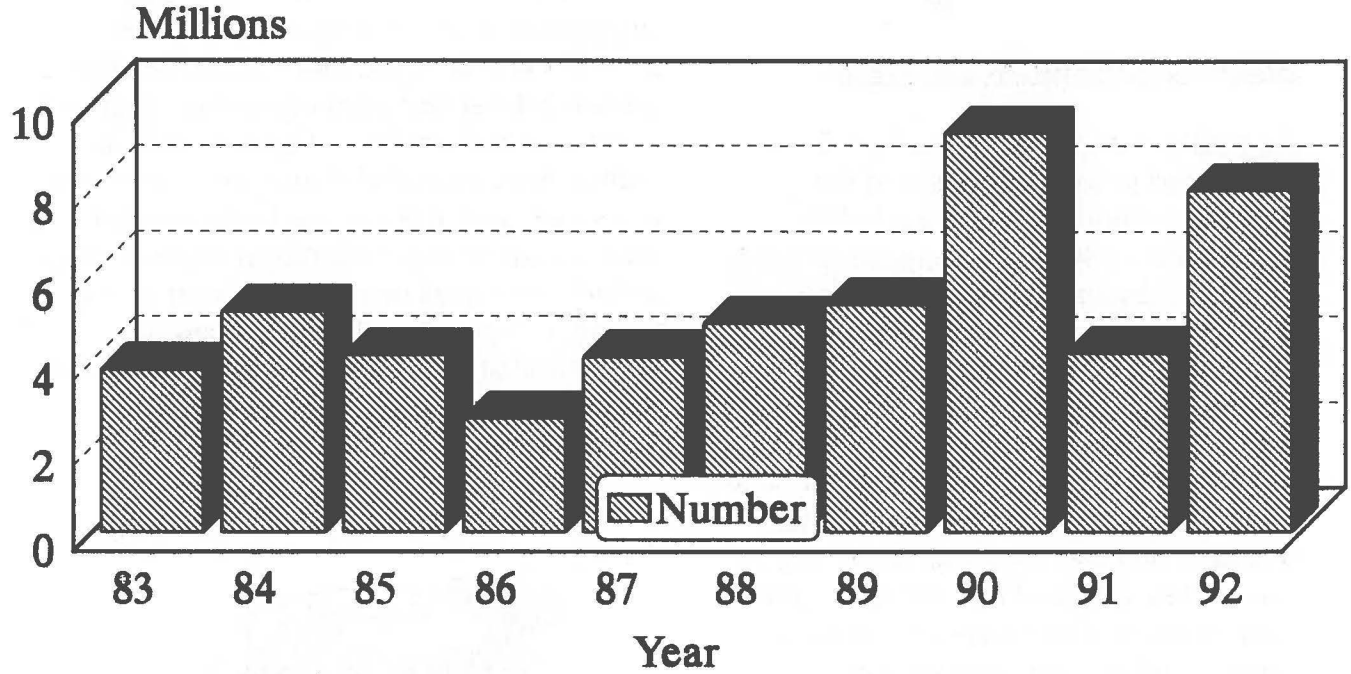
The restoration of striped bass in Atlantic and Gulf Coast waters is one of the Service's highest priorities. As part of this restoration effort, during the past 10 years, Service hatcheries in the Southeast, Southwest, and mid-Atlantic states, working in cooperation with state fish and wildlife agencies and federal fisheries management activities, have distributed over fifty one million striped bass of various sizes into the streams and tributaries along the Atlantic and Gulf Coasts.

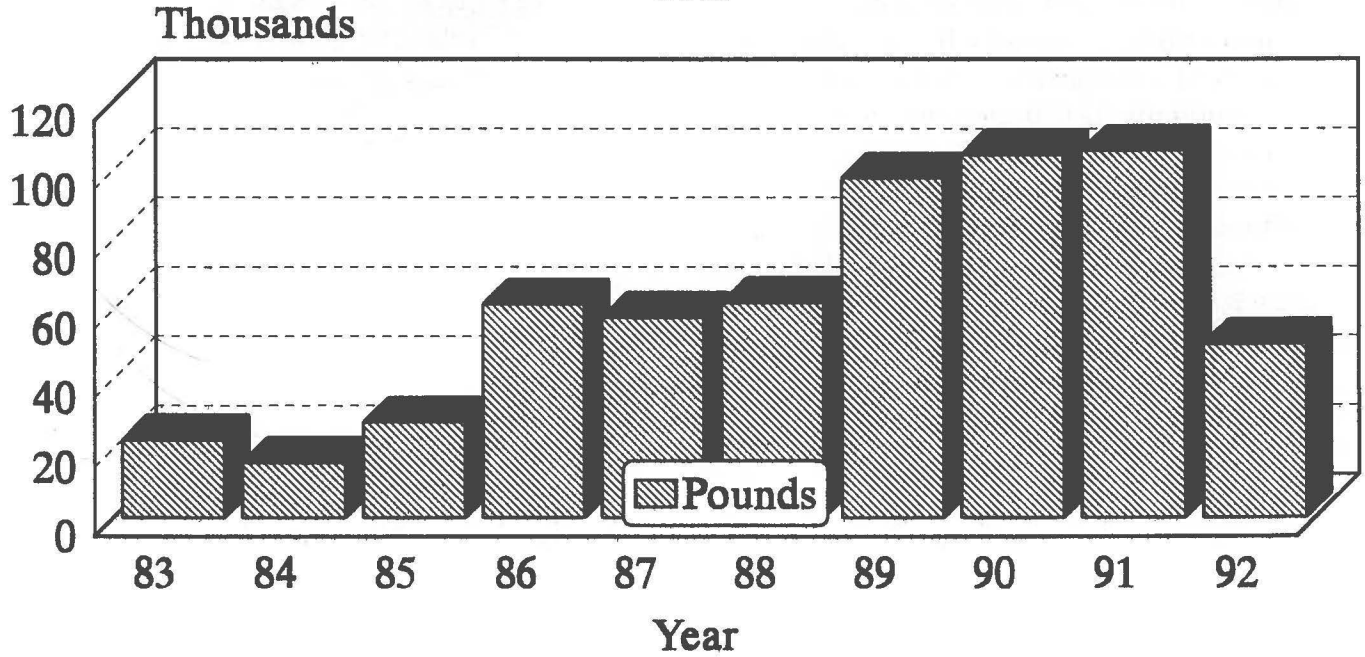
Today striped bass populations are rebounding. The Chesapeake Bay was once credited with hatching 90 percent of all striped bass found in the Atlantic Ocean. After 10 years of very low levels of striped bass production in the Chesapeake Bay, the 1989 Maryland young-of-the-year index for Chesapeake Bay striped bass indicated that striped bass numbers in the Bay had increased significantly. As a result of the Maryland index, some states have reopened their striped bass fishery to limited harvest since 1990.

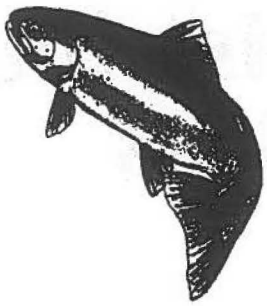
Hatchery rearing and stocking of striped bass alone cannot sustain a healthy striped bass population for the future. However, together with harvest restrictions, efforts to reduce water pollution in breeding grounds, and expanded knowledge of the biological needs of striped bass, hatchery rearing and stocking has played and will continue to play a key role in the recovery of this species.



Ten Years of Fish Distribution for Striped Bass



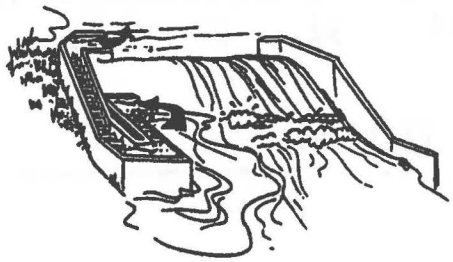




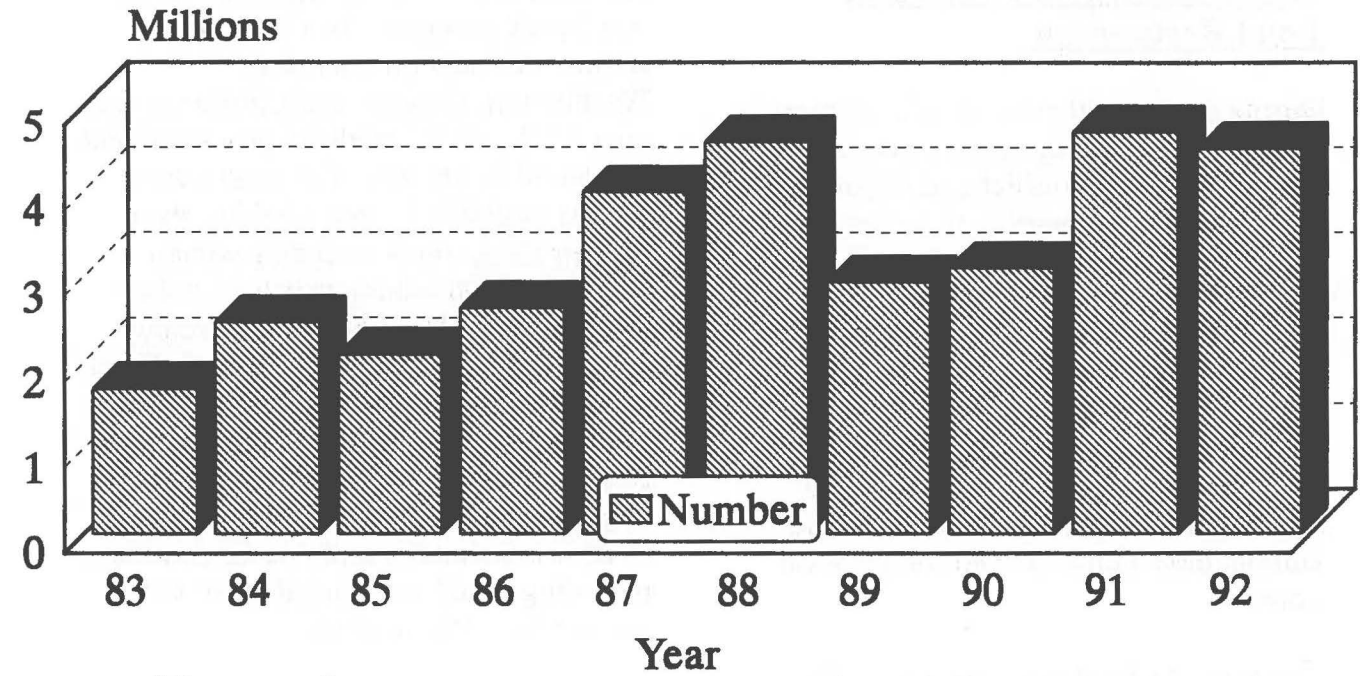
Atlantic Salmon Restoration:

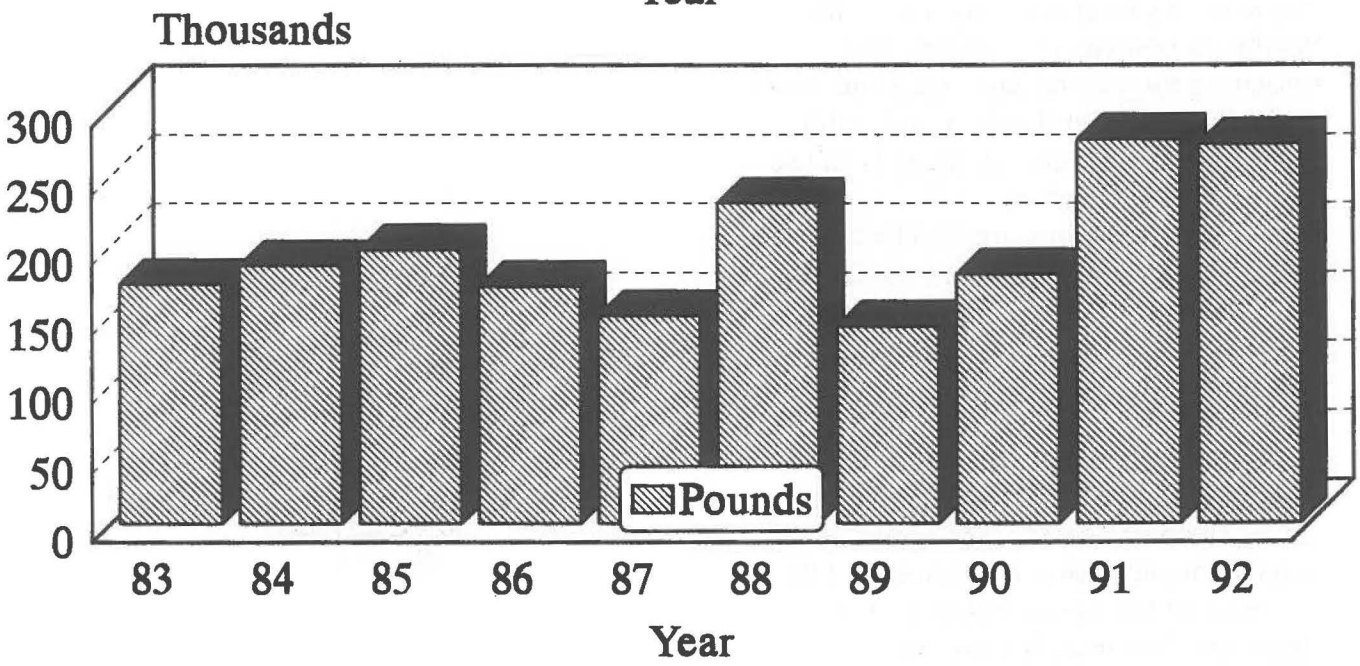
As with the striped bass, the Service is committed to the restoration of the Atlantic salmon to its historic habitat. During the early 1800s, the once plentiful Atlantic salmon underwent a drastic decline in several of the major river systems of New England due to the construction of dams, water pollution, and over-fishing. Historically, Atlantic salmon spawned in at least 28 major New England rivers with an estimated total return of 300,000 adults per year. Today across New England only 3,000 to 7,000 adult Atlantic salmon return annually of which 1,500 to 2,500 appear to be the result of natural reproduction of wild fish. As part of a cooperative effort between state and federal fisheries agencies to restore Atlantic salmon, Service hatcheries have distributed over 32 million Atlantic salmon with a combined weight of nearly two million pounds in New England rivers during the past 10 years. The majority of the fish were stocked in the Penobscot, Connecticut, Merrimack, Union, and St. Croix Rivers.

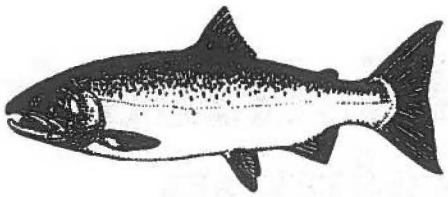
While current numbers of returning adults fall short of maintaining a healthy sport fishery for Atlantic salmon, there are many reasons for optimism. Several fish passages have recently been completed at hydroelectric plants with more scheduled for completion in the near future. These will allow for fish to access more of the excellent salmon habitat that currently exists. Cultural techniques and artificial diets for Atlantic salmon have improved significantly in recent years and more fish are reaching the smolt stage (ready to begin migration to the ocean) at one year versus two or more years as was common in the past. The increased availability of eggs from returning adults also is a positive indicator for the future of Atlantic salmon.



Ten Years of Fish Distribution for Atlantic Salmon





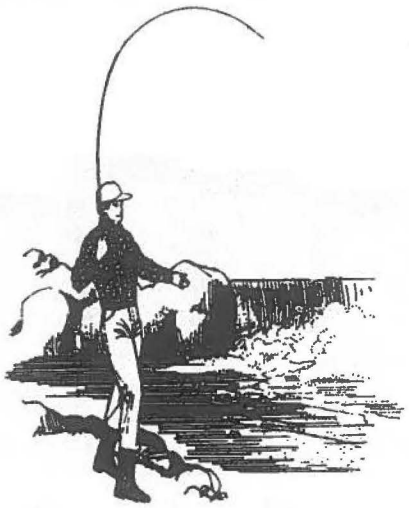


Pacific Salmon and Steelhead Trout Restoration:

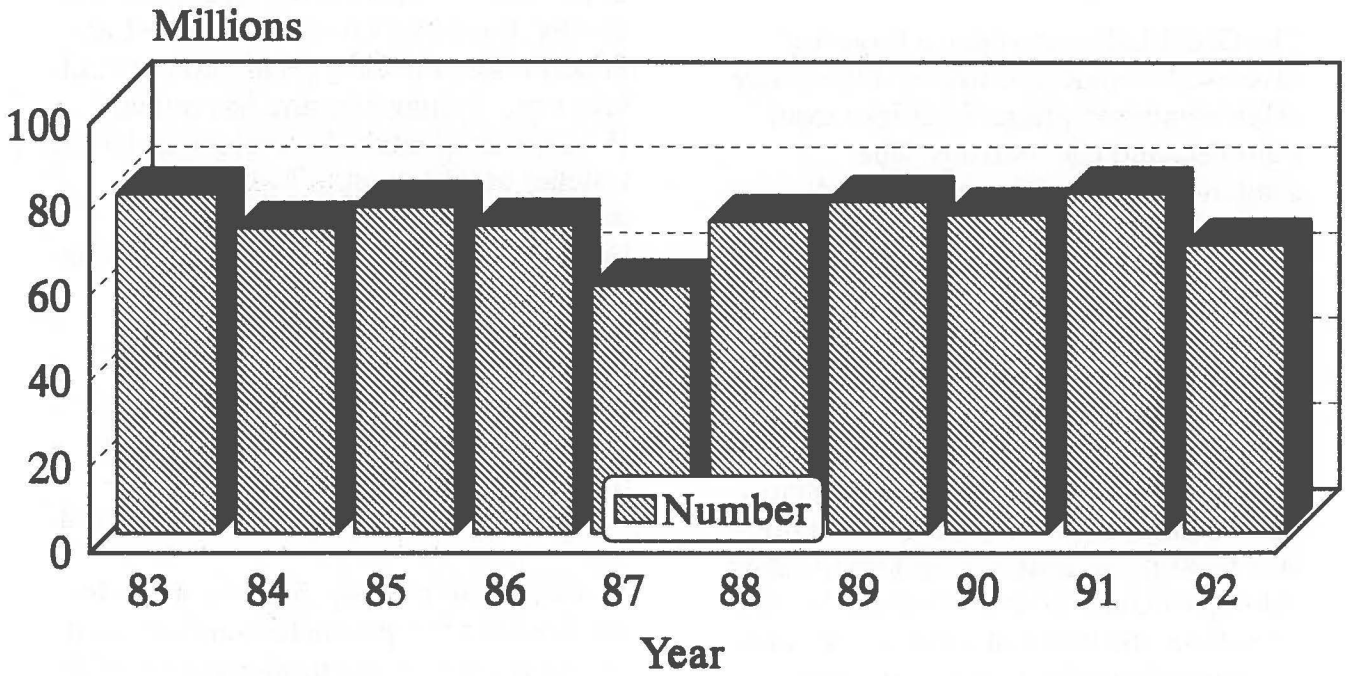
During the past 20 years, Pacific salmon and steelhead management has been plagued by bitter conflict and litigation in the Northwest. However, in recent years anadromous fish producing States, the 24 Indian tribes with treaty fishing rights, and the Federal Government have worked cooperatively to manage these important resources. The Service is an integral part of this closely coordinated interagency network involved with the production and management of Pacific salmon and steelhead trout on the West Coast.

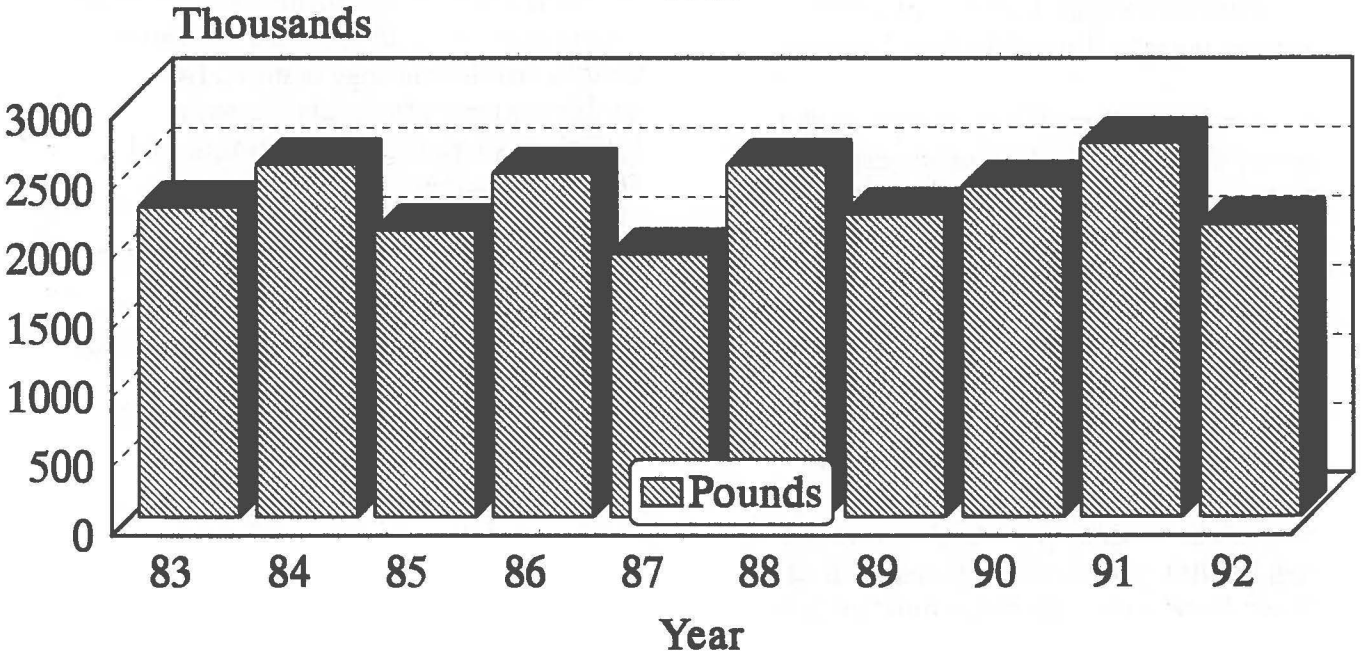
The Service's fisheries program in the Northwest consists of restoring and mitigating for salmon and steelhead losses as a result of Federal power and water development projects, changing land use practices, and pollution. Fish losses as a result of these actions are replaced in part by a combination of hatchery production and habitat rehabilitation to improve natural production. Fish production at a network of 17 National Fish Hatcheries resulted in the release of over 729 million Pacific salmon and steelhead with a combined weight of 23 million pounds during the past 10 years. However, there remains much reason for concern. The endangered species committee of the American Fisheries Society has recommended that as many as 159 stocks of Pacific salmonids face a high or moderate risk of extinction and that an additional 54 stocks should be regarded as having a high potential for extinction in the near future.

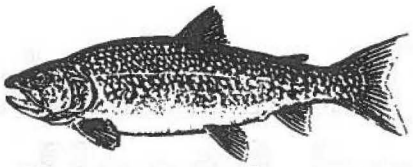
Improved management of Pacific salmon and steelhead is vitally important to the Northwest economy. In 1986, the commercial salmon harvest in Washington, Oregon, and California was over 7,100,000 fish with a value estimated at over $230,000,000. The most recent figures available for sport fishing show that, in 1986, sports men and women caught 940,000 salmon worth a total of $107,500,000. In addition, the Treaty Indian net fishery on the Columbia River yielded another 138,000 salmon. Most salmon produced in the Columbia River Basin and along the Washington coast migrate northward and many are caught in British Columbia and Alaska fisheries, providing significant contribution to the economies of these areas.



Ten Years of Fish Distribution for Pacific Salmon and Steelhead







Great Lakes Lake Trout Restoration:

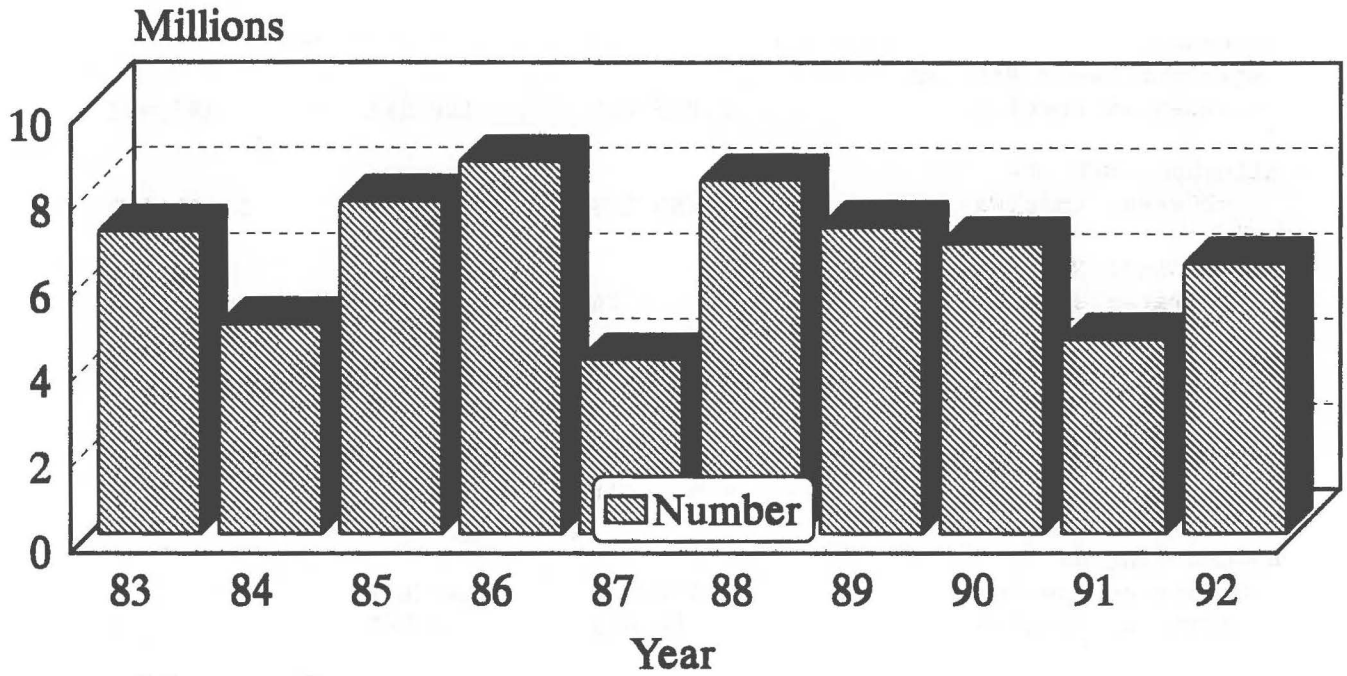
The Great Lakes provided a large and successful commercial fishery in the early 1800s composed primarily of lake trout, whitefish, and lake herring. The combined effects of an unregulated fishery, habitat destruction, water pollution, and the invasion of the parasitic sea lamprey eliminated lake trout in Lakes Erie, Ontario, and Michigan, with only vestigial populations remaining in Lakes Superior and Huron by the early 1950s. As part of a combined effort of state and federal (both the United States and Canada) fisheries agencies to restore lake trout populations in the Great Lakes, Service hatcheries have distributed nearly 65 million lake trout of various sizes with a combined weight in excess of three million pounds during the last 10 years.

Restoration efforts for lake trout in the Great Lakes have relied on several factors, one of which is the stocking of hatchery reared lake trout (initiated by the Service in 1955). Intense efforts to control sea lampreys, important predators of lake trout, have been successful in most of the Great Lakes with sea lamprey populations presently being held to 10 percent of pretreatment population levels. Close regulation of harvest, reduction in water pollution, improved fish habitat, and continued research of those factors thought to be most critical to the survival of stocked fish (including site of release, culture techniques, and artificial diets fed in hatcheries) also have played an important role in restoration efforts. While progress in restoring lake trout has been made in all Lakes, the degree of progress has been Lake specific. Lake Ontario is producing lake trout eggs and fry, but so far no adults. While Lake Superior has a healthy population of adult lake trout, fishing pressure has reduced the number of adults from previous levels. Catches of lake trout in Lake Huron increased in 1991, suggesting the beginning of a recovery after several years of relatively stable catch rates. Large adult 6-year old lake trout have been caught in Lake Erie raising hopes of natural reproduction in that lake. Natural reproduction in Lake Michigan has produced fry, but unmarked (non-hatchery) fingerlings have yet to be found.

In addition to the contributions made by the Service's fish production units toward restoring/preserving our nation's valuable fishery resources, the Service operates various fish technology centers, fish health centers/offices, and fishway facilities as a part of the National Fish Hatchery System.

This report summarizes the distribution of fish and fish eggs by the National Fish Hatchery System for the period of October 1, 1991, through September 30, 1992.

Ten Years of Fish Distribution for Lake Trout in Great Lakes



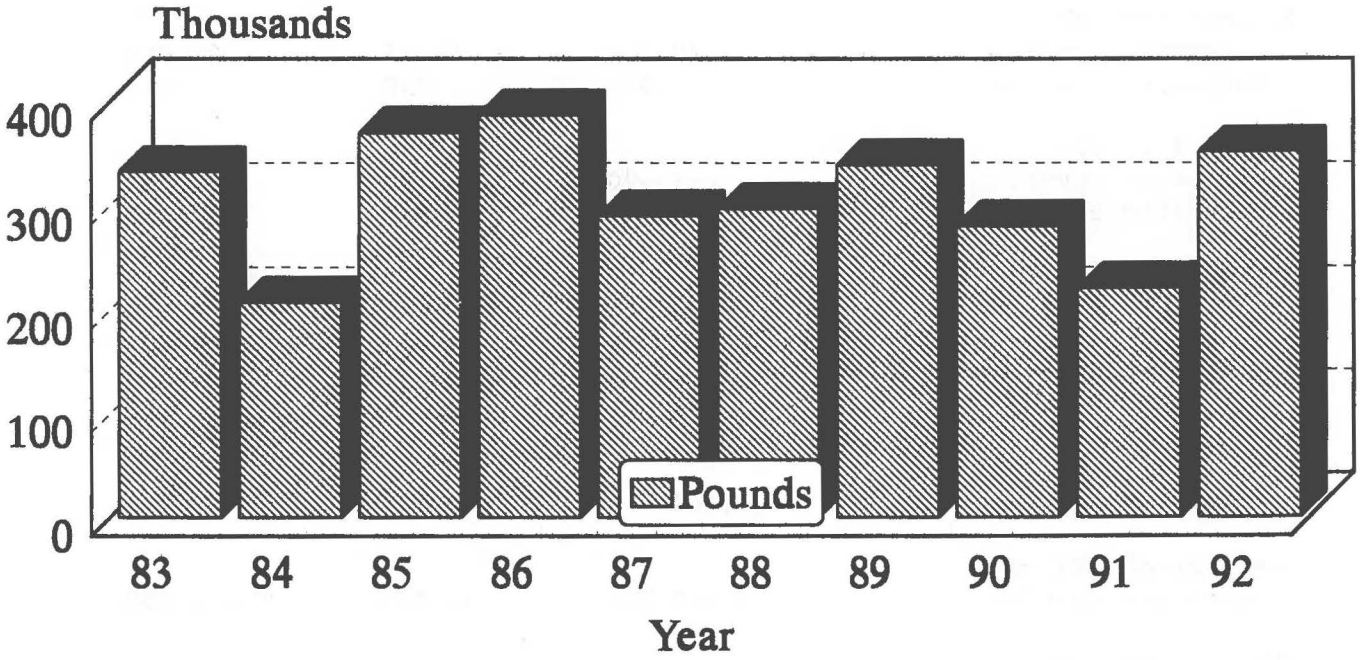


Table 1. Fish and Fish Egg Distribution By National Fish Hatchery

Facility	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Abernathy STC, WA			
-Coldwater species	1,407,493	40,666	600,304
Alchesay/ Williams Creek NFH, AZ			
-Coldwater species	1,095,036	130,168	983,951
Allegheny NFH, PA			
-Coldwater species	1,180,209	93,234	3,161,340
Bears Bluff NFH, SC			
-Warmwater species	24	168	0
Berkshire NFH, MA			
-Coldwater species	91	146	327,805
Bo Ginn NFH/AQ, GA			
-Warmwater species	1,349,541	17,990	0
Bowden NFH, WV			
-Coldwater species	370,205	147,671	0
-Warmwater species	40,013	3,062	0
Bozeman FTC, MT			
-Coldwater species	39,864	8,446	80,000
-Coolwater species	5,072	510	0
Carbon Hill NFH, AL			
-Coolwater species	186,620	95	0
-Warmwater species	182,427	7,265	0
Carson NFH, WA			
-Coldwater species	2,570,144	132,440	3,184,450
Chattahoochee Forest NFH, GA			
-Coldwater species	976,873	152,419	0
Coleman NFH, CA			
-Coldwater species	18,344,774	170,104	0
Craig Brook NFH, ME			
-Coldwater species	1,341,226	34,223	2,664,008
Creston NFH, MT			
-Coldwater species	1,264,975	111,991	5,006,930

Table 1. (Continued) Fish And Egg Distribution By National Fish Hatchery

Facility	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Dale Hollow NFH, TN			
-Coldwater species	1,212,342	215,034	0
Dexter NFH, NM			
-Coolwater species	144,938	1,317	215,782
-Warmwater species	234	78	0
Dworshak NFH, ID			
-Coldwater species	3,522,789	495,917	0
Eagle Creek NFH, OR			
-Coldwater species	3,242,993	220,056	0
Edenton NFH, NC			
-Warmwater species	533,413	12,714	0
Ennis NFH, MT			
-Coldwater species	63,937	64,100	27,544,705
Entiat NFH, WA			
-Coldwater species	709,090	29,690	0
Erwin NFH, TN			
-Coldwater species	20,631	1,649	0
Garrison Dam NFH, ND			
-Coldwater species	995,392	65,964	654,280
-Coolwater species	20,932,476	7,253	0
-Warmwater species	480	16	0
Gavins Point NFH, SD			
-Coldwater species	18,009	4,133	0
-Coolwater species	9,743,080	538	19,353,000
-Warmwater species	1,845,887	13,080	1,033,000
Genoa NFH, WI			
-Coldwater species	91,279	10,725	1,043,016
-Coolwater species	19,427,094	2,697	28,783,726
-Warmwater species	159,221	772	0
Green Lake NFH, ME			
-Coldwater species	1,177,061	139,357	1,524,746
Greers Ferry NFH, AR			
-Coldwater species	991,776	225,962	0

Table 1. (Continued) Fish And Egg Distribution By National Fish Hatchery

Facility	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Hagerman NFH, ID			
-Coldwater species	1,406,398	232,797	0
Harrison Lake NFH, VA			
-Coldwater species	288	432	0
-Warmwater species	188,566	9,882	0
Hiawatha Forest NFH, MI			
-Coldwater species	760,700	31,443	0
Hotchkiss NFH, CO			
-Coldwater species	1,955,249	141,293	0
Inks Dam NFH, TX			
-Coldwater species	7,758	3,601	0
-Warmwater species	828,750	42,650	90,000
Iron River NFH, WI			
-Coldwater species	1,553,790	55,333	0
-Coolwater species	9,000	22	0
Jackson NFH, WY			
-Coldwater species	603,973	71,501	0
Jones Hole NFH, UT			
-Coldwater species	1,364,969	194,598	0
Jordan River NFH, MI			
-Coldwater species	3,082,900	191,534	0
Kooskia NFH, ID			
-Coldwater species	973,486	48,567	0
Lahontan NFH, NV			
-Coldwater species	563,127	50,985	5,117
Lamar NFH, PA			
-Coldwater species	175,336	57,227	0
-Warmwater species	34,419	2,662	0
Leadville NFH, CO			
-Coldwater species	580,360	102,746	0
Leavenworth NFH, WA			
-Coldwater species	3,341,658	154,782	1,244,061

Table 1. (Continued) Fish And Egg Distribution By National Fish Hatchery

Facility	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Little White Salmon/ Willard NFH, WA			
-Coldwater species	6,290,997	99,634	868,000
Makah NFH, WA			
-Coldwater species	1,741,420	56,776	0
Mammoth Spring NFH, AR			
-Coldwater species	3	15	0
-Coolwater species	297,900	254	0
-Warmwater species	2,914,478	7,336	0
Mckinney Lake NFH, NC			
-Warmwater species	540,296	6,957	0
Meridian NFH, MS			
-Warmwater species	921,635	1,976	0
Mescalero NFH, NM			
-Coldwater species	504,414	92,369	0
Nashua NFH, NH			
-Coldwater species	32,953	27,716	2,308,000
Natchitoches NFH, LA			
-Warmwater species	2,981,325	3,422	0
Neosho NFH, MO			
-Coldwater species	255,722	77,445	0
-Warmwater species	1,600	73	0
Norfork NFH, AR			
-Coldwater species	2,117,040	388,401	0
North Attleboro NFH, MA			
-Coldwater species	773,287	15,158	0
Orangeburg NFH, SC			
-Warmwater species	723,042	4,513	0
Pendills Creek NFH, MI			
-Coldwater species	136	1,564	4,555,812
Pittsford NFH, VT			
-Coldwater species	290,183	18,033	0

Table 1. (Continued) Fish And Egg Distribution By National Fish Hatchery

Facility	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Private John Allen NFH, MS			
-Warmwater species	1,392,894	6,935	0
Quilcene NFH, WA			
-Coldwater species	2,974,586	51,059	0
Quinault NFH, WA			
-Coldwater species	3,536,981	99,211	205,000
Richard Cronin NSS, MA			
-Coldwater species	5,000	1,100	418,400
San Marcos FTC/NFH, TX			
-Warmwater species	33,876	424	0
Saratoga NFH, WY			
-Coldwater species	152,586	11,369	12,778,563
Spring Creek NFH, WA			
-Coldwater species	15,140,710	209,934	8,796,637
Tishomingo NFH, OK			
-Warmwater species	4,151,229	60,511	1,908,500
Uvalde NFH, TX			
-Warmwater species	2,068,383	57,454	2,990,000
Valley City/ Baldhill Dam NFH, ND			
-Coolwater species	12,041,109	2,538	0
-Warmwater species	1,706,600	1,399	0
Walhalla NFH, SC			
-Coldwater species	1,718,624	145,171	0
Warm Springs NFH, OR			
-Coldwater species	659,507	54,333	0
Warm Springs NFH, GA			
-Warmwater species	21,231	731	0
Welaka NFH, FL			
-Warmwater species	5,206,559	4,795	0
White River NFH, VT			
-Coldwater species	1,167,424	59,721	0

Table 1. (Continued) Fish And Egg Distribution By National Fish Hatchery

Facility	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
White Sulphur Springs NFH, WV			
-Coldwater species	131,454	4,061	0
Willard NFH, WA			
-Coldwater species	1,573,088	28,876	0
Willow Beach NFH, AZ			
-Coldwater species	641,077	195,966	0
Winthrop NFH, WA			
-Coldwater species	624,771	3,897	0
Wolf Creek NFH, KY			
-Coldwater species	817,944	228,908	0
Total Coldwater Species	98,156,088	5,701,651	77,955,125
Total Coolwater Species	62,787,289	15,224	48,352,508
Total Warmwater Species	27,826,123	266,865	6,021,500
Grand Total	188,769,500	5,983,740	132,329,133

Table 2. Fish And Fish Egg Distribution By Species

Species	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Coldwater Species			
-Apache trout	263,844	38,406	983,951
-Arctic grayling	5,599	406	0
-Atlantic salmon	4,522,369	275,370	7,242,959
-Brook trout	399,974	27,230	0
-Brown trout	2,005,522	121,152	5,492,956
-Chum salmon	3,190,891	6,087	0
-Coho salmon	6,486,937	292,054	868,000
-Cutthroat trout	1,971,587	237,661	1,789,405
-Fall chinook salmon	40,266,564	411,206	10,256,221
-Kokanee	388,000	844	0
-Lake trout	6,676,017	381,738	14,341,487
-Landlocked Atlantic salmon	235,858	17,036	0
-Late fall chinook salmon	44,581	3,475	0
-Rainbow trout	13,621,957	2,474,885	32,551,635
-Spring chinook salmon	12,291,226	593,673	4,428,511
-Steelhead	5,374,800	818,977	0
-Summer chinook salmon	404,855	1,274	0
-Winter chinook salmon	5,507	177	0
Total Coldwater Species	98,156,088	5,701,651	77,955,125
Coolwater Species			
-Bonytail chub	9,391	90	60,000
-Colorado squawfish	754	10	94,282
-Golden redhorse	4	6	0
-Muskellunge	85,242	27	0
-Northern pike	19,385,393	5,630	1,119,600
-Pumpkinseed	4	2	0
-Quillback	2	2	0
-Razorback sucker	134,793	1,217	61,500
-Rock bass	1	1	0
-Sauger	388,540	102	3,816,400
-Saugeye	1,858,350	229	2,667,500
-Shorthead redhorse	8	11	0
-Spotted sucker	116	155	0
-Tiger muskellunge	89,200	129	0
-Walleye	34,135,466	7,337	40,533,226
-Yellow perch	6,700,025	276	0
Total Coolwater Species	62,787,289	15,224	48,352,508

Table 2. (Continued) Fish And Fish Egg Distribution By Species

Species	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Warmwater Species			
-Atlantic sturgeon	4,217	132	0
-Big Bend gambusia	110	2	0
-Bigmouth buffalofish	6	12	0
-Black bullhead	6,104	17	0
-Black crappie	300,257	106	0
-Blue catfish	73,390	1,942	0
-Bluegill	4,251,317	6,192	0
-Bowfin	7	24	0
-Carp	2,988	491	0
-Channel catfish	6,111,913	182,986	3,130,000
-Desert pupfish	50	1	0
-Flathead catfish	24,534	135	24,500
-Freshwater drum	2	2	0
-Gars	1	1	0
-Goldfish	79,050	799	0
-Grass carp	325	1,127	0
-Green sunfish	10	1	0
-Largemouth bass	3,699,115	6,430	1,384,000
-Mooneye	6	8	0
-Paddlefish	131,856	8,627	978,000
-Pallid sturgeon	3,841	9	0
-Pallid X Shovelnose	20	3	0
-Palmetto bass	4,500	7	0
-Redbreast sunfish	250,000	250	0
-Redear sunfish	1,421,772	1,943	0
-Shortnose sturgeon	749	925	0
-Shovelnose sturgeon	7,280	31	55,000
-Smallmouth bass	1,169,414	2,615	0
-Striped bass	9,233,233	51,620	450,000
-Western mosquitofish	1,050,000	350	0
-White bass	2	3	0
-White crappie	6	5	0
-Yaqui catfish	34	55	0
-Yellow bass	8	8	0
-Yellow bullhead	6	6	0
Total Warmwater Species	27,826,123	266,865	6,021,500
Grand Total	188,769,500	5,983,740	132,329,133

Table 3. Fish and Fish Egg Distribution Within a State

State	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Alabama			
-Coldwater species	10,500	3,227	0
-Warmwater species	165,834	4,662	0
Alaska			
-Coolwater species	15,000	1	0
Arizona			
-Coldwater species	1,507,033	283,265	3,342,209
-Coolwater species	123,795	1,295	0
-Warmwater species	268,174	14,783	0
Arkansas			
-Coldwater species	2,661,650	487,295	5,265,805
-Coolwater species	137,450	124	0
-Warmwater species	795,201	5,102	0
California			
-Coldwater species	18,387,684	180,871	105,210
-Warmwater species	10,500	700	0
Colorado			
-Coldwater species	2,204,113	226,677	3,803,586
-Coolwater species	450,005	28	39,862
-Warmwater species	1,243,798	18,381	0
Connecticut			
-Coldwater species	107,337	24,226	110,000
District of Columbia			
-Warmwater species	900	1,000	0
Florida			
-Warmwater species	3,509,922	2,841	0
Georgia			
-Coldwater species	2,291,078	177,852	576,450
-Warmwater species	567,491	11,253	0
Idaho			
-Coldwater species	5,936,227	814,617	4,624,581
-Coolwater species	0	0	315,840
-Warmwater species	40	1	0

Table 3. (Continued) Fish And Egg Distribution Within a State

State	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Illinois			
-Coldwater species	101,500	5,070	384,697
-Coolwater species	2,715,990	40	16,141,178
-Warmwater species	22,440	188	0
Iowa			
-Coldwater species	860	570	0
-Coolwater species	5,985,100	112	1,503,500
-Warmwater species	59,414	22	0
Kansas			
-Coldwater species	6,495	3,385	0
-Coolwater species	10,400	8	1,316,000
Kentucky			
-Coldwater species	742,545	226,850	1,234,722
Louisiana			
-Warmwater species	2,979,325	3,421	0
Maine			
-Coldwater species	2,518,287	173,580	2,818,324
Maryland			
-Coldwater species	23,622	10,141	0
-Warmwater species	272,352	13,536	0
Massachusetts			
-Coldwater species	202,519	47,759	418,400
Michigan			
-Coldwater species	4,194,794	227,691	12,343,171
Minnesota			
-Coldwater species	173,644	6,555	1,323,342
-Coolwater species	6,600	2	1,697,500
-Warmwater species	2,700	1	0
Mississippi			
-Coldwater species	1,103	157	0
-Warmwater species	2,525,573	4,994	0

Table 3. (Continued) Fish And Egg Distribution Within a State

State	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Missouri			
-Coldwater species	293,019	86,875	532,528
-Coolwater species	0	0	2,562,960
-Warmwater species	29,945	92	0
Montana			
-Coldwater species	1,330,975	136,482	2,686,436
-Coolwater species	48,072	533	6,116,000
-Warmwater species	277,000	379	0
Nebraska			
-Coldwater species	1,997	208	319,815
-Coolwater species	2,445,022	212	0
-Warmwater species	146,505	520	0
Nevada			
-Coldwater species	563,127	50,985	1,163,388
-Warmwater species	66,000	71	0
New Hampshire			
-Coldwater species	869,328	17,901	2,438,801
New Jersey			
-Coldwater species	42,290	20,002	0
New Mexico			
-Coldwater species	1,042,751	139,843	1,844,690
-Warmwater species	714,465	52,132	0
New York			
-Coldwater species	1,166,433	81,560	326,645
-Warmwater species	304,224	560	0
North Carolina			
-Coldwater species	6,550	2,270	1,243,924
-Warmwater species	523,947	8,357	0
North Dakota			
-Coldwater species	876,599	63,955	1,555,258
-Coolwater species	26,950,523	9,170	3,424,000
-Warmwater species	1,488,549	1,317	200,000
Ohio			
-Coldwater species	1,000	1	205,157

Table 3. (Continued) Fish And Egg Distribution Within a State

State	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Oklahoma			
-Coldwater species	296,040	71,529	0
-Coolwater species	1,200,000	9	7,663,300
-Warmwater species	3,217,095	35,306	2,158,500
Oregon			
-Coldwater species	4,000,218	279,620	5,448,330
Pennsylvania			
-Coldwater species	392,309	56,712	2,992,723
-Coolwater species	0	0	974,140
-Warmwater species	53,960	15	0
Rhode Island			
-Coldwater species	16,068	4,647	0
South Carolina			
-Coldwater species	447,634	113,592	0
-Warmwater species	3,713,073	12,982	0
South Dakota			
-Coldwater species	28,009	4,366	424,804
-Coolwater species	6,106,882	848	87,960
-Warmwater species	627,499	9,617	0
Tennessee			
-Coldwater species	1,185,896	212,094	3,705,661
-Coolwater species	1,947,070	236	0
-Warmwater species	1,032,825	6,826	0
Texas			
-Coldwater species	200,918	60,772	0
-Coolwater species	108	1	1,188,000
-Warmwater species	1,696,603	28,491	3,635,000
Utah			
-Coldwater species	1,264,359	189,172	1,513,827
-Coolwater species	600	1	0
-Warmwater species	627,450	2,842	0
Vermont			
-Coldwater species	938,499	16,748	1,748,285

Table 3. (Continued) Fish And Egg Distribution Within a State

State	Fish Distributed Number	Fish Distributed Weight (Pounds)	Number Eggs Produced
Virginia			
-Coldwater species	23,288	2,322	245,130
-Coolwater species	0	0	2,138,500
-Warmwater species	267,642	13,669	0
Washington			
-Coldwater species	39,813,220	901,734	8,818,656
-Coolwater species	1,100,300	30	1,015,000
West Virginia			
-Coldwater species	343,662	140,868	20,833
-Warmwater species	305,535	300	0
Wisconsin			
-Coldwater species	1,021,367	53,283	3,056,286
-Coolwater species	11,544,372	2,558	2,168,768
-Warmwater species	75,131	505	28,000
Wyoming			
-Coldwater species	919,541	94,322	1,059,610
-Coolwater species	2,000,000	16	0
-Warmwater species	232,940	11,936	0
Total U.S. Distribution			
Total Coldwater Species	98,156,088	5,701,651	77,701,284
Total Coolwater Species	62,787,289	15,224	48,352,508
Total Warmwater Species	27,824,052	266,802	6,021,500
Total Foreign Distribution			
Total Coldwater Species	0	0	253,841
Total Warmwater Species	2,071	63	0
Grand Total	188,769,500	5,983,740	132,329,133

Table 4. Fish and Fish Egg Distribution By Program/Area Of Interest

Program/Area of Interest	Fish Distributed Number	Weight (Pounds)	Number Eggs Produced
Atlantic Salmon Restoration Program	4,512,738	274,270	7,242,959
Endangered Species Program	1,006,708	91,819	1,342,729
Farm Pond Program	1,993,749	3,980	0
Fish and Wildlife Service Lands	7,305,845	21,841	31,374
Great Lakes Lake Trout Program	6,343,456	352,516	0
Indian Tribal Program	9,331,453	433,914	1,913,113
Inland Restoration/Mitigation	86,196,816	2,530,663	60,962,996
Military Lands	913,503	136,423	0
Pacific Salmon and Steelhead Program	67,619,098	2,115,813	14,868,652
Research and Education	2,956,979	33,616	1,172,561
Striped Bass Restoration Program	8,019,694	50,186	0

SPECIES SHIPPED

The following list represents the general groups and scientific names of fishes produced and distributed to meet fisheries activity responsibilities. The nomenclature used is that established in the American Fisheries Society Special Publication Number 6 (1970), A List of Common and Scientific Names of Fishes from the United States and Canada, ed. 1991.

MAJOR GROUP AND COMMON NAME	SCIENTIFIC NAME
Coldwater	
Apache trout	Oncorhynchus apache
Arctic Grayling	Thymallus arcticus
Atlantic salmon	Salmo salar
Brook trout	Salvelinus fontinalis
Brown trout	Salmo trutta
Chinook salmon	Oncorhynchus tshawytscha
Chum salmon	Oncorhynchus keta
Coho salmon	Oncorhynchus kisutch
Cutthroat trout	Oncorhynchus clarki
Greenback cutthroat	Oncorhynchus clarki stomias
Lahontan cutthroat	Oncorhynchus clarki henshawi
Lake trout	Salvelinus namaycush
Kokanee	Oncorhynchus nerka
Rainbow trout	Oncorhynchus mykiss
Steelhead	Oncorhynchus mykiss
Coolwater	
Bonytail	Gila elegans
Colorado squawfish	Ptychocheilius lucius
Golden redhorse	Moxostoma erythrurum
Muskellunge	Esox masquinongy
Northern pike	Esox lucius
Pumpkinseed	Lepomis gibbosus
Quillback	Carpiodes cyprinus
Razorback sucker	Xyrauchen texanus
Rock bass	Ambloplites rupestris
Sauger	Stizostedion canadense
Saugeye	Stizostedion vitreum X Stizostedion canadense
Shorthead redhorse	Moxostoma macrolepidotum
Spotted sucker	Minytrema melanops
Tiger muskie	Esox lucias X Esox masquinongy
Walleye	Stizostedion vitreum
Yellow perch	Perca flavescens

SPECIES SHIPPED (Continued)

MAJOR GROUP AND COMMON NAME	SCIENTIFIC NAME
Warmwater	
Atlantic sturgeon	Acipenser oxyrhynchus
Big bend gambusia	Gambusia gaigei
Bigmouth buffalofish	Ictiobus cyprinellus
Black bullhead	Ameiurus melas
Black crappie	Pomoxis nigromaculatus
Blue catfish	Ictalurus furcatus
Bluegill	Lepomis microchirus
Carp	Cyprinus carpio
Channel catfish	Ictalurus punctatus
Desert pupfish	Cyprinodon macularuis
Flathead catfish	Pylodictis olivaris
Freshwater drum	Aplodinotus grunniens
Gars	Lepisosteus species
Grass carp	Ctenopharyngodon idella
Goldfish	Carassius auratus
Green sunfish	Lepomis cyanellus
Largemouth bass	Micropterus salmoides
Mooneye	Hiodon tergisus
Paddlefish	Polyodon spathula
Pallid sturgeon	Scaphirhynchus albus
Palmetto bass	Morone chrysops X Morone saxatilis
Redbreast sunfish	Lepomis auritus
Redear sunfish	Lepomis microlophus
Shortnose sturgeon	Acipenser brevirostrum
Shovelnose sturgeon	Scaphirhynchus platorynchus
Smallmouth bass	Micropterus dolomieu
Striped bass	Morone saxatilis
Western mosquitofish	Gambusia affinis
White bass	Morone chrysops
White crappie	Pomoxis annularis
Yaqui catfish	Ictalurus pricei
Yellow bass	Morone mississippiensis
Yellow bullhead	Ameiurus natalis

Listing of Fish and Wildlife Service Regional Offices

Region 1 - Eastside Federal Complex
911 N.E. 11th Avenue
Portland, Oregon 97232-4181

Office Location: 4th Floor

Areas - California, Hawaii, Idaho, Nevada, Oregon, Washington, and the Pacific Trust Territories

Region 2 - U.S.Courthouse & Federal Building
P.O. Box 1306
Albuquerque, New Mexico 87103

Office Location: Room 3118,
500 Gold Street, S.W.
Albuquerque, New Mexico

Areas - Arizona, New Mexico, Oklahoma, and Texas

Region 3 - Federal Building
Room 646E, Fort Snelling
Twin Cities, Minnesota 55111

Office Location: Same

Areas - Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin

Region 4 - Richard B. Russell Federal Building
Room 1290, 75 Spring Street, SW
Atlanta, Georgia 30303

Office Location: Same

Areas - Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Puerto Rico, and the Virgin Islands

Region 5 - 300 Westgate Center Drive
Hadley, Massachusetts 01035

Office Location: Same

Areas - Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and Washington, D.C.

Region 6 - Denver Federal Center
P.O. Box 25486
Denver, Colorado 80225

Office Location: Third Floor
134 Union Blvd.,
Lakewood, Colorado

Areas - Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming

Region 7 - 1011 E. Tudor Road
Anchorage, Alaska 99503

Office Location: Same

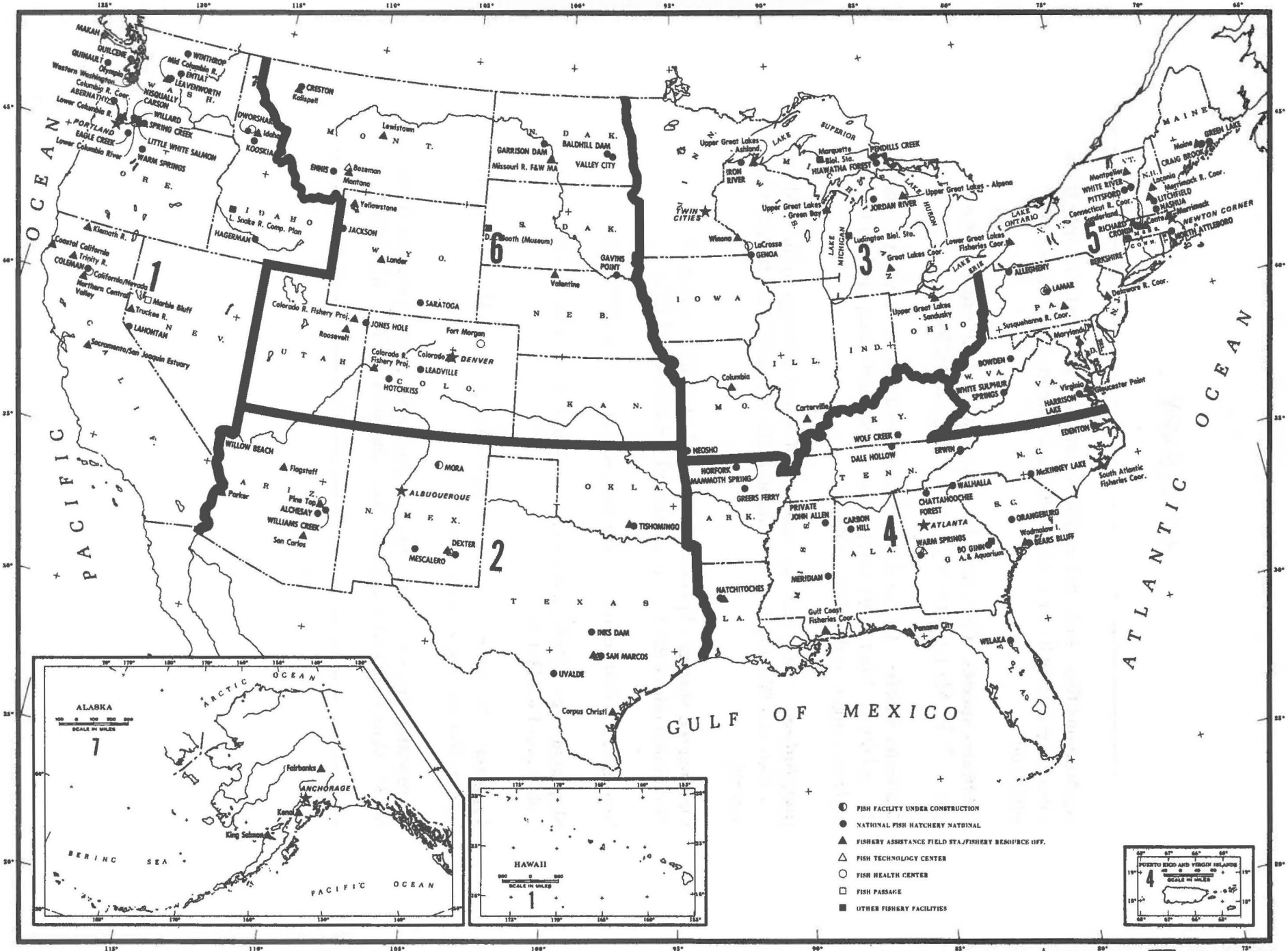
Areas - Alaska

Copies of National and State Listing of Fisheries Offices are available from the Office of Administration - Fisheries at the address given on page one of this publication.

UNITED STATES
DEPARTMENT OF THE INTERIOR

NATIONAL FISH HATCHERIES AND FISHERY ASSISTANCE STATIONS

UNITED STATES
FISH AND WILDLIFE SERVICE



COMPILED IN THE DIVISION OF REALTY

WASHINGTON, D.C. SEPTEMBER 30, 1992

GLOSSARY

Anadromous fish - Fish that migrate from salt water upstream into fresh water to spawn such as Pacific or Atlantic salmon, striped bass, and steelhead.

Coldwater species - Generally, fish that spawn in water temperatures below 55° F. Main cultured species are trout and salmon.

Coolwater species - Generally, fish that spawn in temperatures between 40° and 60° F. Main cultured species are northern pike, muskellunge, walleye, sauger, and yellow perch.

Distribution - The release or transport of fish or fish eggs to the wild or non-U.S Fish and Wildlife Service National Fish Hatcheries for further fish rearing.

Endangered species - Species of fish listed as either endangered or threatened under the U.S. Endangered Species Act of 1973.

Inland - Fish that complete their life cycle entirely in fresh water.

Shipment - All distribution and transfers of fish and fish eggs from a National Fish Hatchery.

Transfer - The shipment of fish between National Fish Hatcheries for further fish rearing or distribution.

Warmwater species - Generally, fish that spawn at temperatures above 60° F. Main cultured species are bass, sturgeon, sunfish, and catfish.

CONVERSION TABLE

Metric to U.S. Customary

Multiply:	By:	To Obtain:
millimeters (mm)	0.03937	inches
centimeters (cm)	0.3937	inches
meters (m)	3.281	feet
kilometers (km)	0.6214	miles
square meters (m^2)	10.76	square feet
square kilometers (km^2)	0.3861	square miles
hectares (ha)	2.471	acres
liters (l)	0.2642	gallons
cubic meters (m^3)	35.31	cubic feet
cubic meters	0.0008110	acre-feet
milligrams (mg)	0.00003527	ounces
grams (g)	0.03527	ounces
kilograms (kg)	2.205	pounds
metric tons (t)	2205.0	pounds
metric tons	1.102	short tons
kilocalories (kcal)	3.968	BTUs
Celsius degrees	1.8(°C)+32	Fahrenheit degrees

U.S. Customary to Metric

Multiply:	By:	To Obtain:
inches	25.40	millimeters
inches	2.54	centimeters
feet (ft)	0.3048	meters
fathoms	1.829	meters
miles (mi)	1.609	kilometers
nautical miles (nmi)	1.852	kilometers
square feet (ft^2)	0.0929	square meters
acres	0.4047	hectares
square miles (mi^2)	2.590	square kilometers
gallons (gal)	3.785	liters
cubic feet (ft^3)	0.02831	cubic meters
acre-feet	1233.0	cubic meters
ounces (oz)	28.35	grams
pounds (lb)	0.4536	kilograms
short tons (ton)	0.9072	metric tons
British thermal units (BTUs)	0.2520	kilocalories
Fahrenheit degrees	0.5556 (°F - 32)	Celsius degrees

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 1									
California									
Coleman NFH									
-Fall chinook salmon			18,067,015	116,660			18,067,015	116,660	
-Late fall chinook salmon					44,581	3,475	44,581	3,475	
-Steelhead					227,671	49,792	227,671	49,792	
-Winter chinook salmon			4,761	81	746	96	5,507	177	
Total Distributed			18,071,776	116,741	272,998	53,363	18,344,774	170,104	
Idaho									
Dworshak NFH									
-Spring chinook salmon			14,440	181	1,022,846	65,788	1,037,286	65,969	
-Spring chinook salmon (t)			100,000	2,313			100,000	2,313	
-Steelhead	176,431	71			2,309,072	429,877	2,485,503	429,948	
Total Distributed	176,431	71	14,440	181	3,331,918	495,665	3,522,789	495,917	
Total Transfered			100,000	2,313			100,000	2,313	
Hagerman NFH									
-Rainbow trout			80,776	3,040			80,776	3,040	
-Steelhead			298,525	5,151	1,027,097	224,606	1,325,622	229,757	
Total Distributed			379,301	8,191	1,027,097	224,606	1,406,398	232,797	
Kooskia NFH									
-Rainbow trout			246,212	9,094			246,212	9,094	
-Spring chinook salmon			727,251	39,223			727,251	39,223	
-Steelhead					23	250	23	250	
Total Distributed			973,463	48,317	23	250	973,486	48,567	
Nevada									
Lahontan NFH									
-Cutthroat trout	552	3	201,628	4,387	360,947	46,595	563,127	50,985	5,117

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 1 (Continued)									
Nevada (Continued)									
Lahontan NFH (Continued)									
Total Distributed	552	3	201,628	4,387	360,947	46,595	563,127	50,985	5,117
Oregon									
Eagle Creek NFH									
-Coho salmon			501,842	24,748	2,550,928	168,331	3,052,770	193,079	
-Steelhead					190,223	26,977	190,223	26,977	
Total Distributed			501,842	24,748	2,741,151	195,308	3,242,993	220,056	
Warm Springs NFH									
-Spring chinook salmon					659,507	54,333	659,507	54,333	
Total Distributed					659,507	54,333	659,507	54,333	
Washington									
Abernathy STC									
-Fall chinook salmon			1,407,493	40,666			1,407,493	40,666	600,304
Total Distributed			1,407,493	40,666			1,407,493	40,666	600,304
Carson NFH									
-Spring chinook salmon			157,044	1,477	2,413,100	130,963	2,570,144	132,440	3,184,450
Total Distributed			157,044	1,477	2,413,100	130,963	2,570,144	132,440	3,184,450
Entiat NFH									
-Spring chinook salmon			365,340	6,624	343,750	23,066	709,090	29,690	
Total Distributed			365,340	6,624	343,750	23,066	709,090	29,690	
Leavenworth NFH									
-Spring chinook salmon			2,817,528	136,247			2,817,528	136,247	1,244,061
-Steelhead					119,275	17,261	119,275	17,261	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 1 (Continued)									
Washington (Continued)									
Leavenworth NFH (Continued)									
-Summer chinook salmon			404,855	1,274			404,855	1,274	
Total Distributed			3,222,383	137,521	119,275	17,261	3,341,658	154,782	1,244,061
Little White Salmon/ Willard NFH									
-Coho salmon									868,000
-Fall chinook salmon			4,829,430	35,887			4,829,430	35,887	
-Spring chinook salmon			653,825	16,715	807,742	47,032	1,461,567	63,747	
-Spring chinook salmon (t)	363,535	235					363,535	235	
Total Distributed			5,483,255	52,602	807,742	47,032	6,290,997	99,634	868,000
Total Transfered	363,535	235					363,535	235	
Makah NFH									
-Chum salmon			344,862	898			344,862	898	
-Coho salmon			69,000	125	351,029	27,528	420,029	27,653	
-Fall chinook salmon			767,387	11,352			767,387	11,352	
-Steelhead			102,190	163	106,952	16,710	209,142	16,873	
Total Distributed			1,283,439	12,538	457,981	44,238	1,741,420	56,776	
Quilcene NFH									
-Chum salmon			2,208,144	3,702			2,208,144	3,702	
-Coho salmon			24,232	50	501,254	30,170	525,486	30,220	
-Fall chinook salmon			83,771	981			83,771	981	
-Spring chinook salmon			33,867	459	123,318	15,697	157,185	16,156	
Total Distributed			2,350,014	5,192	624,572	45,867	2,974,586	51,059	
Quinault NFH									
-Chum salmon			637,885	1,487			637,885	1,487	
-Coho salmon			1,350,540	40,289			1,350,540	40,289	
-Fall chinook salmon			761,903	12,056			761,903	12,056	205,000

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 1 (Continued)									
Washington (Continued)									
Quinault NFH (Continued)									
-Steelhead	152,500	126	415,470	14,538	218,683	30,715	786,653	45,379	
Total Distributed	152,500	126	3,165,798	68,370	218,683	30,715	3,536,981	99,211	205,000
Spring Creek NFH									
-Fall chinook salmon	3,292,304	2,993	10,756,485	183,033			14,048,789	186,026	8,796,637
-Fall chinook salmon (t)	2,058,400	1,715					2,058,400	1,715	
-Spring chinook salmon			1,000,921	14,898	91,000	9,010	1,091,921	23,908	
Total Distributed	3,292,304	2,993	11,757,406	197,931	91,000	9,010	15,140,710	209,934	8,796,637
Total Transfered	2,058,400	1,715					2,058,400	1,715	
Willard NFH									
-Coho salmon	1,138,112	813					1,138,112	813	
-Spring chinook salmon					434,976	28,063	434,976	28,063	
Total Distributed	1,138,112	813			434,976	28,063	1,573,088	28,876	
Winthrop NFH									
-Spring chinook salmon					624,771	3,897	624,771	3,897	
Total Distributed					624,771	3,897	624,771	3,897	
Region 1 - Total Distributed	4,759,899	4,006	49,334,622	725,486	14,529,491	1,450,232	68,624,012	2,179,724	14,903,569
Region 1 - Total Transfered	2,421,935	1,950	100,000	2,313			2,521,935	4,263	
Region 1 - Total Shipped	7,181,834	5,956	49,434,622	727,799	14,529,491	1,450,232	71,145,947	2,183,987	14,903,569
Region 2									
Arizona									
Alchesay/ Williams Creek NFH									
-Apache trout			91,048	862	172,796	37,544	263,844	38,406	983,951

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 2 (Continued)									
Arizona (Continued)									
Alchesay/ Williams Creek NFH (Continued)									
-Brook trout			230,756	6,755			230,756	6,755	
-Brown trout					87,118	9,811	87,118	9,811	
-Cutthroat trout					75,164	7,679	75,164	7,679	
-Rainbow trout			73,917	4,597	364,237	62,920	438,154	67,517	
Total Distributed			395,721	12,214	699,315	117,954	1,095,036	130,168	983,951
Willow Beach NFH									
-Rainbow trout					641,077	195,966	641,077	195,966	
Total Distributed					641,077	195,966	641,077	195,966	
New Mexico									
Dexter NFH									
-Big Bend gambusia			110	2			110	2	
-Bonytail chub			9,391	90			9,391	90	60,000
-Channel catfish					40	20	40	20	
-Colorado squawfish	150	1	602	2	2	7	754	10	94,282
-Colorado squawfish (t)	800	1			30	60	830	61	
-Desert pupfish			50	1			50	1	
-Razorback sucker	122,976	3	10,920	86	897	1,128	134,793	1,217	61,500
-Yaqui catfish					34	55	34	55	
Total Distributed	123,126	4	21,073	181	973	1,210	145,172	1,395	215,782
Total Transfered	800	1			30	60	830	61	
Mescalero NFH									
-Cutthroat trout			12,300	450	100,005	15,520	112,305	15,970	
-Rainbow trout					392,109	76,399	392,109	76,399	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 2 (Continued)									
New Mexico (Continued)									
Mescalero NFH (Continued)									
Total Distributed			12,300	450	492,114	91,919	504,414	92,369	
Oklahoma									
Tishomingo NFH									
-Bluegill	103,000	75			800	350	103,800	425	
-Channel catfish	1,503,500	208	1,088,800	26,791	143,750	30,126	2,736,050	57,125	1,434,000
-Flathead catfish	24,500	10			34	125	24,534	135	24,500
-Paddlefish					6,850	544	6,850	544	
-Smallmouth bass	424,020	360	51,240	78	3,235	1,043	478,495	1,481	
-Striped bass	676,300	546	125,200	255			801,500	801	450,000
Total Distributed	2,731,320	1,199	1,265,240	27,124	154,669	32,188	4,151,229	60,511	1,908,500
Texas									
Inks Dam NFH									
-Channel catfish			3,675	147	171,573	41,576	175,248	41,723	90,000
-Largemouth bass	46,000	23	160,400	228	83	249	206,483	500	
-Paddlefish					649	32	649	32	
-Rainbow trout					7,758	3,601	7,758	3,601	
-Striped bass	400,200	338	46,170	57			446,370	395	
Total Distributed	446,200	361	210,245	432	180,063	45,458	836,508	46,251	90,000
San Marcos FTC/NFH									
-Goldfish									
-Goldfish (t)			1,700	29			1,700	29	
-Largemouth bass			4,065	185			4,065	185	
-Largemouth bass (t)			176	105	128	187	304	292	
-Paddlefish					6	15	6	15	
-Striped bass			29,805	224			29,805	224	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 2 (Continued)									
Texas (Continued)									
San Marcos FTC/NFH (Continued)									
Total Distributed			33,870	409	6	15	33,876	424	
Total Transfered			1,876	134	128	187	2,004	321	
Uvalde NFH									
-Channel catfish			913,170	13,131	153,232	41,364	1,066,402	54,495	1,606,000
-Channel catfish (t)	190,000	34					190,000	34	
-Goldfish			61,550	599			61,550	599	
-Largemouth bass	174,000	243	558,357	1,092	108	310	732,465	1,645	1,384,000
-Paddlefish			600	10	9,366	475	9,966	485	
-Striped bass	150,000	150	48,000	80			198,000	230	
Total Distributed	324,000	393	1,581,677	14,912	162,706	42,149	2,068,383	57,454	2,990,000
Total Transfered	190,000	34					190,000	34	
Region 2 - Total Distributed	3,624,646	1,957	3,520,126	55,722	2,330,923	526,859	9,475,695	584,538	6,188,233
Region 2 - Total Transfered	190,800	35	1,876	134	158	247	192,834	416	
Region 2 - Total Shipped	3,815,446	1,992	3,522,002	55,856	2,331,081	527,106	9,668,529	584,954	6,188,233
Region 3									
Michigan									
Hiawatha Forest NFH									
-Lake trout			719,900	29,382	40,800	2,061	760,700	31,443	
Total Distributed			719,900	29,382	40,800	2,061	760,700	31,443	
Jordan River NFH									
-Lake trout			100,000	4,570	2,982,900	186,964	3,082,900	191,534	
-Lake trout (t)			659,825	1,531			659,825	1,531	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 3 (Continued)									
Michigan (Continued)									
Jordan River NFH (Continued)									
Total Distributed			100,000	4,570	2,982,900	186,964	3,082,900	191,534	
Total Transfered			659,825	1,531			659,825	1,531	
Pendills Creek NFH									
-Lake trout					136	1,564	136	1,564	4,555,812
-Lake trout (t)	843,000	0					843,000	0	
Total Distributed					136	1,564	136	1,564	4,555,812
Total Transfered	843,000	0					843,000	0	
Missouri									
Neosho NFH									
-Paddlefish					1,100	69	1,100	69	
-Rainbow trout			25,000	834	230,722	76,611	255,722	77,445	
-Rainbow trout (t)			42,700	1,135			42,700	1,135	
-Striped bass			500	4			500	4	
Total Distributed			25,500	838	231,822	76,680	257,322	77,518	
Total Transfered			42,700	1,135			42,700	1,135	
Wisconsin									
Genoa NFH									
-Bigmouth buffalofish					6	12	6	12	
-Black bullhead			6,098	9	6	8	6,104	17	
-Black crappie			5	3	5	4	10	7	
-Bluegill					40	2	40	2	
-Bowfin					7	24	7	24	
-Brook trout			19,503	1,095			19,503	1,095	
-Brown trout			12,852	380	45	270	12,897	650	1,043,016
-Carp					1	14	1	14	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 3 (Continued)									
Wisconsin (Continued)									
Genoa NFH (Continued)									
-Freshwater drum					2	2	2	2	
-Gars					1	1	1	1	
-Golden redhorse					4	6	4	6	
-Green sunfish			10	1			10	1	
-Largemouth bass	90,992	215	60,809	444			151,801	659	
-Largemouth bass (t)			2,700	35			2,700	35	
-Mooneye					6	8	6	8	
-Northern pike	6,114,550	164			310	1,555	6,114,860	1,719	162,600
-Paddlefish			163	1			163	1	
-Pumpkinseed					4	2	4	2	
-Quillback					2	2	2	2	
-Rainbow trout			23,027	927	35,852	8,053	58,879	8,980	
-Rock bass			1	1			1	1	
-Sauger	315,840	2					315,840	2	3,816,400
-Saugeye									2,667,500
-Shorthead redhorse					8	11	8	11	
-Smallmouth bass	1,048	2					1,048	2	
-Spotted sucker					116	155	116	155	
-Walleye	12,996,000	156			234	635	12,996,234	791	22,137,226
-White bass					2	3	2	3	
-White crappie					6	5	6	5	
-Yellow bass					8	8	8	8	
-Yellow bullhead					6	6	6	6	
-Yellow perch			3	1	22	7	25	8	
Total Distributed	19,518,430	539	122,471	2,862	36,693	10,793	19,677,594	14,194	29,826,742
Total Transfered			2,700	35			2,700	35	
Iron River NFH									
-Lake trout			976,002	38,111	577,788	17,222	1,553,790	55,333	
-Lake trout (t)	3,000	1	878,039	2,852			881,039	2,853	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 3 (Continued)									
Wisconsin (Continued)									
Iron River NFH (Continued)									
-Muskellunge			9,000	22			9,000	22	
Total Distributed			985,002	38,133	577,788	17,222	1,562,790	55,355	
Total Transfered	3,000	1	878,039	2,852			881,039	2,853	
Region 3 - Total Distributed	19,518,430	539	1,952,873	75,785	3,870,139	295,284	25,341,442	371,608	34,382,554
Region 3 - Total Transfered	846,000	1	1,583,264	5,553			2,429,264	5,554	
Region 3 - Total Shipped	20,364,430	540	3,536,137	81,338	3,870,139	295,284	27,770,706	377,162	34,382,554
Region 4									
Alabama									
Carbon Hill NFH									
-Bluegill									
-Bluegill (t)	270,000	300					270,000	300	
-Channel catfish			25,290	857	7,540	1,720	32,830	2,577	
-Channel catfish (t)					2,000	2,000	2,000	2,000	
-Goldfish									
-Goldfish (t)			300,000	1,200			300,000	1,200	
-Largemouth bass	21,600	12	7,500	5			29,100	17	
-Paddlefish					25	5	25	5	
-Striped bass			67,526	160	52,946	4,506	120,472	4,666	
-Walleye			186,620	95			186,620	95	
Total Distributed	21,600	12	286,936	1,117	60,511	6,231	369,047	7,360	
Total Transfered	270,000	300	300,000	1,200	2,000	2,000	572,000	3,500	
Arkansas									
Greers Ferry NFH									
-Rainbow trout			337,530	18,393	654,246	207,569	991,776	225,962	
-Rainbow trout (t)			112,410	4,369			112,410	4,369	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 4 (Continued)									
Arkansas (Continued)									
Greers Ferry NFH (Continued)									
Total Distributed			337,530	18,393	654,246	207,569	991,776	225,962	
Total Transfered			112,410	4,369			112,410	4,369	
Mammoth Spring NFH									
-Bluegill			206,975	239	6	2	206,981	241	
-Channel catfish			381,886	5,563	2,250	250	384,136	5,813	
-Channel catfish (t)					1,785	1,198	1,785	1,198	
-Goldfish			2,500	50			2,500	50	
-Grass carp					159	795	159	795	
-Largemouth bass			158,550	127	4	28	158,554	155	
-Rainbow trout					3	15	3	15	
-Redear sunfish			199,970	181			199,970	181	
-Shovelnose sturgeon			3,500	30			3,500	30	
-Smallmouth bass			39,500	53	4	12	39,504	65	
-Striped bass	1,919,174	6					1,919,174	6	
-Striped bass (t)	2,093,000	10					2,093,000	10	
-Walleye			297,900	254			297,900	254	
Total Distributed	1,919,174	6	1,290,781	6,497	2,426	1,102	3,212,381	7,605	
Total Transfered	2,093,000	10			1,785	1,198	2,094,785	1,208	
Norfork NFH									
-Brook trout			57,775	161			57,775	161	
-Brown trout			251,158	11,993			251,158	11,993	
-Cutthroat trout			155,762	8,539	22,161	3,599	177,923	12,138	
-Rainbow trout			434,110	18,635	1,196,074	345,474	1,630,184	364,109	
Total Distributed			898,805	39,328	1,218,235	349,073	2,117,040	388,401	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 4 (Continued)									
Florida									
Welaka NFH									
-Atlantic sturgeon			4,216	7			4,216	7	
-Bluegill			1,108,500	1,632			1,108,500	1,632	
-Channel catfish			4,500	193			4,500	193	
-Goldfish			15,000	150			15,000	150	
-Largemouth bass			196,163	234			196,163	234	
-Largemouth bass (t)	98,400	18	2,572	3			100,972	21	
-Redear sunfish			547,500	830			547,500	830	
-Striped bass	777,000	24	1,418,180	1,292	85,500	83	2,280,680	1,399	
-Striped bass (t)			8,295	84			8,295	84	
-Western mosquitofish	1,050,000	350					1,050,000	350	
Total Distributed	1,827,000	374	3,294,059	4,338	85,500	83	5,206,559	4,795	
Total Transfered	98,400	18	10,867	87			109,267	105	
Georgia									
Bo Ginn NFH/AQ									
-Bluegill	981,565	766					981,565	766	
-Channel catfish			69,350	1,387	37,134	9,199	106,484	10,586	
-Channel catfish (t)	141,440	10	7,525	165	17,495	2,578	166,460	2,753	
-Largemouth bass	2,030	2					2,030	2	
-Redear sunfish	102,975	172	31,800	106			134,775	278	
-Shortnose sturgeon					228	213	228	213	
-Shortnose sturgeon (t)					97	195	97	195	
-Striped bass			94,680	1,162	29,779	4,983	124,459	6,145	
Total Distributed	1,086,570	940	195,830	2,655	67,141	14,395	1,349,541	17,990	
Total Transfered	141,440	10	7,525	165	17,592	2,773	166,557	2,948	
Chattahoochee Forest NFH									
-Rainbow trout			500,368	12,993	476,505	139,426	976,873	152,419	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 4 (Continued)									
Georgia (Continued)									
Chattahoochee Forest NFH (Continued)									
Total Distributed			500,368	12,993	476,505	139,426	976,873	152,419	
Warm Springs NFH									
-Striped bass			21,223	684	8	47	21,231	731	
-Striped bass (t)	38,000	1			309	76	38,309	77	
Total Distributed			21,223	684	8	47	21,231	731	
Total Transfered	38,000	1			309	76	38,309	77	
Kentucky									
Wolf Creek NFH									
-Brown trout			1,300	13	43,323	11,795	44,623	11,808	
-Brown trout (t)			65,100	372			65,100	372	
-Rainbow trout			75,399	2,058	697,922	215,042	773,321	217,100	
Total Distributed			76,699	2,071	741,245	226,837	817,944	228,908	
Total Transfered			65,100	372			65,100	372	
Louisiana									
Natchitoches NFH									
-Blue catfish			25,707	779			25,707	779	
-Carp	2,857	22					2,857	22	
-Channel catfish	678,440	56	91,088	1,572			769,528	1,628	
-Largemouth bass	683,227	534					683,227	534	
-Largemouth bass (t)	101,690	51					101,690	51	
-Redear sunfish					50	25	50	25	
-Striped bass	1,499,956	434					1,499,956	434	
Total Distributed	2,864,480	1,046	116,795	2,351	50	25	2,981,325	3,422	
Total Transfered	101,690	51					101,690	51	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 4 (Continued)									
Mississippi									
Meridian NFH									
-Bluegill			567,000	567			567,000	567	
-Bluegill (t)			14,000	14			14,000	14	
-Largemouth bass			78,950	791			78,950	791	
-Redear sunfish			243,000	243			243,000	243	
-Redear sunfish (t)			6,000	6			6,000	6	
-Striped bass			32,685	375			32,685	375	
Total Distributed			921,635	1,976			921,635	1,976	
Total Transfered			20,000	20			20,000	20	
Private John Allen NFH									
-Blue catfish			47,683	1,163			47,683	1,163	
-Bluegill	124,192	331	523,989	1,568			648,181	1,899	
-Channel catfish	102,600	14	79,390	3,231			181,990	3,245	
-Largemouth bass	37,651	50	77,140	90			114,791	140	
-Paddlefish					3,116	0	3,116	0	
-Redear sunfish	259,477	357					259,477	357	
-Striped bass	136,108	88	1,548	43			137,656	131	
Total Distributed	660,028	840	729,750	6,095	3,116	0	1,392,894	6,935	
North Carolina									
Edenton NFH									
-Striped bass	292,535	299	133,793	612	107,085	11,803	533,413	12,714	
-Striped bass (t)	1,525,478	555					1,525,478	555	
Total Distributed	292,535	299	133,793	612	107,085	11,803	533,413	12,714	
Total Transfered	1,525,478	555					1,525,478	555	
Mckinney Lake NFH									
-Bluegill	45,000	45	4,900	10			49,900	55	
-Carp					130	455	130	455	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 4 (Continued)									
North Carolina (Continued)									
Mckinney Lake NFH (Continued)									
-Channel catfish					1,000	218	1,000	218	
-Largemouth bass	76,000	61					76,000	61	
-Striped bass	178,800	159	234,466	6,009			413,266	6,168	
Total Distributed	299,800	265	239,366	6,019	1,130	673	540,296	6,957	
South Carolina									
Bears Bluff NFH									
-Shortnose sturgeon					24	168	24	168	
Total Distributed					24	168	24	168	
Orangeburg NFH									
-Atlantic sturgeon					1	125	1	125	
-Redbreast sunfish	250,000	250					250,000	250	
-Shortnose sturgeon					497	544	497	544	
-Shortnose sturgeon (t)					22	50	22	50	
-Striped bass	440,330	382			32,214	3,212	472,544	3,594	
Total Distributed	690,330	632			32,712	3,881	723,042	4,513	
Total Transfered					22	50	22	50	
Walhalla NFH									
-Brown trout	450,000	25	484,640	9,039	124,594	27,008	1,059,234	36,072	
-Rainbow trout	1,420	3	345,783	11,994	312,187	97,102	659,390	109,099	
Total Distributed	451,420	28	830,423	21,033	436,781	124,110	1,718,624	145,171	
Tennessee									
Dale Hollow NFH									
-Brown trout					112,432	24,461	112,432	24,461	
-Lake trout			12,449	522			12,449	522	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 4 (Continued)									
Tennessee (Continued)									
Dale Hollow NFH (Continued)									
-Rainbow trout			414,469	7,684	672,992	182,367	1,087,461	190,051	
-Rainbow trout (t)			667,056	2,476			667,056	2,476	
Total Distributed			426,918	8,206	785,424	206,828	1,212,342	215,034	
Total Transfered			667,056	2,476			667,056	2,476	
Erwin NFH									
-Rainbow trout			16,287	446	4,344	1,203	20,631	1,649	
Total Distributed			16,287	446	4,344	1,203	20,631	1,649	
Region 4 - Total Distributed	10,112,937	4,442	10,317,198	134,814	4,676,483	1,293,454	25,106,618	1,432,710	
Region 4 - Total Transfered	4,268,008	945	1,182,958	8,689	21,708	6,097	5,472,674	15,731	
Region 4 - Total Shipped	14,380,945	5,387	11,500,156	143,503	4,698,191	1,299,551	30,579,292	1,448,441	
Region 5									
Massachusetts									
Berkshire NFH									
-Atlantic salmon					91	146	91	146	327,805
Total Distributed					91	146	91	146	327,805
North Attleboro NFH									
-Atlantic salmon	664,347	234	6,876	125	102,064	14,799	773,287	15,158	
Total Distributed	664,347	234	6,876	125	102,064	14,799	773,287	15,158	
Richard Cronin NSS									
-Atlantic salmon					5,000	1,100	5,000	1,100	418,400
-Atlantic salmon (t)					52	470	52	470	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 5 (Continued)									
Massachusetts (Continued)									
Richard Cronin NSS (Continued)									
Total Distributed					5,000	1,100	5,000	1,100	418,400
Total Transfered					52	470	52	470	
Maine									
Craig Brook NFH									
-Atlantic salmon	1,024,444	370	107,070	4,014	209,712	29,839	1,341,226	34,223	2,664,008
Total Distributed	1,024,444	370	107,070	4,014	209,712	29,839	1,341,226	34,223	2,664,008
Green Lake NFH									
-Atlantic salmon			464,609	10,923	704,790	126,370	1,169,399	137,293	1,524,746
-Brook trout					2,450	1,269	2,450	1,269	
-Lake trout					2,820	415	2,820	415	
-Landlocked Atlantic salmon					2,392	380	2,392	380	
Total Distributed			464,609	10,923	712,452	128,434	1,177,061	139,357	1,524,746
New Hampshire									
Nashua NFH									
-Atlantic salmon	10,000	6	10,540	15	12,413	27,695	32,953	27,716	2,308,000
Total Distributed	10,000	6	10,540	15	12,413	27,695	32,953	27,716	2,308,000
Pennsylvania									
Allegheny NFH									
-Lake trout			429,000	13,648	751,209	79,586	1,180,209	93,234	3,161,340
Total Distributed			429,000	13,648	751,209	79,586	1,180,209	93,234	3,161,340
Lamar NFH									
-Rainbow trout			60	2	175,276	57,225	175,336	57,227	
-Rainbow trout (t)					757	1,115	757	1,115	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 5 (Continued)									
Pennsylvania (Continued)									
Lamar NFH (Continued)									
-Striped bass			3,234	120	31,185	2,542	34,419	2,662	
Total Distributed			3,294	122	206,461	59,767	209,755	59,889	
Total Transfered					757	1,115	757	1,115	
Virginia									
Harrison Lake NFH									
-Channel catfish					23,500	1,397	23,500	1,397	
-Channel catfish (t)					300	30	300	30	
-Grass carp					166	332	166	332	
-Rainbow trout					288	432	288	432	
-Redear sunfish	37,000	29					37,000	29	
-Striped bass	9,000	13	105,200	6,484	13,700	1,627	127,900	8,124	
Total Distributed	46,000	42	105,200	6,484	37,654	3,788	188,854	10,314	
Total Transfered					300	30	300	30	
Vermont									
Pittsford NFH									
-Atlantic salmon	32,989	13					32,989	13	
-Lake trout					23,728	1,364	23,728	1,364	
-Landlocked Atlantic salmon			75,145	4,492	158,321	12,164	233,466	16,656	
Total Distributed	32,989	13	75,145	4,492	182,049	13,528	290,183	18,033	
White River NFH									
-Atlantic salmon	841,211	410	71,874	1,706	254,339	57,605	1,167,424	59,721	
Total Distributed	841,211	410	71,874	1,706	254,339	57,605	1,167,424	59,721	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 5 (Continued)									
West Virginia									
Bowden NFH									
-Brook trout			30,180	88	43,125	17,411	73,305	17,499	
-Brown trout			38,440	813	1,620	900	40,060	1,713	
-Paddlefish					810	245	810	245	
-Rainbow trout			40,476	1,866	216,364	126,593	256,840	128,459	
-Striped bass					39,203	2,817	39,203	2,817	
Total Distributed			109,096	2,767	301,122	147,966	410,218	150,733	
White Sulphur Springs NFH									
-Rainbow trout			131,454	4,061			131,454	4,061	
-Rainbow trout (t)					3,339	2,236	3,339	2,236	
Total Distributed			131,454	4,061			131,454	4,061	
Total Transfered					3,339	2,236	3,339	2,236	
Region 5 - Total Distributed	2,618,991	1,075	1,514,158	48,357	2,774,566	564,253	6,907,715	613,685	10,404,299
Region 5 - Total Transfered					4,448	3,851	4,448	3,851	
Region 5 - Total Shipped	2,618,991	1,075	1,514,158	48,357	2,779,014	568,104	6,912,163	617,536	10,404,299
Region 6									
Colorado									
Hotchkiss NFH									
-Cutthroat trout			25,725	142			25,725	142	
-Rainbow trout			1,325,830	53,628	603,694	87,523	1,929,524	141,151	
-Rainbow trout (t)			200,133	8,070			200,133	8,070	
Total Distributed			1,351,555	53,770	603,694	87,523	1,955,249	141,293	
Total Transfered			200,133	8,070			200,133	8,070	
Leadville NFH									
-Brook trout			9,185	366			9,185	366	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 6 (Continued)									
Colorado (Continued)									
Leadville NFH (Continued)									
-Brown trout			53,913	549			53,913	549	
-Cutthroat trout	19,050	21	28,936	739	212,303	59,349	260,289	60,109	
-Lake trout			35,792	1,070			35,792	1,070	
-Rainbow trout			10,316	176	210,865	40,476	221,181	40,652	
Total Distributed	19,050	21	138,142	2,900	423,168	99,825	580,360	102,746	
Montana									
Bozeman FTC									
-Arctic grayling					5,599	406	5,599	406	
-Cutthroat trout					26,640	2,461	26,640	2,461	80,000
-Rainbow trout					7,625	5,579	7,625	5,579	
-Shovelnose sturgeon									
-Shovelnose sturgeon (t)	33,000	2					33,000	2	
-Walleye					5,072	510	5,072	510	
Total Distributed					44,936	8,956	44,936	8,956	80,000
Total Transfered	33,000	2					33,000	2	
Creston NFH									
-Cutthroat trout			70,028	3,774			70,028	3,774	
-Kokanee			388,000	844			388,000	844	
-Rainbow trout			233,538	11,256	573,409	96,117	806,947	107,373	5,006,930
Total Distributed			691,566	15,874	573,409	96,117	1,264,975	111,991	5,006,930
Ennis NFH									
-Rainbow trout			9,445	51	54,492	64,049	63,937	64,100	27,544,705
-Rainbow trout (t)					9	60	9	60	
Total Distributed			9,445	51	54,492	64,049	63,937	64,100	27,544,705
Total Transfered					9	60	9	60	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 6 (Continued)									
North Dakota									
Garrison Dam NFH									
-Brown trout			112,446	7,016	106,095	12,783	218,541	19,799	
-Fall chinook salmon			300,776	7,578			300,776	7,578	654,280
-Muskellunge			2,742	3			2,742	3	
-Northern pike	7,318,149	544	2,272,720	1,749			9,590,869	2,293	
-Northern pike (t)	1,210,000	38					1,210,000	38	
-Paddlefish					480	16	480	16	
-Rainbow trout			247,567	7,945	197,820	27,902	445,387	35,847	
-Sauger			72,700	100			72,700	100	
-Saugeye	626,778	167	10,072	10			636,850	177	
-Steelhead					30,688	2,740	30,688	2,740	
-Walleye	10,629,315	4,680					10,629,315	4,680	
-Walleye (t)	170,430	17					170,430	17	
Total Distributed	18,574,242	5,391	3,019,023	24,401	335,083	43,441	21,928,348	73,233	654,280
Total Transfered	1,380,430	55					1,380,430	55	
Valley City/ Baldhill Dam NFH									
-Black crappie			300,247	99			300,247	99	
-Bluegill			76,650	74			76,650	74	
-Bluegill (t)			76,300	109			76,300	109	
-Channel catfish			162,220	623			162,220	623	
-Largemouth bass			1,026,800	510			1,026,800	510	
-Northern pike	1,444,500	41	2,235,164	1,577			3,679,664	1,618	
-Pallid sturgeon			3,841	9			3,841	9	
-Pallid sturgeon (t)			500	1			500	1	
-Smallmouth bass			136,842	84			136,842	84	
-Steelhead									
-Steelhead (t)			28,272	248			28,272	248	
-Tiger muskellunge			88,200	66			88,200	66	
-Walleye	503,500	6	1,069,745	580			1,573,245	586	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 6 (Continued)									
North Dakota (Continued)									
Valley City/ Baldhill Dam NFH (Continued)									
-Yellow perch	6,700,000	268					6,700,000	268	
Total Distributed	8,648,000	315	5,099,709	3,622			13,747,709	3,937	
Total Transfered			105,072	358			105,072	358	
South Dakota									
Gavins Point NFH									
-Bluegill	507,800	379			900	152	508,700	531	
-Channel catfish			467,985	3,343			467,985	3,343	
-Channel catfish (t)	200,000	24					200,000	24	
-Largemouth bass	200,300	143	38,155	276	231	578	238,686	997	
-Largemouth bass (t)	257,500	23					257,500	23	
-Muskellunge	73,500	2					73,500	2	
-Northern pike									957,000
-Paddlefish			63,000	3	45,691	7,212	108,691	7,215	978,000
-Paddlefish (t)			150,000	6			150,000	6	
-Pallid X Shovelnose					20	3	20	3	
-Palmetto bass	4,500	7					4,500	7	
-Rainbow trout					18,009	4,133	18,009	4,133	
-Saugeye	1,200,000	9	21,500	43			1,221,500	52	
-Shovelnose sturgeon	3,780	1					3,780	1	55,000
-Shovelnose sturgeon (t)	4,320	1					4,320	1	
-Smallmouth bass	513,000	169	200	1	325	813	513,525	983	
-Smallmouth bass (t)	110,000	28					110,000	28	
-Tiger muskellunge					1,000	63	1,000	63	
-Walleye	8,442,080	416	5,000	5			8,447,080	421	18,396,000
-Walleye (t)	1,600,000	12					1,600,000	12	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 6 (Continued)									
South Dakota (Continued)									
Gavins Point NFH (Continued)									
Total Distributed	10,944,960	1,126	595,840	3,671	66,176	12,954	11,606,976	17,751	20,386,000
Total Transfered	2,171,820	88	150,000	6			2,321,820	94	
Utah									
Jones Hole NFH									
-Brook trout			7,000	85			7,000	85	
-Brook trout (t)			9,200	310			9,200	310	
-Brown trout			7,000	322	18,325	1,530	25,325	1,852	
-Cutthroat trout			52,292	4,210	53,572	7,176	105,864	11,386	
-Cutthroat trout (t)			225,490	5,440			225,490	5,440	
-Rainbow trout			318,610	7,876	908,170	173,399	1,226,780	181,275	
Total Distributed			384,902	12,493	980,067	182,105	1,364,969	194,598	
Total Transfered			234,690	5,750			234,690	5,750	
Washington									
Carson NFH									
-Rainbow trout			78,323	2,150			78,323	2,150	
Total Distributed			78,323	2,150			78,323	2,150	
Wyoming									
Jackson NFH									
-Brown trout			100,098	2,202			100,098	2,202	
-Cutthroat trout			72,994	1,684	409,461	63,079	482,455	64,763	
-Cutthroat trout (t)					21,058	1,918	21,058	1,918	
-Lake trout					21,420	4,536	21,420	4,536	

Appendix 1. Fish and Fish Eggs Shipped By Region, State, National Fish Hatchery, and Species (Continued)

Region, State, National Fish Hatchery and Species (t) = Fish Transferred	Fish Shipped By Size: Less Than 1.5 Inches Number	Less Than 1.5 Inches Weight (Pounds)	1.5 To 5.5 Inches Number	1.5 To 5.5 Inches Weight (Pounds)	Greater Than 5.5 Inches Number	Greater Than 5.5 Inches Weight (Pounds)	Total Fish Shipped Number	Total Fish Shipped Weight (Pounds)	Total Eggs Shipped Number
Region 6 (Continued)									
Wyoming (Continued)									
Jackson NFH (Continued)									
Total Distributed			173,092	3,886	430,881	67,615	603,973	71,501	
Total Transfered					21,058	1,918	21,058	1,918	
Saratoga NFH									
-Brown trout					123	242	123	242	4,449,940
-Cutthroat trout			47,276	112	24,791	8,142	72,067	8,254	1,704,288
-Lake trout					2,073	723	2,073	723	6,624,335
Total Distributed			47,276	112	26,987	9,107	74,263	9,219	12,778,563
Region 6 - Total Distributed	38,186,252	6,853	11,588,873	122,930	3,538,893	671,692	53,314,018	801,475	66,450,478
Region 6 - Total Transfered	3,585,250	145	689,895	14,184	21,067	1,978	4,296,212	16,307	
Region 6 - Total Shipped	41,771,502	6,998	12,278,768	137,114	3,559,960	673,670	57,610,230	817,782	66,450,478
Grand Total Distributed	78,821,155	18,872	78,227,850	1,163,094	31,720,495	4,801,774	188,769,500	5,983,740	132,329,133
Grand Total Transfered	11,311,993	3,076	3,557,993	30,873	47,381	12,173	14,917,367	46,122	
Grand Total Shipped	90,133,148	21,948	81,785,843	1,193,967	31,767,876	4,813,947	203,686,867	6,029,862	132,329,133

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March 2, 1993

To: Fishery Biologist, Office of Administration - Fisheries

From: Program Analyst, Office of Administration - Fisheries

Subject: FY 1994 Budget Justification Fisheries Data

Jennifer Schaffer from the DOI/IG (Denver) office will try to see you on Wednesday, March 3, 1993, concerning data in the FY 1994 Budget Justification Fisheries portion.

I provided Ms. Schaffer with a copy of the Fish Distribution Report for FY 1992, the data last given to you for the Fisheries distribution outputs displaying fish number and pounds by major programs (attached copy); this also indicated the difference in egg numbers initially provided to the DOI/IG. I also provided her with our database file on disk for Fish distribution (Dist92.dbf). See borrowed the FY 1992 Annual report for the LSR Comp Plan Office from our office.

Jennifer Schaffer will want to go over some of the figures provided in the supporting text of the FY 1994 Budget Justification for the Fisheries portion with you. See is located temporarily on the 3rd floor (most likely with Finance).

George Podsoly

Updated data as 1/13/93 for USFWS, Budgest Estimates.

U.S. Fish and Wildlife Service - Fisheries
Listing of FY 1992 Fish and Fish Egg Distribution for Budget Justifications
ANADROMOUS PORTION Number of Hatcheries:

Major Groups:	No. of Fish Eggs:	Nos.of Fish:	Fish Wgt.(lb)	Egg	Fsh	Tot	
PACIFIC SALMON & STLH.TRT	15,552,732	68,059,854	2,126,746	18	7	25	1
ATLANTIC SALMON	7,242,959	4,522,369	275,370	8	5	13	2
ATLANTIC & GULF STRP BASS	450,000	8,121,960	50,231	18	2	20	3
ENDANGERED ANADRAMOUS SP	0	6,256	1,102	4	0	4	4
	23,245,691	80,710,439	2,453,449				

Listing of FY 1992 Fish and Fish Egg Distribution for Budget Justifications
INLAND PORTION Number of Hatcheries:

Major Groups:	No. of Fish Eggs:	Nos.of Fish:	Fish Wgt.(lb)	Egg	Fsh	Tot	
WARM/COOLWATER SPECIES	53,708,226	82,341,730	229,549	24	9	33	5
INLAND SALMONIDS	46,373,214	18,113,556	2,836,332	32	6	38	6
GREAT LAKES LAKE TROUT	7,717,152	6,580,555	373,523	6	1	7	7
ENDANGERED/THREATENED SP.	1,284,850	1,023,220	90,887	5	6	11	8
	109,083,442	108,059,061	3,530,291				

Listing of FY 1992 Fish and Fish Egg Distribution for Budget Justifications
NEW TOTAL ALL Number of Hatcheries:

Major Groups:	No. of Fish Eggs:	Nos.of Fish:	Fish Wgt.(lb)	Egg	Fsh	Tot	
PACIFIC SALMON & STLH.TRT	15,552,732	68,059,854	2,126,746	18	7	25	1
ATLANTIC SALMON	7,242,959	4,522,369	275,370	8	5	13	2
ATLANTIC & GULF STRP BASS	450,000	8,121,960	50,231	18	2	20	3
ENDANGERED ANADRAMOUS SP	0	6,256	1,102	4	0	4	4
WARM/COOLWATER SPECIES	53,708,226	82,341,730	229,549	24	9	33	5
INLAND SALMONIDS	46,373,214	18,113,556	2,836,332	32	6	38	6
GREAT LAKES LAKE TROUT	7,717,152	6,580,555	373,523	6	1	7	7
ENDANGERED/THREATENED SP.	1,284,850	1,023,220	90,887	5	6	11	8
*	132,329,133	188,769,500	5,983,740				

(USFWS/AF/FAD:GLPopdlay:12/15/92)
Listing of FY 1992 Fish and Fish Egg Distribution for Budget Justifications
***** PREVIOUS DATA (Given DF,Donna Hurly for DOI/IG)**** Number of Hatcheries:

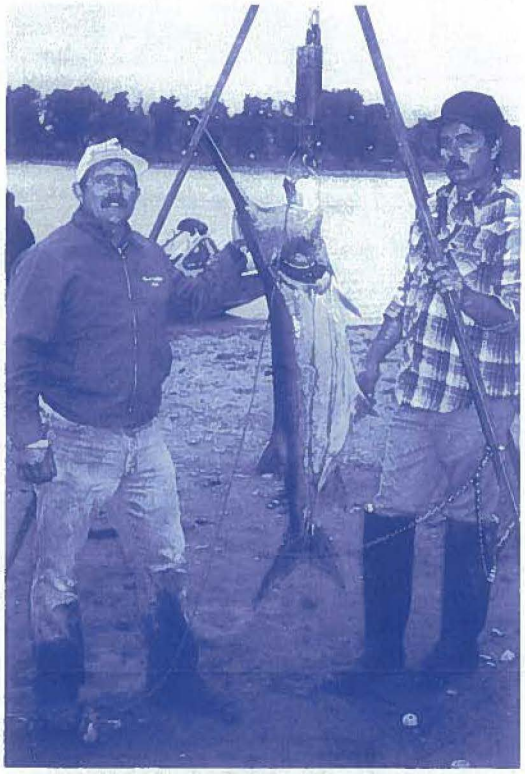
Major Groups:	No. of Fish Eggs:	Nos.of Fish:	Fish Wgt.(lb)	Egg	Fsh	Tot	
PACIFIC SALMON & STLH.TRT	15,552,732	68,059,854	2,126,746	18	7	25	1
ATLANTIC SALMON	7,242,959	4,522,369	275,370	8	5	13	2
ATLANTIC & GULF STRP BASS	450,000	8,121,960	50,231	18	2	20	3
ENDANGERED ANADRAMOUS SP	0	6,256	1,102	4	0	4	4
WARM/COOLWATER SPECIES	33,322,226	82,341,730	229,549	24	9	33	5
INLAND SALMONIDS	45,600,504	18,113,556	2,836,332	32	6	38	6
GREAT LAKES LAKE TROUT	7,717,152	6,580,555	373,523	6	1	7	7
ENDANGERED/THREATENED SP.	1,224,850	1,023,220	90,887	5	6	11	8
*	111,110,423	188,769,500	5,983,740				

* Egg was increased due to added records from field after 12/04/92 (Final Verification). No change to Castros data as it only involved FISH. FYI to GLR by Copy and Disk to Bob Batty 11/13

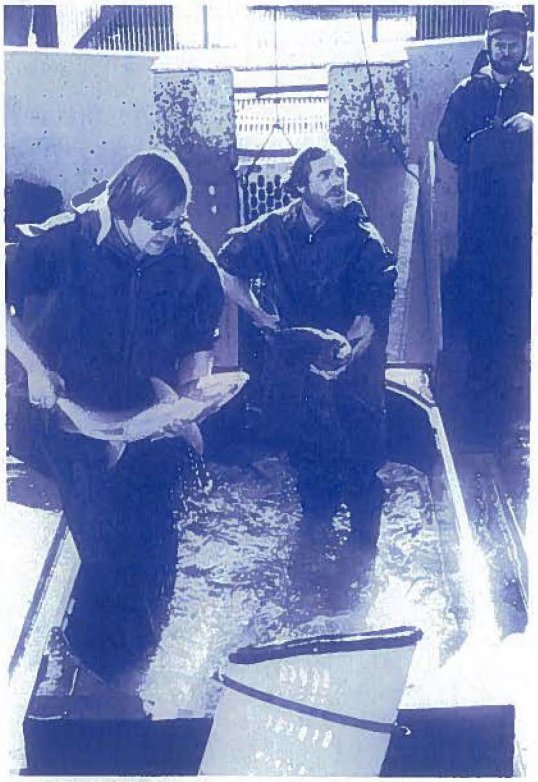
GARRISON DAM NATIONAL FISH HATCHERY CONTINUED

In 1991, nearly ten million walleye fingerlings were produced at Garrison Dam NFH and record numbers of crappie, largemouth and smallmouth bass were also produced.

Garrison Dam NFH has been involved in developing culture techniques for paddlefish since 1985. State of the art techniques include hormone injection to produce ovulation and caesarean sections for egg taking. Adult females are sutured after spawning and returned to the wild. Annually one million eggs are taken and approximately twenty thousand 12-inch fingerlings are stocked in an effort to restore viable populations



Paddlefish from Yellowstone River.



Loading fish in new building.

in the Missouri River system.

The listing of pallid sturgeon as an endangered species, has brought greater emphasis to the culture of this species. Garrison Dam NFH will be used as a holding, spawning and incubation sight for any ripe adult pairs that may be captured above Lake Sakakawea. Preparations have been made at the hatchery for holding and incubating both pallid and shovelnose sturgeon. The fry will be shipped to the Gavins Point NFH and Valley City NFH for rearing. Shovelnose sturgeon continue to be used as a surrogate in the development of culture technics for pallid sturgeon.

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally-owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. Administration.

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

OFFICIAL BUSINESS