

## **A Proposed Classification System for Finfish Based on Rearing Temperature**

### **Background**

In the aquaculture drug approval arena, and especially within the context of species grouping, there has always existed a need to place individual species into a category. In fact, when partnership efforts to pursue the approval of drugs for use in aquatic species was initially formalized in 1994 with the establishment of the International Association of Fish and Wildlife Agencies' (IAFWA) Federal – State Aquaculture Drug Approval Project, the development and execution of studies to address the concept of “crop grouping” was identified as a specific research need. This need has been brought to the fore by the recent approval of 35% PEROX-AID® for use to control mortality in all freshwater, coolwater finfish caused by external columnaris. 35% PEROX-AID® is the first aquaculture drug approval for fish based on a water temperature classification, and the above-described labeling was established in spite of the lack of an “accepted” temperature classification scheme. Concern has been expressed that CVM will soon be asked by fish-health and/or culture professionals whether potential use of 35% PEROX-AID® on a specific fish species that is *generally considered to be a coolwater species*, would be according to labeled use or off-label use. Without an “accepted” classification system in-hand, such queries will obviously be difficult for CVM to answer. Although the existence of a temperature classification system would certainly help as it relates to the immediate issue of questions regarding 35% PEROX-AID®, a species temperature classification scheme would also have additional pre- and post-approval applications for other aquatic animal drugs. The dilemma posed above was the primary impetus for recent discussions within the aquaculture community and the resulting proposed temperature classification scheme proposed and outlined within this document.

## **Temperature Strategies Considered for the Development of a Species Classification System**

Discussions recently held by several groups, including the Joint Subcommittee on Aquaculture's National Aquaculture Drug Research Forum (NADRF) and the Association of Fish and Wildlife Agencies' Drug Approval Working Group (DAWG) resulted in a plan. The U.S. Fish & Wildlife Service's Aquatic Animal Drug Approval Partnership (AADAP) program agreed to generate a proposed classification scheme. The proposal offered herein is based on the temperature of water used to rear the subject species. Although several other strategies were considered and investigated (see below), AADAP concluded that a classification system based on rearing water temperature would not only be the most practical, but also be defensible with hard data.

Consideration was first given to locating, in existing literature, simple definitions for the grouping of coldwater, coolwater, and warmwater fish species. Although there are many references made to these categories of fish (and to their culture), closer examination revealed only a few, albeit disparate, definitions. In spite of a less than acceptable set of definitions, an attempt was made to use these definitions to support a strategy for categorizing a number of popularly reared fish species.

The first strategy was to try to classify species based on spawning temperature ranges. Although the widely accepted and cited "fisheries bible," entitled *Fish Hatchery Management* (Piper et al. 1982) provides definitions for cold, cool, and warmwater species based on the temperature at which fish spawn, a literature search did not result in any agreement on the spawning temperature for those species in which culture and temperature requirement data were available.

The second strategy was an attempt to classify species based on the upper temperature limit for survival, i.e., species-specific upper lethal temperature. Available literature addressing this concept was even more limited than spawning temperature information.

The third strategy explored was an effort to base categorization on the optimal rearing temperature range. Although more data were available in the literature regarding rearing

temperature than was available for the two strategies mentioned above, this latter strategy proved to be the most inconsistent for several reasons. First, there was no clear or consistent use of the term “optimal”; nor was the term “optimal” (within the context of the relationship between rearing vs. growth vs. preferred temperature) defined in the literature. Second, rearing temperatures change with the life stages of many, if not most, species. Lastly, the wide geographic ranges of many fish (which may be natural in occurrence, the result of genetic variations, or the result of the introduction of a species to water bodies outside their original geographic range) caused optimal rearing temperature ranges to be different throughout the country.

In short, no definitive strategy was found in the scientific literature to help guide one in the classification of species by water temperature categories. Hence, it was decided (and as suggested by the NADRF and DAWG in earlier discussions) that the next approach should be to examine the information available from the 2005 Public Aquaculture Production Database (PAPD).

### **Development of a Temperature Classification System Based on Rearing Temperature Data Contained in the 2005 PAPD**

The [PAPD](#) (housed on AADAP’s website) contains the most accurate, comprehensive, up-to-date, and standardized listing of finfish reared domestically by public sector (state, federal and tribal) natural resource agencies. Thus, it held the potential to be used as the sole data source for a proposed classification system.

The Database not only includes a complete list of all species reared, but also the number, weight and life stage of each species reared, and whether species were reared at one of the following defined temperature ranges: 1)  $\leq 12^{\circ}\text{C}$  (i.e., coldwater); 2) between  $12\text{-}18^{\circ}\text{C}$  (i.e., coolwater); or 3)  $\geq 18^{\circ}\text{C}$  (i.e., warmwater). These temperature categories were provided by a representative of the National Aquaculture Association prior to the development of the Database. However, it should be noted that the PAPD’s categorization of fish based on rearing temperature proved not to be without its shortcomings and/or inconsistencies.

A total of 100 species are reported within the PAPD, and depending on the reporting agency, several fall within either of two temperature categories. Although this results in less than a purely “black and white” categorization, it is not unexpected. As noted previously, one need merely consider the exceptionally broad natural north-south geographic distribution of many species to understand why a particular species may be reared in water ranging, as an example, from 12 to 20°C (i.e., spanning both cool and warmwater). This inherent “shortcoming” of the PAPD required that a standardized system be devised to compensate.

Consequently, to determine the proper placement of a species within a category, a “percentage break-point” system was used. When the number of fish in a given species reared in a particular temperature category was  $\geq 80\%$  of the total number reared, that species was labeled as falling within that water temperature category. For example, 83% of yellow perch were reported as being reared in water ranging between 12-18°C (i.e., coolwater), and the remaining 17% were reported as being reared in water  $\geq 18^\circ\text{C}$  (i.e., warmwater). Based on the above-described percentage break-point, yellow perch were therefore categorized as being a coolwater species. Using this system, 90 of the 100 species in the PAPD could be placed into a single temperature category. However, ten species were reared at significant levels (i.e.,  $\geq 20\%$ , but  $\leq 80\%$ ) in both coolwater and warmwater. In these 10 species the “percentage break-point” system did not produce a clear (i.e., single) categorization.

In an attempt to place the 10 “oddball” species into one, and only one category, an informal survey of several aquaculture experts was conducted. However, the results of this survey were inconclusive and did not lend further insight as to the most appropriate categorization of these species. As a consequence, even though it would obviously be much preferred that all species be placed in one, and only one, of the three proposed categories (cold, cool and warmwater species), there are 10 species which have been placed in both the cool and warmwater categories. Therefore, a fourth classification category entitled coolwater/warmwater species has been established for these “crossover” species. And, AADAP would propose that from a regulatory standpoint these 10 species would be considered “coolwater” species when being reared (and/or treated) at the above-

defined coolwater temperature range, and “warmwater” species when being reared (and/or treated) at the above-defined warmwater temperature range.

To summarize, AADAP acknowledges that the PAPD has its shortcomings and may not, by itself, be the ideal source of information for a proposed temperature classification system. However, we do believe it is the best source of standardized information currently available, and thus, the PAPD was the primary source of information (i.e., data) upon which this proposal is based.

### **Proposed Temperature Classification System Based on Rearing Temperature Data Contained in the 2005 PAPD**

It is proposed for CVM’s consideration that all finfish reared by the public sector (and by logical extension, the private sector) be classified as falling into one of four rearing-temperature-based categories. Specifically, these categories would include: 1) coldwater fish reared at water temperatures  $\leq 12^{\circ}\text{C}$ ; 2) coolwater fish reared at water temperatures between  $12\text{-}18^{\circ}\text{C}$ ; 3) warmwater fish that are reared at water temperatures  $\geq 18^{\circ}\text{C}$ ; and 4) coolwater/warmwater “crossover fish” that are reared at water temperatures  $\geq 12^{\circ}\text{C}$ . The following four tables (Tables 1-4) summarize our proposed categorization of finfish (a total of 100 species) reared in the USA by the public sector. The fourth category containing “crossover species” (Table 4) comprises those species (10) reared in significant numbers ( $\geq 20\%$  of total) in each of two water temperature categories (i.e., cool and warmwater). “Crossover species” would be considered “coolwater” species when being reared (and/or treated) at the above-defined coolwater temperature range, and “warmwater” species when being reared (and/or treated) at the above-defined warmwater temperature range. All other species (90) are considered to fall into only one of the other three categories due to the fact that at least 80% of the total number reared fall into one of these more narrowly defined temperature ranges. Regardless of actual rearing/treatment water temperature, these species would always be “hard-wired” into their original category.

In addition to the aforementioned tables, we have also included in Appendix 1 a complete copy of the raw data from the 2005 PAPD from which Tables 1-4 were constructed. The

complete 2005 PAPD can be found on AADAP's website at the following address:

<http://www.fws.gov/fisheries/aadap/ACCESS/main.html>.

Further, it is proposed that this classification system be applied, until such time that new data become available warranting a reclassification, to all past, present and future new animal drugs for aquatic species, pre- and post-approval.

Fish Species Temperature Classification List – Table 1

**Name and Number of Fish Categorized as COLDWATER SPECIES (reared at water temperatures <12°C) based on the 2005 PAPD.**

<u>Common Name</u>	<u>Scientific Name</u>	<u>% Reared in Coldwater</u>	<u>Total Number Reared</u>
Apache Trout	<i>Oncorhynchus gilae apache</i>	100.0%	216,587
Arctic Char	<i>Salvelinus alpinus</i>	100.0%	224,530
Arctic Grayling	<i>Thymallus arcticus</i>	100.0%	583,065
Atlantic Salmon	<i>Salmo salar</i>	100.0%	13,195,748
Brook Trout	<i>Salvelinus fontinalis</i>	97.5%	7,867,876
Brown Trout	<i>Salmo trutta</i>	97.4%	17,312,948
China Rockfish	<i>Sebastes nebulosus</i>	100.0%	1,000
Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	100.0%	120,341,611
Chum Salmon	<i>Oncorhynchus keta</i>	100.0%	48,479,176
Coho Salmon	<i>Oncorhynchus kisutch</i>	100.0%	39,784,364
Cutthroat Trout	<i>Oncorhynchus clarkii</i>	100.0%	9,934,101
Fall Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	100.0%	76,579,690
Gila Trout	<i>Oncorhynchus gilae</i>	100.0%	6,292
Golden Trout	<i>Oncorhynchus mykiss aguabonita</i>	100.0%	51,739
Kokanee	<i>Oncorhynchus nerka</i>	100.0%	44,629,563
Lake Trout	<i>Salvelinus namaycush</i>	100.0%	7,314,919
Landlocked Atlantic Salmon	<i>Salmo salar</i>	100.0%	1,010,336
Lingcod	<i>Ophiodon elongatus</i>	100.0%	1,050
Pacific Halibut	<i>Hippoglossus stenolepis</i>	100.0%	10
Rainbow Trout	<i>Oncorhynchus mykiss</i>	97.8%	87,247,652
Rainbow x Cutthroat hybrid	<i>Oncorhynchus mykiss</i>	100.0%	348,143
Rock Sole	<i>Lepidopsetta bilineata</i>	100.0%	3,000
Sablefish	<i>Anoplopoma fimbria</i>	100.0%	1,000
Sockeye Salmon	<i>Oncorhynchus nerka</i>	100.0%	19,464,691
Splake	<i>Salvelinus fontinalis x S. namaycush</i>	100.0%	930,703
Spring Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	100.0%	13,192,612
Steelhead	<i>Oncorhynchus mykiss</i>	96.5%	30,948,411
Summer Chinook Salmon	<i>Oncorhynchus tshawytscha</i>	100.0%	8,378,410
Tiger Trout	<i>Salmo trutta x Salvelinus fontinalis</i>	100.0%	679,784
	<b><i>Total Coldwater Reared</i></b>		<b>548,729,011</b>

Fish Species Temperature Classification List – Table 2

**Name and Number of Fish Categorized as COOWATER SPECIES (reared at water temperatures 12°C -18°C) based on the 2005 PAPD.**

<u>Common Name</u>	<u>Scientific Name</u>	<u>% Reared in Coolwater</u>	<u>Total Number Reared</u>
Alewife Herring	<i>Alosa pseudoharengus</i>	100.0%	3,162
Blueback Herring	<i>Alosa aestivalis</i>	100.0%	217,989
Bonytail Chub	<i>Gila elegans</i>	81.8%	67,892
Chihuahia Chub	<i>Gila nigrescens</i>	100.0%	4,485
Colorado Pike Minnow	<i>Ptychocheilus lucius</i>	98.6%	284,549
Comanche Springs Pupfish	<i>Cyprinodon elegans</i>	100.0%	283
Herring	<i>Alosa sp., Clupea sp.</i>	100.0%	735,000
June Sucker	<i>Chasmistes liorus</i>	100.0%	3,566
Razorback Sucker	<i>Xyrauchen texanus</i>	85.2%	56,538
Saugeye	<i>Sander canadensis x S. vitreus</i>	99.6%	39,275,371
Shovelnose Sturgeon	<i>Scaphirhynchus platorynchus</i>	100.0%	709
White Sturgeon	<i>Acipenser transmontanus</i>	100.0%	3,755
Yellow Perch	<i>Perca flavescens</i>	82.6%	5,251,058
	<b><u>Total Coolwater Reared</u></b>		<b><u>45,904,357</u></b>

Fish Species Temperature Classification List – Table 3

**Name and Number of Fish Categorized as WARMWATER SPECIES (reared at water temperatures >18°C) based on the 2005 PAPD.**

<u>Common Name</u>	<u>Scientific Name</u>	<u>% Reared in Warmwater</u>	<u>Total Number Reared</u>
Alligator Gar	<i>Atractosteus spatula</i>	87.5%	16
Arkansas Darter	<i>Etheostoma cragini</i>	100.0%	4,258
Atlantic Sturgeon	<i>Acipenser oxyrinchus</i>	100.0%	145
Barrens Topminnow	<i>Fundulus julisia</i>	100.0%	4,117
Black Crappie	<i>Pomoxis nigromaculatus</i>	97.1%	3,176,032
Blue Catfish	<i>Ictalurus furcatus</i>	100.0%	1,419,970
Blue/Channel Catfish	<i>Ictalurus furcatus</i> or <i>I.punctatus</i>	100.0%	169,750
Bluegill	<i>Lepomis macrochirus</i>	100.0%	20,016,529
Bluegill/Redear Sunfish	<i>Lepomis macrochirus</i> or <i>L. microlophus</i>	100.0%	4,464,858
Brown Bullhead	<i>Ameiurus nebulosus</i>	100.0%	1,200
Chain Pickerel	<i>Esox niger</i>	100.0%	4,750
Channel Catfish	<i>Ictalurus punctatus</i>	99.9%	19,595,501
Cobia	<i>Rachycentron canadum</i>	100.0%	10,500
Common Shinner	<i>Luxilus cornutus</i>	100.0%	2,135
Fathead Minnow	<i>Pimephales promelas</i>	100.0%	9,059,121
Flathead Catfish	<i>Pylodictis olivaris</i>	100.0%	24,060
Fountain Darter	<i>Etheostoma fonticola</i>	100.0%	1,918
Gambusia	<i>Gambusia affinis</i>	100.0%	117,150
Golden Shiner	<i>Notemigonus crysoleucas</i>	100.0%	236,650
Goldfish	<i>Carassius auratus</i>	100.0%	5,856,520
Grass Carp	<i>Ctenopharyngodon idella</i>	100.0%	9,529,511
Guadalupe Bass	<i>Micropterus treculii</i>	100.0%	81,016
Hybrid Striped Bass	<i>Morone saxatilis</i> x <i>M.chrysops</i>	81.2%	51,798,635
Hybrid Sunfish	<i>Lepomis cyanellus</i> x <i>L. macrochirus</i>	100.0%	207,871
Largemouth Bass	<i>Micropterus salmoides</i>	100.0%	29,712,155
Least Chub	<i>Iotichthys phlegethonitis</i>	100.0%	15,000
Northern Redbelly dace	<i>Phoxinus eos</i>	100.0%	226
Paddlefish	<i>Polyodon Spathula</i>	100.0%	1,240,319
Red Drum	<i>Sciaenops ocellatus</i>	100.0%	66,044,216
Redear Sunfish	<i>Lepomis microlophus</i>	100.0%	4,028,098
Redeye Bass	<i>Micropterus coosae</i>	100.0%	15,500
Rio Grande Chub	<i>Gila pandora</i>	100.0%	58,912
Rio Grande Silvery Minnow	<i>Hybognathus amarus</i>	100.0%	94,405
Robust Redhorse	<i>Moxostoma robustum</i>	100.0%	55,647
Rock Bass	<i>Ambloplites rupestris</i>	100.0%	2,050
Roundtail Chub	<i>Gila robusta</i>	100.0%	21,796

Fish Species Temperature Classification List – Table 3

<u>Common Name</u>	<u>Scientific Name</u>	<u>% Reared in Warmwater</u>	<u>Total Number Reared</u>
Shoal Bass	<i>Micropterus cataractae</i>	100.0%	136,008
Shortnose Gar	<i>Lepisosteus platostomus</i>	100.0%	14
Shortnose Sturgeon	<i>Acipenser brevirostrum</i>	100.0%	10,314
Southern Redbelly dace	<i>Phoxinus erythrogaster</i>	100.0%	1,753
Spotted Bass	<i>Micropterus punctulatus</i>	100.0%	3,000
Spotted Seatrout	<i>Cynoscion nebulosus</i>	100.0%	3,270,548
Tiger Muskellunge	<i>Esox masquinongy</i>	92.0%	335,902
Topeka Shiner	<i>Notropis topeka</i>	100.0%	3,193
White Bass	<i>Morone chrysops</i>	100.0%	5,514,344
White Crappie	<i>Pomoxis annularis</i>	100.0%	722,767
White Sucker	<i>Catostomus commersonii</i>	99.9%	15,474,516
Woundfin	<i>Plagopterus argentissimus</i>	100.0%	4,400
	<b><u>Total Warmwater Reared</u></b>		<b>252,547,296</b>

Fish Species Temperature Classification List – Table 4

**Name and Number of Fish Categorized as COOLWATER/WARMWATER  
“CROSSOVER” SPECIES (reared at water temperatures  $\geq 12^{\circ}\text{C}$ ) based on the 2005  
PAPD.**

<u>Common Name</u>	<u>Scientific Name</u>	<u>% Reared in Coolwater</u>	<u>% Reared in Warmwater</u>	<u>Total Number Reared</u>
American Shad	<i>Alosa sapidissima</i>	58.6%	41.4%	15,466,973
Hickory Shad	<i>Alosa mediocris</i>	35.2%	64.8%	14,044,914
Lake Sturgeon	<i>Acipenser fulvescens</i>	46.8%	53.2%	135,030
Muskellunge	<i>Esox masquinongy</i>	51.4%	48.6%	2,376,906
Northern Pike	<i>Esox lucius</i>	76.3%	23.7%	8,522,478
Pallid Sturgeon	<i>Scaphirhynchus albus</i>	69.5%	30.5%	97,835
Sauger	<i>Sander canadensis</i>	27.5%	72.5%	31,650,989
Smallmouth Bass	<i>Micropterus dolomieu</i>	30.2%	69.8%	856,375
Striped Bass	<i>Morone saxatilis</i>	54.6%	45.4%	56,336,085
Walleye	<i>Sander vitreus</i>	59.0%	41.0%	906,083,147
			<b><u>Total Reared</u></b>	<b><u>1,035,570,732</u></b>

## APPENDIX 1

### 2005 Public Aquaculture Production Database (PAPD) Raw Data Used to Develop Tables 1-4

**Note:** Species that comprise Table 4 (i.e., “crossover species”) are highlighted and flagged for reference.

## ***2005 Fish Production Water Type and Temperature Information***

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
<b>Alewife Herring</b>					
Coolwater 12 - 18°C	Fry	Freshwater	3,162	1.00	Virginia
<b>Alligator Gar</b>					
Coolwater 12 - 18°C	Catchable	Freshwater	2	50.00	Georgia
Warmwater >18°C	Catchable	Freshwater	14	5.00	Tennessee
<b>American Shad</b>					
Coolwater 12 - 18°C	Fingerling	Freshwater	400,355	544.48	Maryland
Coolwater 12 - 18°C	Fingerling	Freshwater	1,240	11.26	Pennsylvania
Coolwater 12 - 18°C	Fry	Freshwater	3,914,500	7.45	Maryland
Coolwater 12 - 18°C	Fry	Freshwater	4,490,184	8.60	Pennsylvania
Coolwater 12 - 18°C	Fry	Freshwater	249,643	0.47	South Carolina
Warmwater >18°C	Fry	Freshwater	286,818	316.00	Delaware
Warmwater >18°C	Fry	Freshwater	524,753	1.00	Maryland
Warmwater >18°C	Fry	Freshwater	1,332,000	100.00	North Carolina
Warmwater >18°C	Fry	Freshwater	1,346,834	3.59	North Carolina
Warmwater >18°C	Fry	Freshwater	2,920,646	4.00	Virginia
<b>Apache Trout</b>					
Coldwater <12°C	Catchable	Freshwater	156,222	39,316.00	Arizona
Coldwater <12°C	Catchable	Freshwater	59,965	23,031.00	Arizona
Coldwater <12°C	Fingerling	Freshwater	400	14.00	Arizona
<b>Arctic Char</b>					
Coldwater <12°C	Broodstock	Freshwater	343	2,342.48	Alaska
Coldwater <12°C	Catchable	Freshwater	34,558	9,924.42	Alaska
Coldwater <12°C	Fingerling	Freshwater	59,629	650.99	Alaska
Coldwater <12°C	Fry	Freshwater	130,000	45.76	Alaska
<b>Arctic Grayling</b>					
Coldwater <12°C	Catchable	Freshwater	279	25.90	Alaska
Coldwater <12°C	Catchable	Freshwater	30,000	6,860.00	Montana
Coldwater <12°C	Fingerling	Freshwater	14,700	68.38	Alaska

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Fingerling	Freshwater	20,067	3,723.00	Montana
Coldwater <12°C	Fingerling	Freshwater	2,950	128.00	Wyoming
Coldwater <12°C	Fry	Freshwater	1,723	1.00	Idaho
Coldwater <12°C	Fry	Freshwater	494,536	50.00	Montana
Coldwater <12°C	Fry	Freshwater	18,810	2.10	Utah

**Arkansas Darter**

Warmwater >18°C	Fingerling	Freshwater	4,258	2.29	Colorado
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**Atlantic Salmon**

Coldwater <12°C	Broodstock	Freshwater	3,800	13,000.00	Connecticut
Coldwater <12°C	Broodstock	Freshwater	250	3,500.00	Massachusetts
Coldwater <12°C	Catchable	Freshwater	36,655	8,333.00	Connecticut
Coldwater <12°C	Catchable	Freshwater	622,021	111,160.50	Maine
Coldwater <12°C	Catchable	Freshwater	100,666	30,068.00	Massachusetts
Coldwater <12°C	Catchable	Freshwater	1,638	317.00	New Hampshire
Coldwater <12°C	Catchable	Freshwater	990	300.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	5,040	105.00	Connecticut
Coldwater <12°C	Fingerling	Freshwater	420,595	12,359.77	Maine
Coldwater <12°C	Fingerling	Freshwater	813	21.40	Massachusetts
Coldwater <12°C	Fingerling	Freshwater	85,000	13,000.00	Michigan
Coldwater <12°C	Fingerling	Freshwater	8,835	517.00	Rhode Island
Coldwater <12°C	Fingerling	Freshwater	29,039	72.70	Vermont
Coldwater <12°C	Fry	Freshwater	671,432	228.10	Connecticut
Coldwater <12°C	Fry	Freshwater	829,259	1,469.00	Connecticut
Coldwater <12°C	Fry	Freshwater	3,397,680	1,544.39	Maine
Coldwater <12°C	Fry	Freshwater	2,300	1.00	Maryland
Coldwater <12°C	Fry	Freshwater	1,071,109	355.30	Massachusetts
Coldwater <12°C	Fry	Freshwater	1,000,000	350.00	Massachusetts
Coldwater <12°C	Fry	Freshwater	1,885,589	681.90	New Hampshire
Coldwater <12°C	Fry	Freshwater	3,200	1.70	Rhode Island
Coldwater <12°C	Fry	Freshwater	2,837,837	968.90	Vermont
Coldwater <12°C	Fry	Freshwater	178,000	78.00	Vermont
Coldwater <12°C	Fry	Freshwater	4,000	1.30	West Virginia

**Atlantic Sturgeon**

Warmwater >18°C	Broodstock	Brackish	145	3,174.00	Maryland
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Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
<b>Barrens Topminnow</b>					
Warmwater >18°C	Fingerling	Freshwater	4,117	30.50	Tennessee
<b>Black Crappie</b>					
Coolwater 12 - 18°C	Catchable	Freshwater	1,008	210.00	Washington
Coolwater 12 - 18°C	Fry	Freshwater	90,888	225.00	Washington
Warmwater >18°C	Broodstock	Freshwater	1,110	830.00	Arkansas
Warmwater >18°C	Catchable	Freshwater	4,080	660.00	Arkansas
Warmwater >18°C	Catchable	Freshwater	1,000	200.00	New Jersey
Warmwater >18°C	Fingerling	Freshwater	129,041	1,638.00	Alabama
Warmwater >18°C	Fingerling	Freshwater	1,049,274	8,069.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	430,054	504.00	Colorado
Warmwater >18°C	Fingerling	Freshwater	8,154	138.28	Indiana
Warmwater >18°C	Fingerling	Freshwater	81,710	482.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	57,050	402.50	Mississippi
Warmwater >18°C	Fingerling	Freshwater	246,410	325.00	Nebraska
Warmwater >18°C	Fingerling	Freshwater	25,000	50.00	North Dakota
Warmwater >18°C	Fingerling	Freshwater	193,786	2,488.00	Pennsylvania
Warmwater >18°C	Fingerling	Freshwater	19,887	45.50	South Dakota
Warmwater >18°C	Fingerling	Freshwater	759,090	7,452.86	Tennessee
Warmwater >18°C	Fingerling	Freshwater	2,565	133.10	Wisconsin
Warmwater >18°C	Fry	Freshwater	75,925	44.00	South Dakota
<b>Blue Catfish</b>					
Warmwater >18°C	Catchable	Freshwater	3	45.00	Georgia
Warmwater >18°C	Catchable	Freshwater	1,450	372.00	Nebraska
Warmwater >18°C	Fingerling	Freshwater	46,000	120.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	233,991	23,876.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	25,860	12,690.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	16,800	636.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	21,186	822.00	Oklahoma
Warmwater >18°C	Fingerling	Freshwater	77,514	7,624.00	Tennessee
Warmwater >18°C	Fingerling	Freshwater	127,166	698.85	Texas
Warmwater >18°C	Fry	Freshwater	870,000	70.00	Arkansas
<b>Blue/Channel Catfish</b>					
Warmwater >18°C	Fingerling	Freshwater	169,750	717.80	Colorado

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
<b>Blueback Herring</b>					
Coolwater 12 - 18°C	Fry	Freshwater	217,989	1.00	Virginia
<b>Bluegill</b>					
Warmwater >18°C	Broodstock	Freshwater	1,000	166.00	Arkansas
Warmwater >18°C	Broodstock	Freshwater	443	64.17	Indiana
Warmwater >18°C	Broodstock	Freshwater	1,400	175.00	Iowa
Warmwater >18°C	Broodstock	Freshwater	3,095	325.00	Oklahoma
Warmwater >18°C	Catchable	Freshwater	500	250.00	Georgia
Warmwater >18°C	Catchable	Freshwater	335	83.75	Louisiana
Warmwater >18°C	Catchable	Freshwater	3,633	618.00	Nebraska
Warmwater >18°C	Catchable	Freshwater	10,644	1,460.00	New Jersey
Warmwater >18°C	Catchable	Freshwater	50	5.10	Pennsylvania
Warmwater >18°C	Fingerling	Freshwater	199,700	1,156.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	425,700	480.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	4,131	155.00	Colorado
Warmwater >18°C	Fingerling	Freshwater	75,180	117.00	Florida
Warmwater >18°C	Fingerling	Freshwater	3,651,925	3,847.59	Georgia
Warmwater >18°C	Fingerling	Freshwater	1,132,842	1,259.00	Illinois
Warmwater >18°C	Fingerling	Freshwater	455,431	452.14	Indiana
Warmwater >18°C	Fingerling	Freshwater	2,041,746	1,715.90	Iowa
Warmwater >18°C	Fingerling	Freshwater	1,098,512	4,904.73	Kansas
Warmwater >18°C	Fingerling	Freshwater	297,000	342.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	755,744	2,493.00	Louisiana
Warmwater >18°C	Fingerling	Freshwater	636,746	2,843.00	Louisiana
Warmwater >18°C	Fingerling	Freshwater	100,548	38.73	Maryland
Warmwater >18°C	Fingerling	Freshwater	50,000	352.70	Mississippi
Warmwater >18°C	Fingerling	Freshwater	2,182,425	4,043.00	Missouri
Warmwater >18°C	Fingerling	Freshwater	850,816	789.00	Nebraska
Warmwater >18°C	Fingerling	Freshwater	179,200	101.90	North Dakota
Warmwater >18°C	Fingerling	Freshwater	1,695,287	2,143.40	Oklahoma
Warmwater >18°C	Fingerling	Freshwater	6,500	13.00	Pennsylvania
Warmwater >18°C	Fingerling	Freshwater	305,950	380.00	South Carolina
Warmwater >18°C	Fingerling	Freshwater	2,000,000	3,333.00	South Carolina
Warmwater >18°C	Fingerling	Freshwater	666,372	274.11	Tennessee
Warmwater >18°C	Fingerling	Freshwater	828,351	749.56	Texas
Warmwater >18°C	Fingerling	Freshwater	4,465	64.90	Wisconsin
Warmwater >18°C	Fry	Freshwater	9,000	18.00	Louisiana

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fry	Freshwater	100,000	20.00	South Dakota
Warmwater >18°C	Fry	Freshwater	112,805	43.05	Wisconsin
Warmwater >18oC	Fingerling	Freshwater	129,053	71.00	Ohio
<b>Bluegill/Redear Sunfish</b>					
Warmwater >18°C	Catchable	Freshwater	2,500	750.00	Alabama
Warmwater >18°C	Fingerling	Freshwater	4,462,358	8,035.00	Alabama
<b>Bonytail Chub</b>					
Coolwater 12 - 18°C	Catchable	Freshwater	16,969	8,594.00	Arizona
Coolwater 12 - 18°C	Fingerling	Freshwater	18,580	463.00	Arizona
Coolwater 12 - 18°C	Fry	Freshwater	20,000	1.00	Utah
Warmwater >18°C	Catchable	Freshwater	7,194	1,486.70	Utah
Warmwater >18°C	Fingerling	Freshwater	5,149	1,095.00	Colorado
<b>Brook Trout</b>					
Coldwater <12°C	Broodstock	Freshwater	2,300	2,900.00	Connecticut
Coldwater <12°C	Broodstock	Freshwater	300	500.00	Iowa
Coldwater <12°C	Broodstock	Freshwater	740	1,159.00	Michigan
Coldwater <12°C	Broodstock	Freshwater	2,000	4,000.00	Minnesota
Coldwater <12°C	Broodstock	Freshwater	2,407	5,000.00	New Hampshire
Coldwater <12°C	Broodstock	Freshwater	2,530	6,217.00	New Jersey
Coldwater <12°C	Broodstock	Freshwater	4,674	5,941.00	North Carolina
Coldwater <12°C	Broodstock	Freshwater	2,061	2,477.00	South Carolina
Coldwater <12°C	Broodstock	Freshwater	583	1,166.00	Wisconsin
Coldwater <12°C	Catchable	Freshwater	175,731	88,064.00	California
Coldwater <12°C	Catchable	Freshwater	110,990	58,843.00	Connecticut
Coldwater <12°C	Catchable	Freshwater	38,953	20,756.00	Iowa
Coldwater <12°C	Catchable	Freshwater	906,102	208,821.00	Maine
Coldwater <12°C	Catchable	Freshwater	10,000	6,500.00	Massachusetts
Coldwater <12°C	Catchable	Freshwater	70,000	16,500.00	Massachusetts
Coldwater <12°C	Catchable	Freshwater	7,500	2,215.00	Michigan
Coldwater <12°C	Catchable	Freshwater	30,000	12,000.00	Minnesota
Coldwater <12°C	Catchable	Freshwater	3,616	1,462.00	Minnesota
Coldwater <12°C	Catchable	Freshwater	551,461	196,025.00	New Hampshire
Coldwater <12°C	Catchable	Freshwater	231,860	113,628.00	New Jersey
Coldwater <12°C	Catchable	Freshwater	165,380	54,460.00	New York
Coldwater <12°C	Catchable	Freshwater	323,522	164,882.00	North Carolina

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Catchable	Freshwater	2,193	1,907.00	Oregon
Coldwater <12°C	Catchable	Freshwater	73,104	43,340.00	Pennsylvania
Coldwater <12°C	Catchable	Freshwater	459,756	318,934.00	Pennsylvania
Coldwater <12°C	Catchable	Freshwater	751,455	397,241.00	Pennsylvania
Coldwater <12°C	Catchable	Freshwater	27,100	29,268.00	Rhode Island
Coldwater <12°C	Catchable	Freshwater	19,294	6,135.00	South Carolina
Coldwater <12°C	Catchable	Freshwater	121,000	35,000.00	Vermont
Coldwater <12°C	Catchable	Freshwater	68,897	38,815.00	Virginia
Coldwater <12°C	Catchable	Freshwater	2,670	1,319.00	Washington
Coldwater <12°C	Catchable	Freshwater	125,227	80,808.00	West Virginia
Coldwater <12°C	Catchable	Freshwater	2,238	1,311.50	Wisconsin
Coldwater <12°C	Catchable	Freshwater	2,500	2,270.00	Wisconsin
Coldwater <12°C	Fingerling	Freshwater	62,601	674.00	Arizona
Coldwater <12°C	Fingerling	Freshwater	48,000	338.00	Arizona
Coldwater <12°C	Fingerling	Freshwater	67,000	6,355.00	Arkansas
Coldwater <12°C	Fingerling	Freshwater	57,600	4,000.00	California
Coldwater <12°C	Fingerling	Freshwater	59,826	2,690.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	37,400	990.00	Iowa
Coldwater <12°C	Fingerling	Freshwater	293,500	12,878.00	Michigan
Coldwater <12°C	Fingerling	Freshwater	102,415	661.60	Michigan
Coldwater <12°C	Fingerling	Freshwater	110,000	3,100.00	Minnesota
Coldwater <12°C	Fingerling	Freshwater	89,127	1,530.00	Minnesota
Coldwater <12°C	Fingerling	Freshwater	52,954	1,008.00	Montana
Coldwater <12°C	Fingerling	Freshwater	225,684	10,433.00	New Hampshire
Coldwater <12°C	Fingerling	Freshwater	220,500	1,210.00	New Jersey
Coldwater <12°C	Fingerling	Freshwater	6,750	361.00	New York
Coldwater <12°C	Fingerling	Freshwater	449,595	21,195.00	New York
Coldwater <12°C	Fingerling	Freshwater	16	0.20	North Carolina
Coldwater <12°C	Fingerling	Freshwater	239,448	1,392.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	193,100	8,793.00	Pennsylvania
Coldwater <12°C	Fingerling	Freshwater	10,447	613.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	18,911	97.50	Utah
Coldwater <12°C	Fingerling	Freshwater	30,000	167.00	Vermont
Coldwater <12°C	Fingerling	Freshwater	67,600	3,380.00	Virginia
Coldwater <12°C	Fingerling	Freshwater	16,315	731.00	West Virginia
Coldwater <12°C	Fingerling	Freshwater	120,351	13,341.00	Wisconsin
Coldwater <12°C	Fingerling	Freshwater	6,300	90.00	Wisconsin
Coldwater <12°C	Fingerling	Freshwater	120,042	908.00	Wisconsin
Coldwater <12°C	Fingerling	Freshwater	109,246	39,363.00	Wisconsin

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Fingerling	Freshwater	74,330	2,246.80	Wyoming
Coldwater <12°C	Fry	Freshwater	142,840	343.00	California
Coldwater <12°C	Fry	Freshwater	91,936	383.00	Idaho
Coldwater <12°C	Fry	Freshwater	100,000	75.00	Vermont
Coldwater <12°C	Fry	Freshwater	131,814	2,348.00	Washington
Coldwater <12°C	Fry	Freshwater	20,000	23.30	Wisconsin
Coolwater 12 - 18°C	Fingerling	Freshwater	194,084	5,155.00	Utah

**Brown Bullhead**

Warmwater >18°C	Catchable	Freshwater	1,200	300.00	New Jersey
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**Brown Trout**

Coldwater <12°C	Broodstock	Freshwater	9,518	7,887.00	California
Coldwater <12°C	Broodstock	Freshwater	6,900	8,317.00	Connecticut
Coldwater <12°C	Broodstock	Freshwater	455	510.00	Iowa
Coldwater <12°C	Broodstock	Freshwater	2,344	1,674.00	Michigan
Coldwater <12°C	Broodstock	Freshwater	3,400	10,000.00	Minnesota
Coldwater <12°C	Broodstock	Freshwater	1,177	2,665.00	New Hampshire
Coldwater <12°C	Broodstock	Freshwater	2,185	8,021.00	New Jersey
Coldwater <12°C	Broodstock	Freshwater	8,238	9,625.00	North Carolina
Coldwater <12°C	Broodstock	Freshwater	1,037	2,000.00	South Carolina
Coldwater <12°C	Broodstock	Freshwater	410	1,640.00	Vermont
Coldwater <12°C	Broodstock	Freshwater	2,803	7,185.00	Wisconsin
Coldwater <12°C	Catchable	Freshwater	11,690	4,371.00	Arizona
Coldwater <12°C	Catchable	Freshwater	123,315	44,625.00	California
Coldwater <12°C	Catchable	Freshwater	453,176	252,919.00	Connecticut
Coldwater <12°C	Catchable	Freshwater	71,585	25,348.00	Georgia
Coldwater <12°C	Catchable	Freshwater	19,999	3,184.00	Georgia
Coldwater <12°C	Catchable	Freshwater	34,306	17,891.00	Iowa
Coldwater <12°C	Catchable	Freshwater	47,275	12,493.00	Kentucky
Coldwater <12°C	Catchable	Freshwater	177,445	81,189.00	Maine
Coldwater <12°C	Catchable	Freshwater	26,000	6,000.00	Massachusetts
Coldwater <12°C	Catchable	Freshwater	63,000	54,000.00	Massachusetts
Coldwater <12°C	Catchable	Freshwater	98,000	30,000.00	Massachusetts
Coldwater <12°C	Catchable	Freshwater	26,000	6,500.00	Minnesota
Coldwater <12°C	Catchable	Freshwater	37,959	16,853.00	Missouri
Coldwater <12°C	Catchable	Freshwater	8,562	3,403.00	Nebraska
Coldwater <12°C	Catchable	Freshwater	146,105	51,176.00	New Hampshire
Coldwater <12°C	Catchable	Freshwater	182,944	87,783.00	New Jersey

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Catchable	Freshwater	1,647,305	499,613.00	New York
Coldwater <12°C	Catchable	Freshwater	8,850	1,872.00	North Carolina
Coldwater <12°C	Catchable	Freshwater	153,778	81,280.00	North Carolina
Coldwater <12°C	Catchable	Freshwater	3,900	1,702.00	North Dakota
Coldwater <12°C	Catchable	Freshwater	53,593	8,390.00	Oregon
Coldwater <12°C	Catchable	Freshwater	155,988	155,292.00	Pennsylvania
Coldwater <12°C	Catchable	Freshwater	1,843,287	944,346.00	Pennsylvania
Coldwater <12°C	Catchable	Freshwater	33,000	42,570.00	Rhode Island
Coldwater <12°C	Catchable	Freshwater	145,260	35,349.00	South Carolina
Coldwater <12°C	Catchable	Freshwater	17,300	4,950.00	South Dakota
Coldwater <12°C	Catchable	Freshwater	137,566	20,853.00	Tennessee
Coldwater <12°C	Catchable	Freshwater	167,065	57,595.00	Vermont
Coldwater <12°C	Catchable	Freshwater	171,969	96,884.00	Virginia
Coldwater <12°C	Catchable	Freshwater	156,197	46,231.00	Washington
Coldwater <12°C	Catchable	Freshwater	156,197	46,231.00	Washington
Coldwater <12°C	Catchable	Freshwater	108,714	56,519.00	West Virginia
Coldwater <12°C	Catchable	Freshwater	858,204	145,319.00	Wisconsin
Coldwater <12°C	Catchable	Freshwater	1,830	2,440.00	Wisconsin
Coldwater <12°C	Catchable	Freshwater	3,149	5,429.00	Wyoming
Coldwater <12°C	Fingerling	Freshwater	72,128	2,422.00	Arizona
Coldwater <12°C	Fingerling	Freshwater	65,300	6,733.00	Arizona
Coldwater <12°C	Fingerling	Freshwater	151,666	13,943.00	Arkansas
Coldwater <12°C	Fingerling	Freshwater	72,000	4,740.00	Arkansas
Coldwater <12°C	Fingerling	Freshwater	62,910	4,660.00	California
Coldwater <12°C	Fingerling	Freshwater	366,147	8,470.00	Colorado
Coldwater <12°C	Fingerling	Freshwater	84,821	3,502.00	Connecticut
Coldwater <12°C	Fingerling	Freshwater	75,000	2,091.00	Georgia
Coldwater <12°C	Fingerling	Freshwater	103,595	4,818.00	Illinois
Coldwater <12°C	Fingerling	Freshwater	36,371	1,966.00	Indiana
Coldwater <12°C	Fingerling	Freshwater	328,800	6,453.00	Iowa
Coldwater <12°C	Fingerling	Freshwater	450	4.00	Kentucky
Coldwater <12°C	Fingerling	Freshwater	1,867,305	186,730.00	Michigan
Coldwater <12°C	Fingerling	Freshwater	470,000	1,800.00	Minnesota
Coldwater <12°C	Fingerling	Freshwater	42,287	807.00	Montana
Coldwater <12°C	Fingerling	Freshwater	3,900	320.00	Nebraska
Coldwater <12°C	Fingerling	Freshwater	31,998	1,242.40	New Hampshire
Coldwater <12°C	Fingerling	Freshwater	169,600	467.00	New Jersey
Coldwater <12°C	Fingerling	Freshwater	55,500	4,772.00	New Mexico
Coldwater <12°C	Fingerling	Freshwater	13,210	706.00	New York

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Fingerling	Freshwater	535,270	44,442.00	New York
Coldwater <12°C	Fingerling	Freshwater	64,014	958.30	North Carolina
Coldwater <12°C	Fingerling	Freshwater	28,172	2,184.00	Oklahoma
Coldwater <12°C	Fingerling	Freshwater	9,310	1,330.00	Oklahoma
Coldwater <12°C	Fingerling	Freshwater	18,750	250.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	1,122,141	19,961.00	Pennsylvania
Coldwater <12°C	Fingerling	Freshwater	167,069	7,972.00	South Carolina
Coldwater <12°C	Fingerling	Freshwater	8,740	46.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	125,474	5,628.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	2,418	78.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	3,900	75.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	210,967	16,385.00	Utah
Coldwater <12°C	Fingerling	Freshwater	140,500	7,025.00	Virginia
Coldwater <12°C	Fingerling	Freshwater	165,039	5,658.00	West Virginia
Coldwater <12°C	Fingerling	Freshwater	987,470	92,015.00	Wisconsin
Coldwater <12°C	Fingerling	Freshwater	730,255	2,533.00	Wisconsin
Coldwater <12°C	Fingerling	Freshwater	115,070	6,630.40	Wyoming
Coldwater <12°C	Fingerling	Freshwater	3,987	266.00	Wyoming
Coldwater <12°C	Fry	Freshwater	206,000	740.00	California
Coldwater <12°C	Fry	Freshwater	404,071	1,371.00	Connecticut
Coldwater <12°C	Fry	Freshwater	157,996	28.98	New Mexico
Coldwater <12°C	Fry	Freshwater	14,490	35.00	Tennessee
Coldwater <12°C	Fry	Freshwater	75,260	53.00	Tennessee
Coldwater <12oC	Broodstock	Freshwater	763	1,767.00	Ohio
Coldwater <12oC	Fingerling	Freshwater	35,424	6,102.00	Ohio
Coldwater <12oC	Fingerling	Freshwater	59,960	215.00	Ohio
Coolwater 12 - 18°C	Fry	Freshwater	437,138	17,292.00	Washington
Warmwater >18°C	Catchable	Freshwater	14,332	9,795.00	Maryland
Warmwater >18°C	Fingerling	Freshwater	7,000	499.00	Maryland

**Chain Pickerel**

Warmwater >18°C	Fingerling	Freshwater	4,750	80.00	Pennsylvania
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**Channel Catfish**

Coolwater 12 - 18°C	Catchable	Freshwater	16,950	2,568.00	Washington
Warmwater >18°C	Broodstock	Freshwater	150	2,142.00	New Jersey
Warmwater >18°C	Broodstock	Freshwater	250	3,000.00	North Carolina
Warmwater >18°C	Broodstock	Freshwater	350	3,100.00	Oklahoma

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Broodstock	Freshwater	417	3,430.33	Texas
Warmwater >18°C	Catchable	Freshwater	118,828	62,754.00	Alabama
Warmwater >18°C	Catchable	Freshwater	543,498	435,656.00	Arkansas
Warmwater >18°C	Catchable	Freshwater	175,400	26,852.00	Florida
Warmwater >18°C	Catchable	Freshwater	334,478	60,189.96	Georgia
Warmwater >18°C	Catchable	Freshwater	4	16.00	Georgia
Warmwater >18°C	Catchable	Freshwater	398,789	72,507.00	Illinois
Warmwater >18°C	Catchable	Freshwater	98,443	18,536.74	Indiana
Warmwater >18°C	Catchable	Freshwater	2,721	311.00	Iowa
Warmwater >18°C	Catchable	Freshwater	360,606	120,202.00	Kansas
Warmwater >18°C	Catchable	Freshwater	2,337	5,070.00	Kentucky
Warmwater >18°C	Catchable	Freshwater	45	10.00	Minnesota
Warmwater >18°C	Catchable	Freshwater	17,030	911.70	Minnesota
Warmwater >18°C	Catchable	Freshwater	750	1,500.00	Mississippi
Warmwater >18°C	Catchable	Freshwater	26,590	21,982.50	Mississippi
Warmwater >18°C	Catchable	Freshwater	2,000	1,045.00	Mississippi
Warmwater >18°C	Catchable	Freshwater	87,828	87,828.00	Missouri
Warmwater >18°C	Catchable	Freshwater	9,700	743.00	Montana
Warmwater >18°C	Catchable	Freshwater	201,626	57,064.00	Nebraska
Warmwater >18°C	Catchable	Freshwater	5,425	2,920.00	New Jersey
Warmwater >18°C	Catchable	Freshwater	90,218	22,857.00	New Mexico
Warmwater >18°C	Catchable	Freshwater	180,712	43,914.00	North Carolina
Warmwater >18°C	Catchable	Freshwater	213,185	30,426.00	Oklahoma
Warmwater >18°C	Catchable	Freshwater	50,500	10,776.00	Oklahoma
Warmwater >18°C	Catchable	Freshwater	6,500	3,250.00	South Carolina
Warmwater >18°C	Catchable	Freshwater	22,536	11,267.00	South Carolina
Warmwater >18°C	Catchable	Freshwater	25,515	19,817.00	South Carolina
Warmwater >18°C	Catchable	Freshwater	144	1,440.00	Tennessee
Warmwater >18°C	Catchable	Freshwater	387,687	158,238.50	Texas
Warmwater >18°C	Catchable	Freshwater	11,080	7,152.00	Texas
Warmwater >18°C	Catchable	Freshwater	99	18.00	Wisconsin
Warmwater >18°C	Fingerling	Freshwater	246,385	8,473.00	Alabama
Warmwater >18°C	Fingerling	Freshwater	1,675	2,500.00	Arizona
Warmwater >18°C	Fingerling	Freshwater	37,440	2,354.00	Arizona
Warmwater >18°C	Fingerling	Freshwater	259,600	4,811.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	1,017,206	124,580.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	1,101,783	14,830.00	Colorado
Warmwater >18°C	Fingerling	Freshwater	552,146	10,087.40	Georgia
Warmwater >18°C	Fingerling	Freshwater	50,000	9,500.00	Hawaii

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fingerling	Freshwater	82,626	972.00	Illinois
Warmwater >18°C	Fingerling	Freshwater	45,133	329.02	Indiana
Warmwater >18°C	Fingerling	Freshwater	802,923	1,926.99	Kansas
Warmwater >18°C	Fingerling	Freshwater	173,226	46,250.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	141,460	1,188.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	256,421	4,369.15	Louisiana
Warmwater >18°C	Fingerling	Freshwater	124,729	1,157.20	Minnesota
Warmwater >18°C	Fingerling	Freshwater	50,200	237.00	Mississippi
Warmwater >18°C	Fingerling	Freshwater	255,750	129,237.00	Missouri
Warmwater >18°C	Fingerling	Freshwater	536,960	23,485.00	Missouri
Warmwater >18°C	Fingerling	Freshwater	33,205	1,095.00	New Jersey
Warmwater >18°C	Fingerling	Freshwater	464	3.20	New Mexico
Warmwater >18°C	Fingerling	Freshwater	300,000	15,000.00	North Carolina
Warmwater >18°C	Fingerling	Freshwater	65,320	1,890.00	Oklahoma
Warmwater >18°C	Fingerling	Freshwater	276,354	3,408.70	Oklahoma
Warmwater >18°C	Fingerling	Freshwater	155,250	3,491.10	Pennsylvania
Warmwater >18°C	Fingerling	Freshwater	42,577	5,989.00	Tennessee
Warmwater >18°C	Fingerling	Freshwater	625,882	5,507.05	Texas
Warmwater >18°C	Fry	Freshwater	4,085,000	230.00	Arkansas
Warmwater >18°C	Fry	Freshwater	2,165,000	132.94	Georgia
Warmwater >18°C	Fry	Freshwater	186,950	56.09	Indiana
Warmwater >18°C	Fry	Freshwater	1,333,253	1,761.00	Missouri
Warmwater >18°C	Fry	Freshwater	350,000	100.00	North Carolina
Warmwater >18°C	Fry	Freshwater	838,275	48.40	Oklahoma
Warmwater >18°C	Catchable	Freshwater	8,881	4,957.00	Ohio
Warmwater >18°C	Fingerling	Freshwater	1,036	185.00	Ohio

### **Chihuahia Chub**

Coolwater 12 - 18°C	Fingerling	Freshwater	4,485	295.00	New Mexico
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### **China Rockfish**

Coldwater <12°C	Fingerling	Marine	1,000	11.00	Washington
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### **Chinook Salmon**

Coldwater <12°C	Catchable	Freshwater	135,536	31,622.61	Alaska
Coldwater <12°C	Catchable	Freshwater	2,238,983	209,523.00	California
Coldwater <12°C	Catchable	Freshwater	1,979	1,717.00	North Dakota
Coldwater <12°C	Catchable	Freshwater	179	1,790.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	1,866,594	54,232.10	Alaska

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Fingerling	Freshwater	200,000	5,280.00	Alaska
Coldwater <12°C	Fingerling	Freshwater	54,909	3,072.00	Alaska
Coldwater <12°C	Fingerling	Freshwater	696,276	50,350.00	California
Coldwater <12°C	Fingerling	Freshwater	12,325,830	149,707.00	California
Coldwater <12°C	Fingerling	Freshwater	19,804,510	465,690.00	California
Coldwater <12°C	Fingerling	Freshwater	1,697,326	79,852.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	251,612	7,525.00	Illinois
Coldwater <12°C	Fingerling	Freshwater	6,505,783	65,058.00	Michigan
Coldwater <12°C	Fingerling	Freshwater	173,792	1,777.00	Montana
Coldwater <12°C	Fingerling	Freshwater	1,793,780	20,014.00	New York
Coldwater <12°C	Fingerling	Freshwater	200,000	7,852.00	North Dakota
Coldwater <12°C	Fingerling	Freshwater	1,015,787	48,289.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	181,177	601.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	28,013,760	1,373,865.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	23,665,790	312,582.30	Washington
Coldwater <12°C	Fingerling	Freshwater	3,035,959	205,777.00	Washington
Coldwater <12°C	Fingerling	Freshwater	1,411,968	17,202.00	Wisconsin
Coldwater <12°C	Fry	Freshwater	63,830	60.68	Alaska
Coldwater <12°C	Fry	Freshwater	14,360,060	144,670.00	California
Coldwater <12°C	Fry	Freshwater	116,584	97.00	Washington
Coldwater <12°C	Broodstock	Marine	925	1,300.00	Washington
Coldwater <12°C	Broodstock	Marine	337	755.00	Washington
Coldwater <12°C	Broodstock	Marine	11	26.00	Washington
Coldwater <12°C	Broodstock	Marine	1,330	115.00	Washington
Coldwater <12°C	Fingerling	Marine	527,000	10,551.00	Alaska

**Chum Salmon**

Coldwater <12°C	Fingerling	Freshwater	12,381	27.27	Washington
Coldwater <12°C	Fingerling	Freshwater	2,330,996	5,196.41	Washington
Coldwater <12°C	Fingerling	Freshwater	2,394,000	4,065.79	Washington
Coldwater <12°C	Fingerling	Freshwater	2,656,822	6,642.06	Washington
Coldwater <12°C	Fingerling	Freshwater	540,124	822.80	Washington
Coldwater <12°C	Fingerling	Freshwater	772,500	1,403.18	Washington
Coldwater <12°C	Fingerling	Freshwater	966,157	1,971.00	Washington
Coldwater <12°C	Fingerling	Freshwater	878,000	1,227.89	Washington
Coldwater <12°C	Fingerling	Freshwater	379,570	988.99	Washington
Coldwater <12°C	Fingerling	Freshwater	8,800,000	22,561.47	Washington
Coldwater <12°C	Fry	Freshwater	24,029,240	60,391.00	Washington

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Fry	Marine	4,719,382	18,170.00	Alaska
<b>Cobia</b>					
Warmwater >18°C	Catchable	Marine	500	346.00	South Carolina
Warmwater >18°C	Fingerling	Marine	10,000	32.00	South Carolina
<b>Coho Salmon</b>					
Coldwater <12°C	Broodstock	Freshwater	86	330.00	California
Coldwater <12°C	Catchable	Freshwater	596,077	62,696.00	California
Coldwater <12°C	Catchable	Freshwater	280,650	33,200.00	Idaho
Coldwater <12°C	Catchable	Freshwater	263,826	20,513.00	Wisconsin
Coldwater <12°C	Fingerling	Freshwater	934,799	39,815.53	Alaska
Coldwater <12°C	Fingerling	Freshwater	49,130	1,357.00	Alaska
Coldwater <12°C	Fingerling	Freshwater	49,220	1,360.00	Alaska
Coldwater <12°C	Fingerling	Freshwater	13,984	291.00	California
Coldwater <12°C	Fingerling	Freshwater	553,625	25,750.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	304,242	8,512.00	Illinois
Coldwater <12°C	Fingerling	Freshwater	237,009	15,145.86	Indiana
Coldwater <12°C	Fingerling	Freshwater	1,904,544	150,000.00	Michigan
Coldwater <12°C	Fingerling	Freshwater	254,000	19,768.00	New York
Coldwater <12°C	Fingerling	Freshwater	5,556,499	356,828.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	554,445	42,650.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	35,450	1,969.44	Washington
Coldwater <12°C	Fingerling	Freshwater	992,900	58,405.88	Washington
Coldwater <12°C	Fingerling	Freshwater	947,468	59,216.75	Washington
Coldwater <12°C	Fingerling	Freshwater	175,380	13,387.79	Washington
Coldwater <12°C	Fingerling	Freshwater	572,637	31,813.17	Washington
Coldwater <12°C	Fingerling	Freshwater	845,807	38,305.95	Washington
Coldwater <12°C	Fingerling	Freshwater	517,405	47,468.35	Washington
Coldwater <12°C	Fingerling	Freshwater	14,034,560	1,409,704.00	Washington
Coldwater <12°C	Fingerling	Freshwater	546,450	1,233.54	Washington
Coldwater <12°C	Fingerling	Freshwater	12,750	708.33	Washington
Coldwater <12°C	Fingerling	Freshwater	111,820	4,219.62	Washington
Coldwater <12°C	Fingerling	Freshwater	220,572	10,503.43	Washington
Coldwater <12°C	Fingerling	Freshwater	2,584,349	135,201.00	Washington
Coldwater <12°C	Fingerling	Freshwater	239,550	17,469.35	Washington
Coldwater <12°C	Fingerling	Freshwater	283,695	16,990.00	Washington
Coldwater <12°C	Fingerling	Freshwater	208,883	13,195.00	Wisconsin
Coldwater <12°C	Fry	Freshwater	244,723	972.13	Alaska

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Fry	Freshwater	12,139	82.00	California
Coldwater <12°C	Fry	Freshwater	56,868	51.00	Oregon
Coldwater <12°C	Fry	Freshwater	652,300	608.00	Washington
Coolwater 12 - 18°C	Broodstock	Freshwater	33	123.50	California
Coolwater 12 - 18°C	Fingerling	Freshwater	19,547	3,007.20	California
Coldwater <12°C	Fingerling	Marine	2,056,530	111,526.00	Alaska
Coldwater <12°C	Fingerling	Marine	437,316	33,639.69	Washington
Coldwater <12°C	Fingerling	Marine	179,711	11,980.73	Washington
Coldwater <12°C	Fingerling	Marine	448,174	34,742.17	Washington
Coldwater <12°C	Fingerling	Marine	1,795,142	108,509.20	Washington
Coolwater 12 - 18°C	Broodstock	Marine	67	250.50	California

### Colorado Pike Minnow

Coolwater 12 - 18°C	Catchable	Freshwater	30	3.00	Kansas
Coolwater 12 - 18°C	Catchable	Freshwater	500	53.00	New Mexico
Coolwater 12 - 18°C	Fingerling	Freshwater	280,000	634.00	New Mexico
Warmwater >18°C	Fingerling	Freshwater	4,019	360.00	Colorado

### Comanche Springs Pupfish

Coolwater 12 - 18°C	Fingerling	Freshwater	283	2.00	New Mexico
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### Common Shinner

Warmwater >18°C	Fingerling	Freshwater	2,135	3.11	Colorado
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### Cutthroat Trout

Coldwater <12°C	Broodstock	Freshwater	6,650	10,277.50	Wyoming
Coldwater <12°C	Catchable	Freshwater	10,492	4,064.00	California
Coldwater <12°C	Catchable	Freshwater	1,746	841.00	California
Coldwater <12°C	Catchable	Freshwater	40,777	20,523.00	Colorado
Coldwater <12°C	Catchable	Freshwater	19,536	7,245.70	Colorado
Coldwater <12°C	Catchable	Freshwater	111,075	23,885.00	Idaho
Coldwater <12°C	Catchable	Freshwater	4,310	2,679.00	Montana
Coldwater <12°C	Catchable	Freshwater	19,838	10,562.00	Montana
Coldwater <12°C	Catchable	Freshwater	10,136	2,217.00	Nevada
Coldwater <12°C	Catchable	Freshwater	56,880	13,524.00	Nevada
Coldwater <12°C	Catchable	Freshwater	1,521	346.00	New Mexico
Coldwater <12°C	Catchable	Freshwater	40,582	19,800.00	North Dakota
Coldwater <12°C	Catchable	Freshwater	1,424	2,125.00	Oregon

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Catchable	Freshwater	5,341	3,321.00	Washington
Coldwater <12°C	Catchable	Freshwater	77,946	10,276.00	Wyoming
Coldwater <12°C	Catchable	Freshwater	41,874	11,595.00	Wyoming
Coldwater <12°C	Fingerling	Freshwater	39,410	700.00	Arizona
Coldwater <12°C	Fingerling	Freshwater	291,114	24,934.00	Arkansas
Coldwater <12°C	Fingerling	Freshwater	113,709	23,836.00	Arkansas
Coldwater <12°C	Fingerling	Freshwater	35,435	607.60	California
Coldwater <12°C	Fingerling	Freshwater	472,682	7,279.00	Colorado
Coldwater <12°C	Fingerling	Freshwater	411,634	8,352.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	273,154	22,029.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	83,303	1,066.00	Montana
Coldwater <12°C	Fingerling	Freshwater	284,860	11,462.00	Montana
Coldwater <12°C	Fingerling	Freshwater	93,966	222.00	Montana
Coldwater <12°C	Fingerling	Freshwater	77,801	2,171.00	Nevada
Coldwater <12°C	Fingerling	Freshwater	7,960	313.00	New Mexico
Coldwater <12°C	Fingerling	Freshwater	43,654	186.00	North Carolina
Coldwater <12°C	Fingerling	Freshwater	98,789	333.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	1,902,099	72,247.90	Utah
Coldwater <12°C	Fingerling	Freshwater	150,090	1,470.00	Utah
Coldwater <12°C	Fingerling	Freshwater	46,074	189.20	Utah
Coldwater <12°C	Fingerling	Freshwater	854,562	33,335.00	Utah
Coldwater <12°C	Fingerling	Freshwater	248,719	62,687.00	Washington
Coldwater <12°C	Fingerling	Freshwater	431,445	24,551.85	Wyoming
Coldwater <12°C	Fingerling	Freshwater	25,544	1,290.15	Wyoming
Coldwater <12°C	Fry	Freshwater	199,798	439.00	California
Coldwater <12°C	Fry	Freshwater	1,060,676	5,673.00	Idaho
Coldwater <12°C	Fry	Freshwater	5,645	6.00	Montana
Coldwater <12°C	Fry	Freshwater	145,555	39.00	Montana
Coldwater <12°C	Fry	Freshwater	439,592	355.00	Nevada
Coldwater <12°C	Fry	Freshwater	20,000	1.50	New Mexico
Coldwater <12°C	Fry	Freshwater	36,572	620.00	Utah
Coldwater <12°C	Fry	Freshwater	1,336,228	10,082.00	Washington
Coldwater <12°C	Fry	Freshwater	251,503	16.80	Wyoming
Warmwater >18°C	Fingerling	Freshwater	2,400	81.00	Maryland

## Fall Chinook Salmon

Coldwater <12°C	Fingerling	Freshwater	26,310	1,500.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	251,281	3,667.14	Indiana
Coldwater <12°C	Fingerling	Freshwater	35,000	1,165.00	South Dakota

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Fingerling	Freshwater	76,500	880.00	South Dakota
Coldwater <12°C	Fingerling	Freshwater	8,400	1,310.00	South Dakota
Coldwater <12°C	Fingerling	Freshwater	173,999	3,046.40	Washington
Coldwater <12°C	Fingerling	Freshwater	395,931	18,764.50	Washington
Coldwater <12°C	Fingerling	Freshwater	210,471	5,524.17	Washington
Coldwater <12°C	Fingerling	Freshwater	501,460	9,117.45	Washington
Coldwater <12°C	Fingerling	Freshwater	2,942,414	54,489.15	Washington
Coldwater <12°C	Fingerling	Freshwater	570,181	3,041.46	Washington
Coldwater <12°C	Fingerling	Freshwater	67,603,240	1,191,939.00	Washington
Coldwater <12°C	Fingerling	Freshwater	935,300	10,500.98	Washington
Coldwater <12°C	Fingerling	Freshwater	100,400	1,438.40	Washington
Coldwater <12°C	Fingerling	Freshwater	810,000	12,461.54	Washington
Coldwater <12°C	Fingerling	Freshwater	104,000	14,857.14	Washington
Coldwater <12°C	Fingerling	Freshwater	452,523	5,093.91	Washington
Coldwater <12°C	Fingerling	Freshwater	96,000	1,200.00	Washington
Coldwater <12°C	Fingerling	Freshwater	287,280	4,352.73	Washington
Coldwater <12°C	Fry	Freshwater	999,000	1,167.00	Washington

### Fathead Minnow

Warmwater >18°C	Broodstock	Freshwater	60,000	300.00	North Carolina
Warmwater >18°C	Fingerling	Freshwater	1,108,212	2,832.00	Iowa
Warmwater >18°C	Fingerling	Freshwater	1,888,451	4,079.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	1,517,400	1,461.00	Missouri
Warmwater >18°C	Fingerling	Freshwater	52,150	60.10	New Jersey
Warmwater >18°C	Fingerling	Freshwater	50,000	25.00	Pennsylvania
Warmwater >18°C	Fingerling	Freshwater	13,020	62.00	Texas
Warmwater >18°C	Fingerling	Freshwater	2,404,008	4,555.00	Wisconsin
Warmwater >18°C	Fry	Freshwater	1,440,880	2,170.00	Wisconsin
Warmwater >18oC	Broodstock	Freshwater	525,000	1,500.00	Ohio

### Flathead Catfish

Warmwater >18°C	Fingerling	Freshwater	60	0.50	Louisiana
Warmwater >18°C	Fry	Freshwater	24,000	1.35	Colorado

### Fountain Darter

Warmwater >18°C	Fry	Freshwater	18	0.02	Arizona
Warmwater >18°C	Fry	Freshwater	1,900	0.03	Texas

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
<b>Gambusia</b>					
Warmwater >18°C	Fingerling	Freshwater	117,150	44.90	New Jersey
<b>Gila Trout</b>					
Coldwater <12°C	Catchable	Freshwater	4,346	685.80	New Mexico
Coldwater <12°C	Fingerling	Freshwater	14	0.10	Arizona
Coldwater <12°C	Fingerling	Freshwater	1,932	17.13	New Mexico
<b>Golden Shiner</b>					
Warmwater >18°C	Fingerling	Freshwater	210,000	1,115.00	Alabama
Warmwater >18°C	Fingerling	Freshwater	26,650	38.00	Pennsylvania
<b>Golden Trout</b>					
Coldwater <12°C	Fingerling	Freshwater	30,779	687.00	Wyoming
Coldwater <12°C	Fry	Freshwater	15,080	7.00	Montana
Coldwater <12°C	Fry	Freshwater	5,880	56.00	Washington
<b>Goldfish</b>					
Coolwater 12 - 18°C	Broodstock	Freshwater	1,000	1,000.00	North Carolina
Warmwater >18°C	Fingerling	Freshwater	170,586	1,200.00	Alabama
Warmwater >18°C	Fingerling	Freshwater	297,600	372.00	Georgia
Warmwater >18°C	Fingerling	Freshwater	3,538,753	12,880.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	49,918	609.00	Louisiana
Warmwater >18°C	Fingerling	Freshwater	1,798,663	6,017.50	Oklahoma
<b>Grass Carp</b>					
Warmwater >18°C	Catchable	Freshwater	37,561	7,086.00	Arkansas
Warmwater >18°C	Catchable	Freshwater	240	240.00	Nebraska
Warmwater >18°C	Catchable	Freshwater	130	207.23	Texas
Warmwater >18°C	Fingerling	Freshwater	114	51.40	Florida
Warmwater >18°C	Fingerling	Freshwater	4,859	2,150.00	Iowa
Warmwater >18°C	Fingerling	Freshwater	8,581	782.24	Kansas
Warmwater >18°C	Fingerling	Freshwater	1,414	643.00	Missouri
Warmwater >18°C	Fingerling	Freshwater	256,612	908.00	Oklahoma
Warmwater >18°C	Fry	Freshwater	9,220,000	95.00	Arkansas
<b>Guadalupe Bass</b>					
Warmwater >18°C	Fingerling	Freshwater	81,016	134.47	Texas

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
<b>Herring</b>					
Coolwater 12 - 18°C	Fry	Freshwater	735,000	41.86	Maryland
<b>Hickory Shad</b>					
Coolwater 12 - 18°C	Fry	Freshwater	4,940,000	281.36	Maryland
Warmwater >18°C	Fry	Freshwater	9,104,914	518.58	Pennsylvania
<b>Hybrid Striped Bass</b>					
Coolwater 12 - 18°C	Fingerling	Freshwater	104,725	225.84	Indiana
Coolwater 12 - 18°C	Fingerling	Freshwater	136,193	447.10	Tennessee
Coolwater 12 - 18°C	Fry	Freshwater	6,500,000	45.50	Georgia
Coolwater 12 - 18°C	Fry	Freshwater	2,800,000	22.14	South Carolina
Coolwater 12 - 18°C	Fry	Freshwater	176,980	35.00	Utah
Warmwater >18°C	Fingerling	Freshwater	563,620	566.00	Alabama
Warmwater >18°C	Fingerling	Freshwater	386,447	900.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	18,992	2,187.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	105,969	324.00	Colorado
Warmwater >18°C	Fingerling	Freshwater	260,000	250.00	Florida
Warmwater >18°C	Fingerling	Freshwater	1,299,016	341.57	Georgia
Warmwater >18°C	Fingerling	Freshwater	122,180	244.00	Illinois
Warmwater >18°C	Fingerling	Freshwater	76,626	347.00	Iowa
Warmwater >18°C	Fingerling	Freshwater	838,348	3,336.57	Kansas
Warmwater >18°C	Fingerling	Freshwater	15,580	1,834.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	599,284	747.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	804,470	402.20	Mississippi
Warmwater >18°C	Fingerling	Freshwater	40,072	115.50	Missouri
Warmwater >18°C	Fingerling	Freshwater	280,263	513.00	Nebraska
Warmwater >18°C	Fingerling	Freshwater	61,598	1,964.00	New Jersey
Warmwater >18°C	Fingerling	Freshwater	711,333	817.60	Oklahoma
Warmwater >18°C	Fingerling	Freshwater	415,231	277.00	South Carolina
Warmwater >18°C	Fingerling	Freshwater	1,377,643	2,142.85	Texas
Warmwater >18°C	Fry	Freshwater	1,243,200	1.00	Alabama
Warmwater >18°C	Fry	Freshwater	1,930,000	19.00	Arkansas
Warmwater >18°C	Fry	Freshwater	4,100,074	11.00	Colorado
Warmwater >18°C	Fry	Freshwater	500,000	3.95	Florida
Warmwater >18°C	Fry	Freshwater	3,933,000	31.10	Kansas
Warmwater >18°C	Fry	Freshwater	2,300,000	18.20	Kentucky
Warmwater >18°C	Fry	Freshwater	12,620,280	99.70	Oklahoma

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fry	Freshwater	5,691,358	268.95	Texas
Warmwater >18oC	Fingerling	Freshwater	306,155	123.00	Ohio
Warmwater >18oC	Fry	Freshwater	1,480,000	12.00	Ohio

**Hybrid Sunfish**

Warmwater >18°C	Catchable	Freshwater	75,319	10,269.00	Missouri
Warmwater >18°C	Catchable	Freshwater	4,765	238.30	Oklahoma
Warmwater >18°C	Fingerling	Freshwater	28,691	683.40	Missouri
Warmwater >18°C	Fingerling	Freshwater	97,220	496.30	Oklahoma
Warmwater >18oC	Catchable	Freshwater	1,876	540.00	Ohio

**June Sucker**

Coolwater 12 - 18°C	Catchable	Freshwater	3,566	498.30	Utah
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**Kokanee**

Coldwater <12°C	Catchable	Freshwater	265,370	27,675.00	Washington
Coldwater <12°C	Fingerling	Freshwater	6,341,169	14,832.00	Colorado
Coldwater <12°C	Fingerling	Freshwater	643,661	9,449.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	83,752	3,523.00	Montana
Coldwater <12°C	Fingerling	Freshwater	868,970	710.00	New Mexico
Coldwater <12°C	Fingerling	Freshwater	224,259	2,358.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	215,083	1,002.00	Utah
Coldwater <12°C	Fingerling	Freshwater	664,694	5,741.30	Wyoming
Coldwater <12°C	Fry	Freshwater	1,064,957	3,474.00	California
Coldwater <12°C	Fry	Freshwater	158,494	627.00	Connecticut
Coldwater <12°C	Fry	Freshwater	18,820,370	53,651.00	Idaho
Coldwater <12°C	Fry	Freshwater	857,660	924.00	Montana
Coldwater <12°C	Fry	Freshwater	2,993,121	710.00	New Mexico
Coldwater <12°C	Fry	Freshwater	11,428,000	29,859.00	Washington

**Lake Sturgeon**

Coolwater 12 - 18°C	Catchable	Freshwater	350	73.00	Wisconsin
Coolwater 12 - 18°C	Fingerling	Freshwater	16,460	155.00	Georgia
Coolwater 12 - 18°C	Fingerling	Freshwater	15,316	30.00	Wisconsin
Coolwater 12 - 18°C	Fingerling	Freshwater	31,129	838.00	Wisconsin
Warmwater >18°C	Catchable	Freshwater	8,993	924.35	Tennessee
Warmwater >18°C	Catchable	Freshwater	1,271	153.80	Wisconsin
Warmwater >18°C	Fingerling	Freshwater	8,612	6.63	Arkansas

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fingerling	Freshwater	4,079	24.40	Georgia
Warmwater >18°C	Fingerling	Freshwater	25,908	759.00	Minnesota
Warmwater >18°C	Fingerling	Freshwater	7,797	6.00	Mississippi
Warmwater >18°C	Fingerling	Freshwater	14,000	302.40	Missouri
Warmwater >18°C	Fingerling	Freshwater	115	2.00	New York
Warmwater >18°C	Fingerling	Freshwater	1,000	10.00	Tennessee

**Lake Trout**

Coldwater <12°C	Broodstock	Freshwater	200	2,000.00	Michigan
Coldwater <12°C	Broodstock	Freshwater	7,800	31,000.00	Minnesota
Coldwater <12°C	Broodstock	Freshwater	8,348	4,240.00	Utah
Coldwater <12°C	Catchable	Freshwater	200	2,105.00	Colorado
Coldwater <12°C	Catchable	Freshwater	14,201	1,075.00	Idaho
Coldwater <12°C	Catchable	Freshwater	62,832	7,570.00	Illinois
Coldwater <12°C	Catchable	Freshwater	66,255	5,655.00	Indiana
Coldwater <12°C	Catchable	Freshwater	2,705,595	228,704.00	Michigan
Coldwater <12°C	Catchable	Freshwater	300,000	25,000.00	Minnesota
Coldwater <12°C	Catchable	Freshwater	111,420	17,847.00	New York
Coldwater <12°C	Catchable	Freshwater	120	470.00	Pennsylvania
Coldwater <12°C	Catchable	Freshwater	7,500	7,500.00	South Dakota
Coldwater <12°C	Catchable	Freshwater	609	5,639.00	Utah
Coldwater <12°C	Catchable	Freshwater	79,793	10,026.00	Vermont
Coldwater <12°C	Catchable	Freshwater	106,526	11,430.00	Wisconsin
Coldwater <12°C	Catchable	Freshwater	184	2,359.00	Wyoming
Coldwater <12°C	Fingerling	Freshwater	59,200	1,561.00	Colorado
Coldwater <12°C	Fingerling	Freshwater	16,325	1,928.00	Maine
Coldwater <12°C	Fingerling	Freshwater	1,323,659	26,866.00	Michigan
Coldwater <12°C	Fingerling	Freshwater	505,667	23,000.00	Michigan
Coldwater <12°C	Fingerling	Freshwater	85,509	6,468.00	Minnesota
Coldwater <12°C	Fingerling	Freshwater	20,000	800.00	Minnesota
Coldwater <12°C	Fingerling	Freshwater	4,750	857.00	New Jersey
Coldwater <12°C	Fingerling	Freshwater	428,680	27,131.00	New York
Coldwater <12°C	Fingerling	Freshwater	26,050	1,217.00	New York
Coldwater <12°C	Fingerling	Freshwater	252,300	15,753.00	New York
Coldwater <12°C	Fingerling	Freshwater	97,987	6,483.00	Pennsylvania
Coldwater <12°C	Fingerling	Freshwater	240	8.00	Pennsylvania
Coldwater <12°C	Fingerling	Freshwater	35,036	2,319.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	713,493	54,724.00	Wisconsin
Coldwater <12°C	Fingerling	Freshwater	56,544	2,355.00	Wisconsin

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Fingerling	Freshwater	4,409	66.80	Wyoming
Coldwater <12°C	Fry	Freshwater	198,487	1,066.00	California
Coldwater <12°C	Fry	Freshwater	15,000	6.00	Pennsylvania

## Landlocked Atlantic Salmon

Coldwater <12°C	Catchable	Freshwater	77,810	16,461.00	New York
Coldwater <12°C	Catchable	Freshwater	77,467	13,908.00	New York
Coldwater <12°C	Catchable	Freshwater	84,638	14,595.50	Vermont
Coldwater <12°C	Catchable	Freshwater	186,862	36,257.00	Vermont
Coldwater <12°C	Fingerling	Freshwater	121,861	25,083.00	Maine
Coldwater <12°C	Fingerling	Freshwater	322,880	28,983.00	New York
Coldwater <12°C	Fry	Freshwater	22,000	11.00	New York
Coldwater <12°C	Fry	Freshwater	116,818	189.00	Vermont

## Largemouth Bass

Coldwater <12°C	Catchable	Freshwater	576	101.00	Washington
Warmwater >18°C	Broodstock	Freshwater	35	17.50	Indiana
Warmwater >18°C	Broodstock	Freshwater	380	912.00	Iowa
Warmwater >18°C	Broodstock	Freshwater	656	1,545.00	Oklahoma
Warmwater >18°C	Broodstock	Freshwater	535	440.91	Texas
Warmwater >18°C	Catchable	Freshwater	257	30.00	Alabama
Warmwater >18°C	Catchable	Freshwater	549	68.60	Alabama
Warmwater >18°C	Catchable	Freshwater	438	235.77	Georgia
Warmwater >18°C	Catchable	Freshwater	30	3.00	Iowa
Warmwater >18°C	Catchable	Freshwater	751	1,047.00	Nebraska
Warmwater >18°C	Catchable	Freshwater	4,644	1,160.00	New Mexico
Warmwater >18°C	Catchable	Freshwater	26	9.20	Pennsylvania
Warmwater >18°C	Fingerling	Freshwater	407,244	769.00	Alabama
Warmwater >18°C	Fingerling	Freshwater	164,491	266.00	Alabama
Warmwater >18°C	Fingerling	Freshwater	15,000	30.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	172,376	4,579.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	1,374,747	3,593.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	117,377	4,216.00	Colorado
Warmwater >18°C	Fingerling	Freshwater	108,000	100.00	Florida
Warmwater >18°C	Fingerling	Freshwater	680,315	650.15	Georgia
Warmwater >18°C	Fingerling	Freshwater	1,500	400.00	Hawaii
Warmwater >18°C	Fingerling	Freshwater	394,312	11,597.00	Illinois
Warmwater >18°C	Fingerling	Freshwater	22,345	695.00	Illinois
Warmwater >18°C	Fingerling	Freshwater	730,107	1,123.00	Illinois

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fingerling	Freshwater	62,979	2,220.15	Indiana
Warmwater >18°C	Fingerling	Freshwater	269,573	314.50	Iowa
Warmwater >18°C	Fingerling	Freshwater	6,602	440.00	Iowa
Warmwater >18°C	Fingerling	Freshwater	35,713	1,662.60	Iowa
Warmwater >18°C	Fingerling	Freshwater	41,483	145.08	Kansas
Warmwater >18°C	Fingerling	Freshwater	203,000	90.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	129,875	5,511.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	43,320	85.00	Louisiana
Warmwater >18°C	Fingerling	Freshwater	1,077,511	572.00	Louisiana
Warmwater >18°C	Fingerling	Freshwater	119,876	192.00	Maryland
Warmwater >18°C	Fingerling	Freshwater	8,838	354.00	Minnesota
Warmwater >18°C	Fingerling	Freshwater	108,368	48.70	Mississippi
Warmwater >18°C	Fingerling	Freshwater	75,532	83.90	Mississippi
Warmwater >18°C	Fingerling	Freshwater	259,454	672.00	Missouri
Warmwater >18°C	Fingerling	Freshwater	22,449	774.00	Missouri
Warmwater >18°C	Fingerling	Freshwater	300	86.00	Missouri
Warmwater >18°C	Fingerling	Freshwater	50,300	137.00	Montana
Warmwater >18°C	Fingerling	Freshwater	221,529	3,195.00	Nebraska
Warmwater >18°C	Fingerling	Freshwater	1,190	223.00	New Jersey
Warmwater >18°C	Fingerling	Freshwater	98,707	239.00	New Mexico
Warmwater >18°C	Fingerling	Freshwater	122,067	110.80	North Dakota
Warmwater >18°C	Fingerling	Freshwater	1,272,052	4,448.80	Oklahoma
Warmwater >18°C	Fingerling	Freshwater	18,719	96.00	Pennsylvania
Warmwater >18°C	Fingerling	Freshwater	11,350	18.50	South Carolina
Warmwater >18°C	Fingerling	Freshwater	78,550	367.60	South Dakota
Warmwater >18°C	Fingerling	Freshwater	181,135	1,725.00	South Dakota
Warmwater >18°C	Fingerling	Freshwater	266,017	465.81	Tennessee
Warmwater >18°C	Fingerling	Freshwater	5,778,161	10,645.95	Texas
Warmwater >18°C	Fingerling	Freshwater	180	16.00	Wisconsin
Warmwater >18°C	Fingerling	Freshwater	2,490	75.70	Wisconsin
Warmwater >18°C	Fry	Freshwater	1,411,217	89.60	Colorado
Warmwater >18°C	Fry	Freshwater	1,149,965	6.00	Illinois
Warmwater >18°C	Fry	Freshwater	122,921	55.32	Indiana
Warmwater >18°C	Fry	Freshwater	493,292	27.60	Iowa
Warmwater >18°C	Fry	Freshwater	7,705,724	56.58	Louisiana
Warmwater >18°C	Fry	Freshwater	1,124,719	1,183.25	Louisiana
Warmwater >18°C	Fry	Freshwater	378,585	21.56	Maryland
Warmwater >18°C	Fry	Freshwater	86,175	44.09	Mississippi
Warmwater >18°C	Fry	Freshwater	377,622	2.00	Missouri

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fry	Freshwater	1,443,230	82.20	Oklahoma
Warmwater >18°C	Fry	Freshwater	221,821	65.40	South Dakota
Warmwater >18°C	Fry	Freshwater	215,380	2.20	Texas
Warmwater >18°C	Fry	Freshwater	145,000	153.00	Texas
Warmwater >18°C	Fry	Freshwater	45,892	41.70	Wyoming
Warmwater >18oC	Fingerling	Freshwater	26,601	324.00	Ohio

**Least Chub**

Warmwater >18°C	Fry	Freshwater	15,000	10.00	Utah
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**Lingcod**

Coldwater <12°C	Broodstock	Marine	50	750.00	Washington
Coldwater <12°C	Fingerling	Marine	1,000	23.00	Washington

**Muskellunge**

Coldwater <12°C	Fry	Freshwater	422,000	16.00	New York
Coolwater 12 - 18°C	Broodstock	Freshwater	25	400.00	North Carolina
Coolwater 12 - 18°C	Catchable	Freshwater	446	219.00	Wisconsin
Coolwater 12 - 18°C	Fingerling	Freshwater	35,100	1,041.44	Indiana
Coolwater 12 - 18°C	Fingerling	Freshwater	21,064	2,638.10	Indiana
Coolwater 12 - 18°C	Fingerling	Freshwater	24,332	257.50	Iowa
Coolwater 12 - 18°C	Fingerling	Freshwater	13,835	3,491.90	Iowa
Coolwater 12 - 18°C	Fingerling	Freshwater	191,991	47,029.26	Michigan
Coolwater 12 - 18°C	Fingerling	Freshwater	6,550	474.00	Missouri
Coolwater 12 - 18°C	Fingerling	Freshwater	3,635	999.00	Nebraska
Coolwater 12 - 18°C	Fingerling	Freshwater	8,031	910.00	New Jersey
Coolwater 12 - 18°C	Fingerling	Freshwater	620	144.00	North Carolina
Coolwater 12 - 18°C	Fingerling	Freshwater	1,710	340.00	South Dakota
Coolwater 12 - 18°C	Fingerling	Freshwater	8,729	210.75	Virginia
Coolwater 12 - 18°C	Fingerling	Freshwater	102,433	25,471.00	Wisconsin
Coolwater 12 - 18°C	Fry	Freshwater	617,984	15.70	Iowa
Coolwater 12 - 18°C	Fry	Freshwater	163,093	7.00	Wisconsin
Coolwater 12 - 18oC	Fingerling	Freshwater	22,797	3,929.00	Ohio
Warmwater >18°C	Catchable	Freshwater	520	1,784.00	Minnesota
Warmwater >18°C	Fingerling	Freshwater	20,679	4,220.00	Illinois
Warmwater >18°C	Fingerling	Freshwater	10,088	1,332.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	7,721	23.50	Minnesota
Warmwater >18°C	Fingerling	Freshwater	19,499	4,402.40	Minnesota

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fingerling	Freshwater	148,895	2,078.00	New York
Warmwater >18°C	Fingerling	Freshwater	109,250	4,072.00	Pennsylvania
Warmwater >18°C	Fry	Freshwater	166,328	5.60	Illinois
Warmwater >18°C	Fry	Freshwater	249,551	1.65	Kentucky

**Mussel**

Warmwater >18°C	Fry	Freshwater	7,111,404	45.50	Missouri
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**Northern Pike**

Coolwater 12 - 18°C	Fingerling	Freshwater	18,547	59.35	Indiana
Coolwater 12 - 18°C	Fingerling	Freshwater	264,238	903.60	Iowa
Coolwater 12 - 18°C	Fingerling	Freshwater	10,210	28.13	Michigan
Coolwater 12 - 18°C	Fingerling	Freshwater	11,165	27.50	Montana
Coolwater 12 - 18°C	Fingerling	Freshwater	57,100	62.00	Montana
Coolwater 12 - 18°C	Fingerling	Freshwater	24,335	1,565.00	Nebraska
Coolwater 12 - 18°C	Fingerling	Freshwater	43,220	1,526.00	New Jersey
Coolwater 12 - 18°C	Fingerling	Freshwater	208,980	116.40	North Dakota
Coolwater 12 - 18°C	Fingerling	Freshwater	1,757,483	1,455.63	North Dakota
Coolwater 12 - 18°C	Fingerling	Freshwater	3,549	101.75	Virginia
Coolwater 12 - 18°C	Fingerling	Freshwater	217,838	668.00	Wisconsin
Coolwater 12 - 18°C	Fingerling	Freshwater	35,000	64.00	Wisconsin
Coolwater 12 - 18°C	Fingerling	Freshwater	26,906	2,984.00	Wisconsin
Coolwater 12 - 18°C	Fingerling	Freshwater	172,900	123.50	Wyoming
Coolwater 12 - 18°C	Fry	Freshwater	192,000	38.40	Indiana
Coolwater 12 - 18°C	Fry	Freshwater	1,495,699	38.00	Iowa
Coolwater 12 - 18°C	Fry	Freshwater	378,000	13.00	Wisconsin
Coolwater 12 - 18°C	Fry	Freshwater	1,589,000	20.05	Wisconsin
Warmwater >18°C	Fingerling	Freshwater	643,244	21.80	Illinois
Warmwater >18°C	Fingerling	Freshwater	17,483	98.00	Illinois
Warmwater >18°C	Fingerling	Freshwater	2,500	308.00	Illinois
Warmwater >18°C	Fingerling	Freshwater	57,225	1,015.00	Minnesota
Warmwater >18°C	Fingerling	Freshwater	6,530	149.60	Pennsylvania
Warmwater >18°C	Fry	Freshwater	1,289,326	46.70	Minnesota

**Northern Redbelly dace**

Warmwater >18°C	Fingerling	Freshwater	226	0.38	Colorado
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**Pacific Halibut**

Coldwater <12°C	Broodstock	Marine	10	750.00	Washington
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Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
<b>Paddlefish</b>					
Warmwater >18°C	Catchable	Freshwater	6,124	1,460.00	Kansas
Warmwater >18°C	Catchable	Freshwater	25	4.00	Minnesota
Warmwater >18°C	Catchable	Freshwater	30,478	7,123.00	Oklahoma
Warmwater >18°C	Catchable	Freshwater	2	0.50	Oklahoma
Warmwater >18°C	Catchable	Freshwater	20,965	5,601.00	South Dakota
Warmwater >18°C	Fingerling	Freshwater	3,373	49.60	Arkansas
Warmwater >18°C	Fingerling	Freshwater	20,800	53.20	Louisiana
Warmwater >18°C	Fingerling	Freshwater	2,855	357.00	Louisiana
Warmwater >18°C	Fingerling	Freshwater	5,271	1,760.50	Louisiana
Warmwater >18°C	Fingerling	Freshwater	6,080	517.40	Mississippi
Warmwater >18°C	Fingerling	Freshwater	7,452	18.25	Mississippi
Warmwater >18°C	Fingerling	Freshwater	4,656	3,905.80	Missouri
Warmwater >18°C	Fingerling	Freshwater	1,400	452.00	New York
Warmwater >18°C	Fingerling	Freshwater	32,433	3,080.00	Pennsylvania
Warmwater >18°C	Fry	Freshwater	50,368	1.85	Arkansas
Warmwater >18°C	Fry	Freshwater	181,245	5.22	Louisiana
Warmwater >18°C	Fry	Freshwater	166,850	6.13	Mississippi
Warmwater >18°C	Fry	Freshwater	270,000	12.50	Missouri
Warmwater >18°C	Fry	Freshwater	103,802	2.93	Oklahoma
Warmwater >18°C	Fry	Freshwater	326,140	27.00	South Dakota
<b>Pallid Sturgeon</b>					
Coolwater 12 - 18°C	Catchable	Freshwater	9,106	283.20	Montana
Coolwater 12 - 18°C	Fingerling	Freshwater	3,355	23.70	Montana
Coolwater 12 - 18°C	Fry	Freshwater	55,500	2.30	Montana
Warmwater >18°C	Catchable	Freshwater	1,569	178.68	Louisiana
Warmwater >18°C	Catchable	Freshwater	7,823	664.97	Missouri
Warmwater >18°C	Catchable	Freshwater	1,400	374.90	Nebraska
Warmwater >18°C	Fingerling	Freshwater	2,546	180.20	Iowa
Warmwater >18°C	Fingerling	Freshwater	2,864	35.30	Kansas
Warmwater >18°C	Fingerling	Freshwater	2,199	29.40	Missouri
Warmwater >18°C	Fingerling	Freshwater	3,482	62.50	Montana
Warmwater >18°C	Fingerling	Freshwater	2,451	76.85	Montana
Warmwater >18°C	Fingerling	Freshwater	752	54.00	South Dakota
Warmwater >18°C	Fingerling	Freshwater	647	1.30	Wisconsin
Warmwater >18°C	Fry	Freshwater	2,041	0.11	Montana
Warmwater >18°C	Fry	Freshwater	2,000	0.50	South Dakota

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fry	Freshwater	100	0.10	Washington
<b>Rainbow Trout</b>					
Coldwater <12°C	Broodstock	Freshwater	13,828	36,679.00	California
Coldwater <12°C	Broodstock	Freshwater	5,200	6,900.00	Connecticut
Coldwater <12°C	Broodstock	Freshwater	3,344	7,791.00	Idaho
Coldwater <12°C	Broodstock	Freshwater	264	194.25	Indiana
Coldwater <12°C	Broodstock	Freshwater	800	3,600.00	Iowa
Coldwater <12°C	Broodstock	Freshwater	1,853	1,179.00	Michigan
Coldwater <12°C	Broodstock	Freshwater	4,700	14,000.00	Minnesota
Coldwater <12°C	Broodstock	Freshwater	2,345	6,547.00	New Jersey
Coldwater <12°C	Broodstock	Freshwater	20	54.00	South Carolina
Coldwater <12°C	Broodstock	Freshwater	2,391	2,905.00	Utah
Coldwater <12°C	Broodstock	Freshwater	110	880.00	Vermont
Coldwater <12°C	Broodstock	Freshwater	1,700	4,036.00	Wisconsin
Coldwater <12°C	Broodstock	Freshwater	30,659	18,465.00	Wyoming
Coldwater <12°C	Catchable	Freshwater	24,488	7,775.00	Alabama
Coldwater <12°C	Catchable	Freshwater	201,574	54,047.66	Alaska
Coldwater <12°C	Catchable	Freshwater	574,472	176,804.00	Arizona
Coldwater <12°C	Catchable	Freshwater	50,000	10,500.00	Arizona
Coldwater <12°C	Catchable	Freshwater	1,304,753	409,430.00	Arizona
Coldwater <12°C	Catchable	Freshwater	1,383,639	857,644.00	Arkansas
Coldwater <12°C	Catchable	Freshwater	1,225,791	576,271.00	Arkansas
Coldwater <12°C	Catchable	Freshwater	4,033	887.00	California
Coldwater <12°C	Catchable	Freshwater	6,178,440	3,203,529.00	California
Coldwater <12°C	Catchable	Freshwater	3,330,912	1,534,143.00	Colorado
Coldwater <12°C	Catchable	Freshwater	243,799	85,372.40	Colorado
Coldwater <12°C	Catchable	Freshwater	249,000	171,522.00	Connecticut
Coldwater <12°C	Catchable	Freshwater	1,151,123	426,999.00	Georgia
Coldwater <12°C	Catchable	Freshwater	313,222	121,198.00	Georgia
Coldwater <12°C	Catchable	Freshwater	52,202	29,697.00	Idaho
Coldwater <12°C	Catchable	Freshwater	2,320,979	819,087.00	Idaho
Coldwater <12°C	Catchable	Freshwater	49,607	26,029.00	Indiana
Coldwater <12°C	Catchable	Freshwater	1,291	1,113.00	Iowa
Coldwater <12°C	Catchable	Freshwater	249,479	130,788.00	Iowa
Coldwater <12°C	Catchable	Freshwater	692,120	233,339.00	Kentucky
Coldwater <12°C	Catchable	Freshwater	17,175	8,501.00	Maine
Coldwater <12°C	Catchable	Freshwater	54,000	16,000.00	Massachusetts
Coldwater <12°C	Catchable	Freshwater	100,000	65,000.00	Massachusetts

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Catchable	Freshwater	218,000	208,000.00	Massachusetts
Coldwater <12°C	Catchable	Freshwater	1,000	500.00	Michigan
Coldwater <12°C	Catchable	Freshwater	12,780	2,440.00	Minnesota
Coldwater <12°C	Catchable	Freshwater	320,000	106,000.00	Minnesota
Coldwater <12°C	Catchable	Freshwater	600	178.00	Mississippi
Coldwater <12°C	Catchable	Freshwater	1,615,139	969,083.00	Missouri
Coldwater <12°C	Catchable	Freshwater	237,955	96,143.00	Missouri
Coldwater <12°C	Catchable	Freshwater	150,622	34,842.00	Montana
Coldwater <12°C	Catchable	Freshwater	177,618	85,629.00	Montana
Coldwater <12°C	Catchable	Freshwater	304,301	117,146.00	Nebraska
Coldwater <12°C	Catchable	Freshwater	8,527	2,443.00	Nevada
Coldwater <12°C	Catchable	Freshwater	299,975	185,167.00	New Hampshire
Coldwater <12°C	Catchable	Freshwater	257,730	108,604.00	New Jersey
Coldwater <12°C	Catchable	Freshwater	356,090	107,489.00	New Mexico
Coldwater <12°C	Catchable	Freshwater	187,488	69,184.00	New Mexico
Coldwater <12°C	Catchable	Freshwater	1,040,429	182,455.80	New Mexico
Coldwater <12°C	Catchable	Freshwater	8,048	4,732.00	New Mexico
Coldwater <12°C	Catchable	Freshwater	366,728	77,388.50	New Mexico
Coldwater <12°C	Catchable	Freshwater	103,138	41,903.00	New Mexico
Coldwater <12°C	Catchable	Freshwater	388,322	107,937.00	New York
Coldwater <12°C	Catchable	Freshwater	969	2,706.00	North Carolina
Coldwater <12°C	Catchable	Freshwater	282,363	147,032.00	North Carolina
Coldwater <12°C	Catchable	Freshwater	61,554	29,961.80	North Dakota
Coldwater <12°C	Catchable	Freshwater	198,079	72,911.00	Oklahoma
Coldwater <12°C	Catchable	Freshwater	2,373,878	889,129.00	Oregon
Coldwater <12°C	Catchable	Freshwater	10,360	9,706.00	Pennsylvania
Coldwater <12°C	Catchable	Freshwater	1,825,060	945,173.00	Pennsylvania
Coldwater <12°C	Catchable	Freshwater	344,473	339,702.00	Pennsylvania
Coldwater <12°C	Catchable	Freshwater	73,100	89,143.00	Rhode Island
Coldwater <12°C	Catchable	Freshwater	245,381	94,414.00	South Carolina
Coldwater <12°C	Catchable	Freshwater	13,422	2,150.00	South Dakota
Coldwater <12°C	Catchable	Freshwater	210,000	104,520.00	South Dakota
Coldwater <12°C	Catchable	Freshwater	1,250	418.00	Tennessee
Coldwater <12°C	Catchable	Freshwater	1,600	1,904.00	Tennessee
Coldwater <12°C	Catchable	Freshwater	760	1,292.00	Tennessee
Coldwater <12°C	Catchable	Freshwater	85	327.00	Tennessee
Coldwater <12°C	Catchable	Freshwater	26,421	22,453.00	Tennessee
Coldwater <12°C	Catchable	Freshwater	251,049	169,863.00	Tennessee
Coldwater <12°C	Catchable	Freshwater	48,450	25,336.00	Tennessee

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Catchable	Freshwater	1,063	1,877.00	Tennessee
Coldwater <12°C	Catchable	Freshwater	67,189	29,957.00	Tennessee
Coldwater <12°C	Catchable	Freshwater	860,122	266,941.50	Tennessee
Coldwater <12°C	Catchable	Freshwater	2,780,113	581,363.80	Utah
Coldwater <12°C	Catchable	Freshwater	131,000	57,553.00	Vermont
Coldwater <12°C	Catchable	Freshwater	250	250.00	Virginia
Coldwater <12°C	Catchable	Freshwater	999,758	561,978.00	Virginia
Coldwater <12°C	Catchable	Freshwater	2,704,108	987,914.00	Washington
Coldwater <12°C	Catchable	Freshwater	927,581	630,532.00	West Virginia
Coldwater <12°C	Catchable	Freshwater	8,859	23,681.00	West Virginia
Coldwater <12°C	Catchable	Freshwater	21,750	10,743.00	Wisconsin
Coldwater <12°C	Catchable	Freshwater	777,420	84,782.00	Wisconsin
Coldwater <12°C	Catchable	Freshwater	338,831	84,711.00	Wyoming
Coldwater <12°C	Catchable	Freshwater	2,039	424.00	Wyoming
Coldwater <12°C	Fingerling	Freshwater	16,000	3,520.00	Alaska
Coldwater <12°C	Fingerling	Freshwater	713,659	1,959.34	Alaska
Coldwater <12°C	Fingerling	Freshwater	1,553,291	29,888.00	Arizona
Coldwater <12°C	Fingerling	Freshwater	180,237	5,885.00	Arizona
Coldwater <12°C	Fingerling	Freshwater	1,342,338	53,703.00	Arkansas
Coldwater <12°C	Fingerling	Freshwater	1,142,291	124,807.00	California
Coldwater <12°C	Fingerling	Freshwater	824,360	39,070.53	Colorado
Coldwater <12°C	Fingerling	Freshwater	5,249,660	154,418.00	Colorado
Coldwater <12°C	Fingerling	Freshwater	257,807	11,662.00	Georgia
Coldwater <12°C	Fingerling	Freshwater	398,355	12,871.00	Georgia
Coldwater <12°C	Fingerling	Freshwater	2,517,427	73,042.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	95,193	6,565.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	5,000	952.00	Illinois
Coldwater <12°C	Fingerling	Freshwater	50,000	4,355.00	Illinois
Coldwater <12°C	Fingerling	Freshwater	328,800	6,453.00	Iowa
Coldwater <12°C	Fingerling	Freshwater	145,250	795.00	Kentucky
Coldwater <12°C	Fingerling	Freshwater	1,052,788	105,279.00	Michigan
Coldwater <12°C	Fingerling	Freshwater	70,000	7,000.00	Minnesota
Coldwater <12°C	Fingerling	Freshwater	3,093,793	163,033.00	Montana
Coldwater <12°C	Fingerling	Freshwater	184	25.00	Montana
Coldwater <12°C	Fingerling	Freshwater	729,032	36,790.50	Montana
Coldwater <12°C	Fingerling	Freshwater	12	0.32	Nebraska
Coldwater <12°C	Fingerling	Freshwater	199,299	1,366.00	Nevada
Coldwater <12°C	Fingerling	Freshwater	144,828	4,377.00	New Mexico
Coldwater <12°C	Fingerling	Freshwater	402,517	5,030.00	New Mexico

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Fingerling	Freshwater	59,675	5,465.00	New Mexico
Coldwater <12°C	Fingerling	Freshwater	144,393	2,207.00	New Mexico
Coldwater <12°C	Fingerling	Freshwater	137,000	2,452.80	New Mexico
Coldwater <12°C	Fingerling	Freshwater	299,997	40,816.00	New Mexico
Coldwater <12°C	Fingerling	Freshwater	300	2.00	New York
Coldwater <12°C	Fingerling	Freshwater	352,090	10,879.00	New York
Coldwater <12°C	Fingerling	Freshwater	486,099	4,103.00	North Carolina
Coldwater <12°C	Fingerling	Freshwater	12,514	133.40	North Carolina
Coldwater <12°C	Fingerling	Freshwater	92,800	952.00	Oklahoma
Coldwater <12°C	Fingerling	Freshwater	2,971,798	42,645.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	7,800	21.08	Pennsylvania
Coldwater <12°C	Fingerling	Freshwater	739,770	22,777.00	Pennsylvania
Coldwater <12°C	Fingerling	Freshwater	32,254	1,887.00	South Carolina
Coldwater <12°C	Fingerling	Freshwater	287,553	1,181.55	South Dakota
Coldwater <12°C	Fingerling	Freshwater	8,000	266.00	South Dakota
Coldwater <12°C	Fingerling	Freshwater	7,550	2,137.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	125,715	378.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	100,000	827.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	24,112	2,227.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	113,627	4,460.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	8,467	1,598.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	23,778	1,248.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	395,725	9,360.00	Tennessee
Coldwater <12°C	Fingerling	Freshwater	892,867	59,984.00	Utah
Coldwater <12°C	Fingerling	Freshwater	562,778	19,372.00	Utah
Coldwater <12°C	Fingerling	Freshwater	81,600	4,080.00	Virginia
Coldwater <12°C	Fingerling	Freshwater	421,668	7,531.00	West Virginia
Coldwater <12°C	Fingerling	Freshwater	62,076	8,449.00	Wisconsin
Coldwater <12°C	Fingerling	Freshwater	26,296	933.00	Wisconsin
Coldwater <12°C	Fingerling	Freshwater	1,519,874	95,159.73	Wyoming
Coldwater <12°C	Fingerling	Freshwater	35,000	366.70	Wyoming
Coldwater <12°C	Fingerling	Freshwater	4,490	139.00	Wyoming
Coldwater <12°C	Fry	Freshwater	106,506	234.31	Alaska
Coldwater <12°C	Fry	Freshwater	3,224,927	15,038.00	California
Coldwater <12°C	Fry	Freshwater	145,274	564.00	Idaho
Coldwater <12°C	Fry	Freshwater	100,000	26.00	Indiana
Coldwater <12°C	Fry	Freshwater	33,832	35.00	Montana
Coldwater <12°C	Fry	Freshwater	4,550	5.00	Montana
Coldwater <12°C	Fry	Freshwater	47,149	44.00	New Mexico

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Fry	Freshwater	3,134,296	7,272.00	New Mexico
Coldwater <12°C	Fry	Freshwater	504,164	162.76	New Mexico
Coldwater <12°C	Fry	Freshwater	820,695	1,183.00	New Mexico
Coldwater <12°C	Fry	Freshwater	4,808,658	92,012.00	Washington
Coldwater <12°C	Fry	Freshwater	108,980	19.83	Wyoming
Coldwater <12oC	Broodstock	Freshwater	886	2,904.00	Ohio
Coldwater <12oC	Catchable	Freshwater	129,868	100,655.00	Ohio
Coldwater <12oC	Fingerling	Freshwater	96,400	536.00	Ohio
Coolwater 12 - 18°C	Catchable	Freshwater	1,137,917	263,639.00	Nevada
Coolwater 12 - 18°C	Fingerling	Freshwater	50,000	6,000.00	Hawaii
Warmwater >18°C	Broodstock	Freshwater	6,200	21,700.00	Maryland
Warmwater >18°C	Catchable	Freshwater	475,633	297,565.00	Maryland
Warmwater >18°C	Catchable	Freshwater	269,290	92,923.28	Texas
Warmwater >18°C	Fingerling	Freshwater	10,500	437.00	Maryland

### Rainbow x Cutthroat hybrid

Coldwater <12°C	Fingerling	Freshwater	212,696	3,458.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	106,165	3,407.00	Nevada
Coldwater <12°C	Fry	Freshwater	7,682	81.00	Idaho
Coldwater <12°C	Fry	Freshwater	21,600	11.00	Montana

### Razorback Sucker

Coolwater 12 - 18°C	Catchable	Freshwater	14,912	11,388.00	Arizona
Coolwater 12 - 18°C	Fingerling	Freshwater	13,158	211.50	Arizona
Coolwater 12 - 18°C	Fry	Freshwater	20,100	12.00	Arizona
Warmwater >18°C	Catchable	Freshwater	8,368	6,884.00	Arizona

### Red Drum

Warmwater >18°C	Fingerling	Freshwater	48,007	120.00	South Carolina
Warmwater >18°C	Fry	Freshwater	286,781	69.50	South Carolina
Warmwater >18°C	Catchable	Marine	10,000	11,210.76	South Carolina
Warmwater >18°C	Fingerling	Marine	30,000	66.00	Florida
Warmwater >18°C	Fingerling	Marine	77,696	5,106.00	Florida
Warmwater >18°C	Fingerling	Marine	3,000,000	1,200.00	South Carolina
Warmwater >18°C	Fingerling	Marine	12,591,730	13,766.00	Texas
Warmwater >18°C	Fry	Marine	50,000,000	20.00	South Carolina

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
<b>Redear Sunfish</b>					
Warmwater >18°C	Broodstock	Freshwater	917	185.00	Arkansas
Warmwater >18°C	Broodstock	Freshwater	106	50.48	Indiana
Warmwater >18°C	Fingerling	Freshwater	352,520	669.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	18,794	29.00	Florida
Warmwater >18°C	Fingerling	Freshwater	735,779	775.81	Georgia
Warmwater >18°C	Fingerling	Freshwater	845,318	939.00	Illinois
Warmwater >18°C	Fingerling	Freshwater	128,402	180.82	Indiana
Warmwater >18°C	Fingerling	Freshwater	1,165,905	1,818.80	Kansas
Warmwater >18°C	Fingerling	Freshwater	150,500	200.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	205,665	189.00	Louisiana
Warmwater >18°C	Fingerling	Freshwater	5,000	7.14	Maryland
Warmwater >18°C	Fingerling	Freshwater	98,740	104.00	Mississippi
Warmwater >18°C	Fingerling	Freshwater	178,250	823.00	South Carolina
Warmwater >18°C	Fingerling	Freshwater	142,202	145.55	Tennessee
<b>Redeye Bass</b>					
Warmwater >18°C	Fingerling	Freshwater	15,500	16.00	Alabama
<b>Rio Grande Chub</b>					
Warmwater >18°C	Fingerling	Freshwater	58,912	205.00	Colorado
<b>Rio Grande Silvery Minnow</b>					
Warmwater >18°C	Fingerling	Freshwater	300	2.00	New Jersey
Warmwater >18°C	Fingerling	Freshwater	94,105	403.00	New Mexico
<b>Robust Redhorse</b>					
Warmwater >18°C	Fingerling	Freshwater	17,464	769.13	Georgia
Warmwater >18°C	Fingerling	Freshwater	1,000	250.00	South Carolina
Warmwater >18°C	Fingerling	Freshwater	25,117	2,093.00	South Carolina
Warmwater >18°C	Fry	Freshwater	3,000	0.02	Georgia
Warmwater >18°C	Fry	Freshwater	9,066	0.86	Georgia
<b>Rock Bass</b>					
Warmwater >18°C	Fingerling	Freshwater	2,050	35.00	Nebraska
<b>Rock Sole</b>					
Coldwater <12°C	Fingerling	Marine	3,000	25.00	Washington

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
<b>Roundtail Chub</b>					
Warmwater >18°C	Fingerling	Freshwater	19,396	116.39	Colorado
Warmwater >18°C	Fingerling	Freshwater	2,400	201.10	Nevada
<b>Sablefish</b>					
Coldwater <12°C	Broodstock	Marine	200	2,000.00	Washington
Coldwater <12°C	Catchable	Marine	800	4,000.00	Washington
<b>Sauger</b>					
Coolwater 12 - 18°C	Fingerling	Freshwater	3,141	4.60	Colorado
Coolwater 12 - 18°C	Fingerling	Freshwater	4,455	4.10	Indiana
Coolwater 12 - 18°C	Fingerling	Freshwater	1,082,132	1,202.32	Kansas
Coolwater 12 - 18°C	Fingerling	Freshwater	20,668	37.00	Montana
Coolwater 12 - 18°C	Fingerling	Freshwater	53,350	64.00	Nebraska
Coolwater 12 - 18°C	Fingerling	Freshwater	62,858	66.24	Pennsylvania
Coolwater 12 - 18°C	Fingerling	Freshwater	178,039	152.85	Tennessee
Coolwater 12 - 18°C	Fry	Freshwater	6,847,090	33.42	Kansas
Coolwater 12 - 18°C	Fry	Freshwater	436,850	1.00	Montana
Warmwater >18°C	Fingerling	Freshwater	10,660	15.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	1,188,746	2,892.00	Illinois
Warmwater >18°C	Fry	Freshwater	21,763,000	239.70	Illinois
<b>Saugeye</b>					
Coolwater 12 - 18°C	Fingerling	Freshwater	617,906	432.00	Colorado
Coolwater 12 - 18°C	Fingerling	Freshwater	256,800	625.00	Illinois
Coolwater 12 - 18°C	Fingerling	Freshwater	48,979	60.70	Indiana
Coolwater 12 - 18°C	Fingerling	Freshwater	821,833	913.11	Kansas
Coolwater 12 - 18°C	Fingerling	Freshwater	966,638	1,074.00	Oklahoma
Coolwater 12 - 18°C	Fingerling	Freshwater	18,505	11.20	Pennsylvania
Coolwater 12 - 18°C	Fry	Freshwater	16,234,380	60.37	Colorado
Coolwater 12 - 18°C	Fry	Freshwater	831,000	9.20	Illinois
Coolwater 12 - 18°C	Fry	Freshwater	350,150	3.28	Indiana
Coolwater 12 - 18°C	Fry	Freshwater	6,847,090	33.41	Kansas
Coolwater 12 - 18°C	Fry	Freshwater	2,639,107	12.88	Oklahoma
Coolwater 12 - 18oC	Fingerling	Freshwater	8,154,370	3,892.00	Ohio
Coolwater 12 - 18oC	Fry	Freshwater	1,340,560	6.50	Ohio
Warmwater >18°C	Fingerling	Freshwater	134,150	146.00	Arkansas

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fingerling	Freshwater	13,900	39.68	Texas
<b>Shoal Bass</b>					
Warmwater >18°C	Fingerling	Freshwater	136,008	130.20	Georgia
<b>Shortnose Gar</b>					
Warmwater >18°C	Catchable	Freshwater	4	5.00	Georgia
Warmwater >18°C	Catchable	Freshwater	10	20.00	Minnesota
<b>Shortnose Sturgeon</b>					
Warmwater >18°C	Fingerling	Freshwater	1,300	9.70	Georgia
Warmwater >18°C	Fingerling	Freshwater	720	4.00	North Carolina
Warmwater >18°C	Fry	Freshwater	8,294	2.25	Georgia
<b>Shovelnose Sturgeon</b>					
Coolwater 12 - 18°C	Fingerling	Freshwater	709	31.00	Ohio
<b>Smallmouth Bass</b>					
Coolwater 12 - 18°C	Catchable	Freshwater	50	150.00	North Dakota
Coolwater 12 - 18°C	Fingerling	Freshwater	15,000	29.00	Arkansas
Coolwater 12 - 18°C	Fingerling	Freshwater	1,647	70.00	Iowa
Coolwater 12 - 18°C	Fingerling	Freshwater	16,004	70.25	Kansas
Coolwater 12 - 18°C	Fingerling	Freshwater	52,440	129.10	Tennessee
Coolwater 12 - 18°C	Fingerling	Freshwater	17,200	419.00	Utah
Coolwater 12 - 18°C	Fingerling	Freshwater	8,800	40.00	Virginia
Coolwater 12 - 18°C	Fingerling	Freshwater	427	17.00	Wisconsin
Coolwater 12 - 18°C	Fry	Freshwater	147,000	8.36	Kansas
Warmwater >18°C	Broodstock	Freshwater	304	498.50	Oklahoma
Warmwater >18°C	Catchable	Freshwater	10,738	1,074.00	South Carolina
Warmwater >18°C	Fingerling	Freshwater	7,610	18.00	Alabama
Warmwater >18°C	Fingerling	Freshwater	102,965	211.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	120,796	917.00	Colorado
Warmwater >18°C	Fingerling	Freshwater	37,617	990.00	Illinois
Warmwater >18°C	Fingerling	Freshwater	75,291	243.00	Illinois
Warmwater >18°C	Fingerling	Freshwater	1,000	3.64	Maryland
Warmwater >18°C	Fingerling	Freshwater	1,116	4.50	Montana
Warmwater >18°C	Fingerling	Freshwater	42,900	188.30	Oklahoma
Warmwater >18°C	Fingerling	Freshwater	448	1.00	Pennsylvania
Warmwater >18°C	Fingerling	Freshwater	43,713	97.00	South Carolina

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fingerling	Freshwater	82,670	415.00	South Dakota
Warmwater >18°C	Fingerling	Freshwater	11,764	94.79	Texas
Warmwater >18°C	Fry	Freshwater	58,875	3.35	Oklahoma

**Sockeye Salmon**

Coldwater <12°C	Broodstock	Freshwater	900	4.00	Washington
Coldwater <12°C	Broodstock	Freshwater	400	1,146.00	Washington
Coldwater <12°C	Broodstock	Freshwater	180	35.00	Washington
Coldwater <12°C	Fingerling	Freshwater	39,722	2,478.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	38,818	2,986.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	177,830	11,297.00	Washington
Coldwater <12°C	Fingerling	Freshwater	231,508	396.27	Washington
Coldwater <12°C	Fingerling	Freshwater	785,785	231.11	Washington
Coldwater <12°C	Fry	Freshwater	72,108	930.00	Idaho
Coldwater <12°C	Fry	Freshwater	18,016,540	6,315.00	Washington
Coldwater <12°C	Broodstock	Marine	280	55.00	Washington
Coldwater <12°C	Broodstock	Marine	250	825.00	Washington
Coldwater <12°C	Broodstock	Marine	13	100.00	Washington
Coldwater <12°C	Fingerling	Marine	100,357	2,694.00	Alaska

**Southern Redbelly dace**

Warmwater >18°C	Fingerling	Freshwater	1,753	0.98	Colorado
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**Splake**

Coldwater <12°C	Catchable	Freshwater	43,910	14,821.00	Maine
Coldwater <12°C	Catchable	Freshwater	14,140	3,377.00	New York
Coldwater <12°C	Fingerling	Freshwater	69,401	1,347.00	Colorado
Coldwater <12°C	Fingerling	Freshwater	432,215	52,826.00	Michigan
Coldwater <12°C	Fingerling	Freshwater	70,000	2,800.00	Minnesota
Coldwater <12°C	Fingerling	Freshwater	2,300	290.00	South Dakota
Coldwater <12°C	Fingerling	Freshwater	184,707	8,071.40	Utah
Coldwater <12°C	Fingerling	Freshwater	47,516	5,445.00	Wisconsin
Coldwater <12°C	Fingerling	Freshwater	66,514	1,213.70	Wyoming

**Spotted Bass**

Warmwater >18°C	Fingerling	Freshwater	3,000	2.00	Alabama
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**Spotted Seatrout**

Warmwater >18°C	Fingerling	Marine	3,270,548	2,664.00	Texas
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Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
<b>Spring Chinook Salmon</b>					
Coldwater <12°C	Fingerling	Freshwater	5,550,694	299,495.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	6,344,661	504,831.00	Washington
Coldwater <12°C	Fingerling	Freshwater	89,365	11,915.33	Washington
Coldwater <12°C	Fingerling	Freshwater	933,424	10,704.36	Washington
Coldwater <12°C	Fingerling	Freshwater	274,468	3,154.80	Washington
<b>Steelhead</b>					
Coldwater <12°C	Broodstock	Freshwater	900	2,700.00	Minnesota
Coldwater <12°C	Catchable	Freshwater	3,227	199.00	Alaska
Coldwater <12°C	Catchable	Freshwater	2,842,490	618,373.00	California
Coldwater <12°C	Catchable	Freshwater	690,107	134,667.00	California
Coldwater <12°C	Catchable	Freshwater	4,436,117	983,964.00	Idaho
Coldwater <12°C	Catchable	Freshwater	3,107,662	603,816.00	Idaho
Coldwater <12°C	Catchable	Freshwater	140,520	135,881.00	Pennsylvania
Coldwater <12°C	Catchable	Freshwater	70,150	8,409.00	Vermont
Coldwater <12°C	Catchable	Freshwater	594,811	76,616.00	Washington
Coldwater <12°C	Fingerling	Freshwater	40,500	1,012.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	56,058	4,312.00	Illinois
Coldwater <12°C	Fingerling	Freshwater	893,047	56,623.31	Indiana
Coldwater <12°C	Fingerling	Freshwater	32,358	3,784.66	Indiana
Coldwater <12°C	Fingerling	Freshwater	2,356,254	392,709.00	Michigan
Coldwater <12°C	Fingerling	Freshwater	40,000	5,700.00	Minnesota
Coldwater <12°C	Fingerling	Freshwater	815,179	44,185.00	New York
Coldwater <12°C	Fingerling	Freshwater	4,716,571	903,470.00	Oregon
Coldwater <12°C	Fingerling	Freshwater	26,528	93.34	Washington
Coldwater <12°C	Fingerling	Freshwater	6,230,685	1,075,210.00	Washington
Coldwater <12°C	Fingerling	Freshwater	149,599	88.94	Washington
Coldwater <12°C	Fingerling	Freshwater	48,625	5,720.59	Washington
Coldwater <12°C	Fingerling	Freshwater	149,874	22,040.29	Washington
Coldwater <12°C	Fingerling	Freshwater	316,968	55,608.42	Washington
Coldwater <12°C	Fingerling	Freshwater	62,553	12,510.60	Washington
Coldwater <12°C	Fingerling	Freshwater	52,558	6,652.91	Washington
Coldwater <12°C	Fingerling	Freshwater	21,050	2,536.14	Washington
Coldwater <12°C	Fry	Freshwater	3,866	40.43	Alaska
Coldwater <12°C	Fry	Freshwater	1,200,000	400.00	Minnesota
Coldwater <12°C	Fry	Freshwater	104,266	612.00	Oregon
Coldwater <12°C	Fry	Freshwater	257,366	3,633.00	Washington

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12oC	Fingerling	Freshwater	402,827	40,389.00	Ohio
Coolwater 12 - 18°C	Fingerling	Freshwater	20,712	2,547.00	California
Coolwater 12 - 18°C	Fingerling	Freshwater	1,064,983	135,246.00	Pennsylvania
<b>Striped Bass</b>					
Warmwater >18°C	Catchable	Brackish	27,838	730.00	Georgia
Coolwater 12 - 18°C	Catchable	Freshwater	27	405.00	Pennsylvania
Coolwater 12 - 18°C	Fingerling	Freshwater	97,283	279.92	Indiana
Coolwater 12 - 18°C	Fingerling	Freshwater	61,035	247.80	Kansas
Coolwater 12 - 18°C	Fingerling	Freshwater	419,310	588.88	Pennsylvania
Coolwater 12 - 18°C	Fingerling	Freshwater	1,313,325	4,396.90	Tennessee
Coolwater 12 - 18°C	Fry	Freshwater	9,110,000	63.77	Georgia
Coolwater 12 - 18°C	Fry	Freshwater	6,880,000	7.00	Pennsylvania
Coolwater 12 - 18°C	Fry	Freshwater	12,900,000	102.02	South Carolina
Warmwater >18°C	Catchable	Freshwater	17,545	4,099.00	Florida
Warmwater >18°C	Catchable	Freshwater	32	222.00	Georgia
Warmwater >18°C	Catchable	Freshwater	15,591	2,280.00	Louisiana
Warmwater >18°C	Catchable	Freshwater	875	175.00	Mississippi
Warmwater >18°C	Fingerling	Freshwater	285,760	297.00	Alabama
Warmwater >18°C	Fingerling	Freshwater	623,397	3,136.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	381,300	380.00	Florida
Warmwater >18°C	Fingerling	Freshwater	38,818	69.00	Georgia
Warmwater >18°C	Fingerling	Freshwater	2,553,903	763.48	Georgia
Warmwater >18°C	Fingerling	Freshwater	758,499	1,512.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	40,072	69.00	Missouri
Warmwater >18°C	Fingerling	Freshwater	472,760	24,881.00	North Carolina
Warmwater >18°C	Fingerling	Freshwater	1,368,165	849.00	North Carolina
Warmwater >18°C	Fingerling	Freshwater	2,198,066	1,465.00	South Carolina
Warmwater >18°C	Fingerling	Freshwater	355,535	644.25	South Carolina
Warmwater >18°C	Fingerling	Freshwater	6,650	11.00	South Carolina
Warmwater >18°C	Fingerling	Freshwater	66,000	55.00	South Carolina
Warmwater >18°C	Fingerling	Freshwater	2,355,647	4,431.22	Texas
Warmwater >18°C	Fingerling	Freshwater	1,298,000	926.25	Virginia
Warmwater >18°C	Fry	Freshwater	693,300	1.00	Alabama
Warmwater >18°C	Fry	Freshwater	15,000	16.80	Alabama
Warmwater >18°C	Fry	Freshwater	3,549,000	37.00	Arkansas
Warmwater >18°C	Fry	Freshwater	200,000	0.10	Arkansas
Warmwater >18°C	Fry	Freshwater	120,000	0.40	Colorado

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fry	Freshwater	65,100	40.10	Florida
Warmwater >18°C	Fry	Freshwater	2,155,000	17.00	Florida
Warmwater >18°C	Fry	Freshwater	154,320	90.80	Georgia
Warmwater >18°C	Fry	Freshwater	70,881	46.75	Louisiana
Warmwater >18°C	Fry	Freshwater	54,982	26.70	Mississippi
Warmwater >18°C	Fry	Freshwater	428,983	536.00	North Carolina
Warmwater >18°C	Fry	Freshwater	2,775,571	21.95	Oklahoma
Warmwater >18°C	Fry	Freshwater	1,457,746	6.61	Texas
Warmwater >18°C	Fry	Freshwater	220,800	109.00	Texas
Warmwater >18°C	Fry	Freshwater	131,290	142.00	Virginia
Warmwater >18oC	Fingerling	Freshwater	98,679	25.00	Ohio
Warmwater >18oC	Fry	Freshwater	500,000	4.00	Ohio

**Sturgeon**

Coolwater 12 - 18°C	Fingerling	Freshwater	7,464	109.70	Michigan
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**Summer Chinook Salmon**

Coldwater <12°C	Fingerling	Freshwater	2,128,012	108,114.00	Idaho
Coldwater <12°C	Fingerling	Freshwater	44,725	1,286.31	Washington
Coldwater <12°C	Fingerling	Freshwater	1,254,059	15,675.74	Washington
Coldwater <12°C	Fingerling	Freshwater	145,697	1,821.21	Washington
Coldwater <12°C	Fingerling	Freshwater	4,788,183	250,438.00	Washington
Coldwater <12°C	Fry	Freshwater	17,734	27.00	Washington

**Tiger Muskellunge**

Coldwater <12°C	Fry	Freshwater	4,793	1,935.00	Washington
Coolwater 12 - 18°C	Fingerling	Freshwater	3,995	440.00	New Jersey
Coolwater 12 - 18°C	Fry	Freshwater	18,000	54.10	Utah
Warmwater >18°C	Fingerling	Freshwater	74,760	8,787.00	New York
Warmwater >18°C	Fingerling	Freshwater	85,354	4,900.70	Pennsylvania
Warmwater >18°C	Fry	Freshwater	149,000	5.20	Minnesota

**Tiger Trout**

Coldwater <12°C	Catchable	Freshwater	13,208	6,317.00	Connecticut
Coldwater <12°C	Catchable	Freshwater	5,000	6,500.00	Massachusetts
Coldwater <12°C	Catchable	Freshwater	29,078	9,041.00	Nevada
Coldwater <12°C	Catchable	Freshwater	1,000	1,000.00	New Hampshire
Coldwater <12°C	Fingerling	Freshwater	20,256	211.00	Nevada

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coldwater <12°C	Fingerling	Freshwater	479,357	12,050.00	Utah
Coldwater <12°C	Fry	Freshwater	131,885	4,575.00	Washington
<b>Topeka Shiner</b>					
Warmwater >18°C	Fingerling	Freshwater	3,193	10.60	Missouri
<b>Walleye</b>					
Coldwater <12°C	Fry	Freshwater	85,000	0.41	Maryland
Coldwater <12°C	Fry	Freshwater	99,895,000	2,661.00	New York
Coolwater 12 - 18°C	Catchable	Freshwater	3,004	185.00	Iowa
Coolwater 12 - 18°C	Catchable	Freshwater	8,000	457.00	Minnesota
Coolwater 12 - 18°C	Catchable	Freshwater	10,206	138.00	Montana
Coolwater 12 - 18°C	Catchable	Freshwater	3,725	555.00	Wisconsin
Coolwater 12 - 18°C	Fingerling	Freshwater	99,375	100.75	Arkansas
Coolwater 12 - 18°C	Fingerling	Freshwater	402,335	322.00	Colorado
Coolwater 12 - 18°C	Fingerling	Freshwater	343,821	341.19	Georgia
Coolwater 12 - 18°C	Fingerling	Freshwater	1,461,056	3,555.00	Illinois
Coolwater 12 - 18°C	Fingerling	Freshwater	726,748	895.10	Indiana
Coolwater 12 - 18°C	Fingerling	Freshwater	28,000	40.00	Iowa
Coolwater 12 - 18°C	Fingerling	Freshwater	1,621,238	3,561.00	Iowa
Coolwater 12 - 18°C	Fingerling	Freshwater	577,755	1,386.60	Kansas
Coolwater 12 - 18°C	Fingerling	Freshwater	3,461,544	8,609.15	Michigan
Coolwater 12 - 18°C	Fingerling	Freshwater	1,386,946	1,045.20	Missouri
Coolwater 12 - 18°C	Fingerling	Freshwater	460,800	531.00	Missouri
Coolwater 12 - 18°C	Fingerling	Freshwater	2,334	100.00	Missouri
Coolwater 12 - 18°C	Fingerling	Freshwater	5,739	380.40	Missouri
Coolwater 12 - 18°C	Fingerling	Freshwater	2,102,712	1,326.00	Montana
Coolwater 12 - 18°C	Fingerling	Freshwater	698,478	4,252.00	Nebraska
Coolwater 12 - 18°C	Fingerling	Freshwater	36,079	759.00	New Jersey
Coolwater 12 - 18°C	Fingerling	Freshwater	387,440	374.00	New Jersey
Coolwater 12 - 18°C	Fingerling	Freshwater	531,750	5,454.00	New York
Coolwater 12 - 18°C	Fingerling	Freshwater	34,500	53.00	North Carolina
Coolwater 12 - 18°C	Fingerling	Freshwater	8,868,750	5,203.10	North Dakota
Coolwater 12 - 18°C	Fingerling	Freshwater	233,213	339.30	Oklahoma
Coolwater 12 - 18°C	Fingerling	Freshwater	1,434,541	829.82	Pennsylvania
Coolwater 12 - 18°C	Fingerling	Freshwater	1,877,600	1,445.00	South Dakota
Coolwater 12 - 18°C	Fingerling	Freshwater	360,000	14,405.00	South Dakota
Coolwater 12 - 18°C	Fingerling	Freshwater	1,598,797	1,826.40	Tennessee
Coolwater 12 - 18°C	Fingerling	Freshwater	147,940	188.00	Vermont

<b>Water Temperature</b>	<b>Age Class</b>	<b>Water Type</b>	<b>Fish Number</b>	<b>Fish Weight (lbs)</b>	<b>State</b>
Coolwater 12 - 18°C	Fingerling	Freshwater	856,880	634.20	Virginia
Coolwater 12 - 18°C	Fingerling	Freshwater	69,956	7,321.00	Wisconsin
Coolwater 12 - 18°C	Fingerling	Freshwater	3,608,597	5,420.00	Wisconsin
Coolwater 12 - 18°C	Fingerling	Freshwater	184,350	188.50	Wyoming
Coolwater 12 - 18°C	Fry	Freshwater	3,100,000	11.52	Arizona
Coolwater 12 - 18°C	Fry	Freshwater	29,539,690	112.00	Colorado
Coolwater 12 - 18°C	Fry	Freshwater	114,250	0.54	Georgia
Coolwater 12 - 18°C	Fry	Freshwater	1,000,000	7.60	Idaho
Coolwater 12 - 18°C	Fry	Freshwater	7,047,000	77.60	Illinois
Coolwater 12 - 18°C	Fry	Freshwater	19,932,350	186.82	Indiana
Coolwater 12 - 18°C	Fry	Freshwater	707,000	5.12	Iowa
Coolwater 12 - 18°C	Fry	Freshwater	122,398,000	1,028.00	Iowa
Coolwater 12 - 18°C	Fry	Freshwater	49,926,430	243.66	Kansas
Coolwater 12 - 18°C	Fry	Freshwater	5,394,459	12.95	Kentucky
Coolwater 12 - 18°C	Fry	Freshwater	22,375,500	291.00	Michigan
Coolwater 12 - 18°C	Fry	Freshwater	8,788	6.00	Mississippi
Coolwater 12 - 18°C	Fry	Freshwater	9,888	5.65	Missouri
Coolwater 12 - 18°C	Fry	Freshwater	8,556,400	41.80	Missouri
Coolwater 12 - 18°C	Fry	Freshwater	28,080,000	127.00	Montana
Coolwater 12 - 18°C	Fry	Freshwater	2,028,000	23.00	Nebraska
Coolwater 12 - 18°C	Fry	Freshwater	25,000	10.00	Nebraska
Coolwater 12 - 18°C	Fry	Freshwater	1,250,000	9.50	Nevada
Coolwater 12 - 18°C	Fry	Freshwater	790,125	8.20	New Jersey
Coolwater 12 - 18°C	Fry	Freshwater	11,744,180	156.00	New Mexico
Coolwater 12 - 18°C	Fry	Freshwater	4,010,000	19.57	Oklahoma
Coolwater 12 - 18°C	Fry	Freshwater	92,392,340	450.90	Pennsylvania
Coolwater 12 - 18°C	Fry	Freshwater	800,000	3.90	Pennsylvania
Coolwater 12 - 18°C	Fry	Freshwater	3,318,712	29.50	South Dakota
Coolwater 12 - 18°C	Fry	Freshwater	48,000,000	234.40	South Dakota
Coolwater 12 - 18°C	Fry	Freshwater	618,045	446.70	South Dakota
Coolwater 12 - 18°C	Fry	Freshwater	8,990,200	12.00	Vermont
Coolwater 12 - 18°C	Fry	Freshwater	1,465,370	733.00	Washington
Coolwater 12 - 18°C	Fry	Freshwater	1,684,000	8.80	Wisconsin
Coolwater 12 - 18°C	Fry	Freshwater	14,428,290	173.00	Wisconsin
Coolwater 12 - 18°C	Fry	Freshwater	662,750	565.00	Wyoming
Coolwater 12 - 18oC	Fingerling	Freshwater	1,993,851	768.00	Ohio
Coolwater 12 - 18oC	Fry	Freshwater	8,275,335	40.00	Ohio
Warmwater >18°C	Catchable	Freshwater	138,818	42,480.30	Minnesota

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Warmwater >18°C	Fingerling	Freshwater	6,958	8.00	Alabama
Warmwater >18°C	Fingerling	Freshwater	1,094,327	1,742.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	188,260	45,071.90	Iowa
Warmwater >18°C	Fingerling	Freshwater	1,653,506	1,585.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	310,016	232.10	Minnesota
Warmwater >18°C	Fingerling	Freshwater	1,357,734	60,879.50	Minnesota
Warmwater >18°C	Fingerling	Freshwater	46,406	74.96	Texas
Warmwater >18°C	Fry	Freshwater	5,025,000	50.00	Arkansas
Warmwater >18°C	Fry	Freshwater	261,982,000	2,400.90	Minnesota

**White Bass**

Warmwater >18°C	Catchable	Freshwater	400	250.00	Iowa
Warmwater >18°C	Fingerling	Freshwater	11,000	10.00	Florida
Warmwater >18°C	Fingerling	Freshwater	372,044	361.00	Kentucky
Warmwater >18°C	Fingerling	Freshwater	260,900	94.00	Nebraska
Warmwater >18°C	Fry	Freshwater	70,000	0.55	Florida
Warmwater >18°C	Fry	Freshwater	4,800,000	37.90	Kentucky

**White Crappie**

Warmwater >18°C	Broodstock	Freshwater	1,230	1,016.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	675,573	4,913.00	Arkansas
Warmwater >18°C	Fingerling	Freshwater	9,220	11.00	Missouri
Warmwater >18°C	Fingerling	Freshwater	2,000	46.00	Pennsylvania
Warmwater >18°C	Fingerling	Freshwater	34,744	238.09	Tennessee

**White Sturgeon**

Coolwater 12 - 18°C	Catchable	Freshwater	3,755	1,217.00	Washington
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**White Sucker**

Coolwater 12 - 18°C	Catchable	Freshwater	7,756	800.00	Wisconsin
Warmwater >18°C	Fry	Freshwater	15,466,760	182.10	Minnesota

**Woundfin**

Warmwater >18°C	Fingerling	Freshwater	4,400	14.00	Utah
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**Yellow Perch**

Coldwater <12°C	Fry	Freshwater	495,000	28.19	Maryland
Coolwater 12 - 18°C	Catchable	Freshwater	80	50.00	Wisconsin

Water Temperature	Age Class	Water Type	Fish Number	Fish Weight (lbs)	State
Coolwater 12 - 18°C	Fingerling	Freshwater	273,464	2,417.00	Nebraska
Coolwater 12 - 18°C	Fingerling	Freshwater	477,400	327.00	North Dakota
Coolwater 12 - 18°C	Fingerling	Freshwater	110,160	146.80	North Dakota
Coolwater 12 - 18°C	Fingerling	Freshwater	94,055	108.50	South Dakota
Coolwater 12 - 18°C	Fingerling	Freshwater	11,384	359.50	Wisconsin
Coolwater 12 - 18°C	Fry	Freshwater	1,400,000	1.00	Nebraska
Coolwater 12 - 18°C	Fry	Freshwater	944,600	647.00	Pennsylvania
Coolwater 12 - 18°C	Fry	Freshwater	1,000,000	684.96	Pennsylvania
Coolwater 12 - 18°C	Fry	Freshwater	27,415	14.80	Wisconsin
Warmwater >18°C	Fingerling	Freshwater	417,500	1,519.67	Maryland

**Total Fish Number** 1,889,870,264**Total Fish Weight (lb)** 44,095,132