

LIST OF FISHES KNOWN TO INHABIT THE WATERS OF THE DISTRICT OF COLUMBIA AND VICINITY.

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INTRODUCTORY.

There is herewith presented the first published list of the fishes of the District of Columbia and vicinity. Much has been written concerning the fishes of the region, but the literature is scattered through many journals, newspapers, and Government reports, and pertains chiefly to the well-known game and food fishes, while the smaller fishes—important as affording food for the others—have been very generally neglected.

For convenience, the limits of the District may be regarded as extending over a radius of 20 miles from the Capitol, it having been the practice to include this area in former treatises on the fauna and flora of the region under discussion. The waters considered, therefore, are:

(1) The Potomac River, from Occoquan River, Virginia, to a point 5 miles above the Great Falls. Its principal tributaries in this section, beginning at the southern limit, are as follows:

In Maryland and District of Columbia: Mattawoman Creek, Accokeek Creek, Piscataway Run, Swan Creek, Broad Creek, Oxen Run, Eastern Branch or Anacostia River (with its tributaries, Sligo Branch, Northwest Branch, Paint Branch, Little Paint Branch, and Beaver Dam), Rock Creek and Piney Branch, Foundry Run, and Cabin John Run.

In Virginia: Pohick Creek, Accotink Creek, Dogue Creek, Little Hunting Creek, Hunting Creek, Cameron Run (and its tributaries, Back Lick Run and Holmes Run), Four-Mile Run, Roach's Run, Gravelly Run, Little River, Pimmitt Run, and Difficult Run.

(2) The Chesapeake and Ohio Canal and the Government reservoirs above Georgetown.

(3) The Patuxent River, Maryland, from Nottingham post-office northward, with numerous tributaries flowing from the west, the principal branches being the Western, Collington, and Mattaponi.

The fishes of this region have perhaps received less attention from local students than any other class of vertebrate animals. They are certainly not the least interesting and important group for study, and at the present time afford an excellent subject for investigation. Systematic collecting will doubtless add considerably to the list of species, and aid in the elucidation of questions pertaining to geographical distribution and variation.

The District fish fauna, as at present known, comprises 81 species, belonging to 62 genera and 31 families. The most numerous family, the *Cyprinidae*, which includes the minnows and carp-like fishes, has 19 species. Other families with 5 or more species are the *Siluridae* (catfishes), *Catostomidae* (suckers), *Clupeidae* (shad and herring), and *Centrarchidae* (bass and sunfish). The local fish fauna has been considerably

enriched by the introduction of non-indigenous species, some of which are now among the best food and game fishes of the region. The acclimatized species, numbering about 10, are mostly members of the bass family and are indicated in the list. About 30 species are of economic importance, of which the principal are the shad, hickory shad, alewives, striped bass (better known locally as rock or rockfish), white perch, black basses, yellow perch, eel, sturgeon, suckers, carp, and catfishes. Some years ago the value of the fishes caught for market in that part of the Potomac under District jurisdiction was about \$12,000, about half of which sum was credited to the shad. A recent act of Congress has prohibited all forms of net fishing in the District waters, which thus become an important nursery where such valuable species as the shad, the herring, the striped bass, and the black basses may spawn unmolested.

Four species recognized as distinct by recent authorities have been described from District waters; two of these are minnows (*Notropis*), one is a silverside (*Menidia*), and one is a darter (*Boleosoma*). From the Potomac have also come the types of a number of other species which are now regarded as identical with previously described forms.

An interesting feature of the fish fauna is the regular or occasional appearance in our waters of typical salt-water fishes. These are usually observed during dry weather, when there is an extension upstream of the zone of brackish water, which is normally about 40 miles below Washington; but a few, such as the silver gar, make deliberate visits to the fresh waters. The salt-water fishes which have thus far been detected within our limits number about 12; others may be looked for in spring and summer between Alexandria and Mount Vernon.

The following list includes all species of fishes known to occur in the vicinity of Washington, and is largely based on collections of the United States Fish Commission and United States National Museum. Those species of which specimens are preserved are indicated by an asterisk (*) after the scientific name. The common names of the fishes are given in all cases; those in local use are distinguished by quotation marks.

This list is only preliminary, as the available specimens and information do not warrant a full discussion of the District fish fauna at this time. It is contemplated to issue a second list, with illustrations of all the species and detailed notes on their habits, distribution, and abundance, as soon as the material can be collected. To this end the cooperation of anglers, commercial fishermen, fish-dealers, and students is asked in furnishing specimens and notes, for which full credit will be given.

PETROMYZONIDÆ. The Lampreys.

1. *Petromyzon marinus* Linnæus.* "*Lamprey*"; "*Lamper Eel*"; "*Sucker*"; *Sea Lamprey*.

Not common. Comes from salt water in spring and runs up streams to spawn. Shad are sometimes taken with lampreys 6 to 14 inches long hanging on their sides. Large ones, 1½ to 3 feet long, ascend small streams with the branch herring. Fishermen make it a point to kill the lamprey whenever there is an opportunity, as it is of no economic value and is regarded as destructive to other fish.

GALEIDÆ. The Requiem Sharks.

2. *Carcharhinus obscurus* (LeSueur).* *Dusky Shark*.

Occasionally observed in the Potomac between Fort Washington and Alexandria during dry weather when the water becomes brackish. An example 5 feet long, taken at Glymont in August, 1894, was examined by us in Center Market, where a cast of the specimen is now exhibited. Other sharks have also been taken in sturgeon nets at Glymont during dry weather, and many years ago one was captured at Fort Washington.

ACIPENSERIDÆ. The Sturgeons.

3. *Acipenser sturio* Linnæus.* *Sturgeon*.

Once abundant in the Potomac, but now comparatively rare. Ascends the river in spring to spawn. Large numbers were formerly caught in seines and gill nets by the shad and herring fishermen, who regarded sturgeon as nuisances and usually knocked them in the head and threw them away. The fish now commands a high price.

4. *Acipenser brevirostris* LeSueur.* *Sturgeon*; *Short-nosed Sturgeon*.

Not so abundant as the common sturgeon, and has undergone the same decrease in recent years. Probably not recognized by fishermen as a different species from the foregoing.

LEPISOSTEIDÆ. The Gars.

5. *Lepisosteus osseus* (Linnæus).* "*Gar Pike*"; "*Gar*."

Common in Potomac River and tributaries, especially Eastern Branch, Four-Mile Run, and Little River, but less numerous now than fifteen years ago. In former years shad gill-net fishermen often carried little clubs with which to kill the gars that became entangled in their nets. A destructive, fish-eating species, ascending creeks in summer after small fish. Food value very inferior; the expression "Common as gar broth" is proverbial.

SILURIDÆ. The Catfishes.

6. *Ictalurus punctatus* (Rafinesque).* *Spotted Cat*; *Blue Cat*.

This very desirable species of catfish has been introduced by the Fish Commission, small plants of adult and yearling fish being made in 1889, 1891, and 1892 in tributaries of the Potomac at Quantico, Va., Woodmont, Md., and Hagerstown, Md. On April 13, 1899, two live specimens, about a foot in length, were brought to the Fish Commission from the Potomac at Washington.

7. *Ameiurus catus* (Linnæus).* "*Channel Cat*"; "*White Cat*."

Abundant in channels of Potomac River. A valuable food-fish, many being taken by net fishermen and anglers. Attains a length of 2 feet.

8. *Ameiurus nebulosus* (LeSueur).* "*Mud Cat*"; "*Yellow Cat*"; *Bullhead*; *Horned Pout*.

Generally abundant in Potomac River and tributaries. Spawns along muddy flats and shores. Much less valuable for food than the channel cat.

9. *Ameiurus natalis* (LeSueur).* "*Stone Cat*"; *Yellow Cat*.

Occurs in Potomac River and Rock Creek. Less common than other members of this genus.

10. *Schilbeodes insignis* (Richardson).* "*Poison Cat*"; "*Mad Tom*"; *Stone Cat*.

Common in sluggish, muddy waters and also on rocky bottoms. A vicious little fellow, often caught with the hook, and capable of inflicting a painful wound with the pectoral spines.

CATOSTOMIDÆ. The Suckers.

11. *Carpiodes cyprinus* (LeSueur).* *Carp Sucker*; *American Carp*; "*Carp*"; *Quillback*.

Not very common except in circumscribed areas. Sometimes brought to the city markets, but not a highly esteemed food-fish. Locally called "carp." Reaches a length of 18 or 20 inches.

12. *Catostomus commersonii* (Lacépède).* "*Sucker*"; *Brook Sucker*; *White Sucker*; "*Fine-scaled Mullet*"; "*Bay Mare*."

Very common in the Potomac and in the tributary creeks. Found in our waters at all seasons, but taken chiefly in winter with seines and fykes. A poor food-fish, weighing 1 or 2 pounds. Bites freely at the hook baited with a worm, and is often caught by youthful anglers.

13. *Catostomus nigricans* LeSueur.* "*Stone-toter*."

Common in Potomac, Rock Creek, and other tributaries, but less so than formerly; prefers clear, rapid waters. Many are caught for market with seines in creeks, from December to April. Regarded as a fair fish for that time of year. It is said to carry stones on its flat head, whence the local name.

14. *Erimyzon sucetta* (Lacépède).* "*Chub*"; *Chub Sucker*; *Creek Fish*; *Creek Sucker*.

Found in the Potomac River and its tributaries generally, but is not abundant. In fall and winter it resorts to headwaters of streams. Frequently eaten and considered a good winter fish, being the best of the suckers for the table. Maximum weight, 1 pound.

15. *Moxostoma macrolepidotum* (LeSueur).* "Mullet"; "Red Mullet"; Redhorse Mullet.

Very common in the Potomac, where it reaches a weight of 2 pounds. Many caught in shad seines in the river below Washington; some taken with the shad, but the bulk of the run is after the shad season. The fishermen say that "when the red mullet come the shad fishing is over for seines."

CYPRINIDÆ. The Carps and Minnows.

16. *Cyprinus carpio* Linnæus.* *Carp*; *German Carp*; *Asiatic Carp*; varieties, *Leather Carp* and *Mirror Carp*.

Introduced from Europe, and now very abundant in the Potomac and the canal. Large quantities are sent to the city markets from the adjacent parts of the Potomac. Many weighing from a few ounces to 30 pounds are caught by anglers from wharves and the Long Bridge.

17. *Carassius auratus* (Linnæus).* "Goldfish"; "Silver-fish"; "Sand Perch."

Introduced from Europe and now common in the river and its principal tributaries, interbreeding with the carp. Chiefly valued as an aquarium fish; a few are sold for food in Washington markets under the name of "sand perch."

18. *Tinca tinca* (Linnæus).* *Tench*.

Introduced from Europe by the Fish Commission; escaped into the Potomac and now becoming common. Some are sent to market from District waters. Readily distinguished by its rich, greenish-brown color and very fine scales.

19. *Idus idus* (Linnæus).* *Golden Ide*; *Golden Orfe*.

Introduced from Europe and escaped into the Potomac from the United States Fish Commission ponds. A handsome, hardy aquarium fish and a fair food-fish, having a length of about a foot.

20. *Hybognathus nuchalis* Agassiz.* "Gudgeon"; "Smelt"; "Silvery Minnow"; *Smelt Minnow*.

Abundant in the Potomac and tributaries. Many caught by anglers from the city wharves and along the sea-walls of the reclaimed flats. Reaches a length of 6 inches, but averages only 4 inches.

21. *Semotilus corporalis* (Mitchill).* "Fallfish"; "Chub"; *Dace*.

This, the largest native cyprinoid fish of the District, is not uncommon in the clear tributaries of the Potomac, especially Rock Creek. It is often caught with hook and line in the smaller streams, but has little value as a market fish. It attains a length of 18 inches and a weight of nearly 5 pounds, but none so large has been observed in our local waters.

22. *Semotilus atromaculatus* (Mitchill).* *Horned Dace*; "Fallfish"; "Chub"; *Silver Chub*.

Common in tributaries of Potomac and in upper waters of Patuxent near Laurel, Md. The maximum size is 10 to 12 inches.

23. *Leuciscus vandoisulus* Cuvier & Valenciennes.* *Minnow*; *Long-mouthed Minnow*.

This beautiful minnow is found in the creeks of the District, but it is not abundant. It has been collected in the Northwest Branch, Berry Run near Glenwood Cemetery, and Accokeek Creek near Bryan Point, Maryland. In the last-named stream it has been found in some numbers. It is interesting to note that the sixth entry in the large catalogues of the fish collection of the United States National Museum registers a specimen of this species taken in District waters by Prof. S. F. Baird.

24. *Leuciscus margarita* (Cope).* *Minnow*.

This showy little fish inhabits clear creeks. It is less common than the preceding species.

25. *Notemigonus crysoleucas* (Mitchill).* "Roach"; "Sunfish"; "Dace"; "Bitterhead"; *Shiner*; *Chub*; *Bream*.

One of the most abundant and best known of our minnows, readily recognized by its uniform golden or brassy color. It frequents waters with bottom overgrown with grass or other vegetation. Examples a foot in length have been taken. The smaller fish are excellent bait for black bass.

26. *Notropis procne* (Cope).* *Minnow*.

A few specimens of this diminutive minnow, whose maximum length is only 2½ inches, have been taken in Little River. It probably occurs in other suitable places.

27. *Notropis hudsonius amarus* (Girard).* *Spawn-eater*; *Silver-fin*; *Shiner*.

Common in the Potomac. Type was obtained at Washington and described by Dr. Girard in 1856.

28. *Notropis analostanus* (Girard).* *Silver-fin; Satin-fin; Lace-fin.*
Common in the Potomac River and tributaries. The type was described by Girard in 1856 from specimens taken at Analostan Island, after which the species was named.
29. *Notropis cornutus* (Mitchill).* *Shiner; Dace; Redfin.*
Abundant in small streams, such as Rock Creek, Northwest Branch, Cameron Run near Alexandria, and other tributaries of the Potomac. A valuable bait-minnow for bass and perch.
30. *Notropis photogenis* (Cope).* *Silvery Minnow.*
Apparently rare. A few specimens were taken in the Potomac at Washington in December, 1877, by Mr. William Palmer; and some years ago several were collected near Falls Church, Va., in Delaney Run, a branch of Little Hunting Creek, by the same collector.
31. *Rhinichthys cataractæ* (Cuvier & Valenciennes).* *Long-nosed Dace; Black-nosed Dace; Black Minnow.*
Inhabits cold, clear streams. Apparently not common.
32. *Rhinichthys atronasmus* (Mitchill).* *Dace; Black-nosed Dace; Brook Minnow.*
Abundant, especially in small, spring streams tributary to Rock Creek. An active little fish of beautiful coloration. There is a black lateral band extending from snout to tail; in males in spring this band, together with the lower fins and sometimes the entire body, is bright crimson.
33. *Hybopsis kentuckiensis* (Rafinesque).* *"Chub"; "Horny-head"; Grass Chub; River Chub; Indian Chub; Jerker.*
Usually common on grassy bottom in the Potomac and tributaries. A very good bait-fish for bass, rockfish, and perch. Reaches a length of 9 inches.
34. *Exoglossum maxillingua* (LeSueur).* *Cut-lips; Butter Chub.*
Found in clear streams at foot of rapids, and in feeders of the canal. Not uncommon in places. A small species, remarkable for its 3-lobed lower jaw.

ANGUILLIDÆ. The Eels.

35. *Anguilla chrysypa* Rafinesque.* *Eel.*
Abundant. In spring the young, about 3 inches long, ascend the river, large straggling schools being seen along the rocky shores above Georgetown; these have come from salt water, where they were hatched. Large numbers are caught by commercial fishermen and anglers. An omnivorous feeder, very destructive to spawn of shad and other fish.

DOROSOMATIDÆ. The Gizzard Shads.

36. *Dorosoma cepedianum* (LeSueur).* *"Gizzard Shad"; "Virginia Shad"; "Mud Shad"; Hickory Shad; Winter Shad.*
Fairly common in the Potomac at all seasons, but scarcer now than formerly. Sold in the markets, but not highly esteemed as food. Spawns in summer. Average weight, 1½ to 2 pounds.

CLUPEIDÆ. The Herrings and Shads.

37. *Pomolobus mediocris* (Mitchill).* *"Hickory Shad"; "Hickory Jack"; "Tailor Shad"; "Fresh-water Tailor"; Fall Herring; Tailor Herring; Mattawacca.*
Common. Comes in spring with the branch herring; a few remain in upper river through summer and fall. Used as food, but not highly esteemed; sometimes sold to the unwary as true shad, from which it is readily distinguished by its projecting lower jaw. Largest weigh 4 pounds, the average 2 pounds.
38. *Pomolobus pseudoharengus* (Wilson).* *"Herring"; "Branch Herring"; "Blear-eye"; River Herring; Alewife.*
Very abundant, but less so than formerly. Ascends the river in early spring, in advance of the shad, usually reaching District waters about March 1, but sometimes by the middle of February.
39. *Pomolobus æstivalis* (Mitchill).* *"Glut Herring"; "River Herring"; Summer Herring; Alewife.*
Very abundant, reaching this part of the river in spring a little later than the shad. A trifle larger than the branch herring, from which it is readily distinguished by its black peritoneum. Next to the shad this is the most important food-fish of the District waters, large numbers being sold fresh and also salted at the fishing shores.

40. *Alosa sapidissima* (Wilson).* *Shad.*

This valuable food-fish ascends the river in spring, usually reaching the District about April 1. The upper limit of its range is the Great Falls, where numbers are taken by means of long-handled dip nets, the fishermen standing on the rocks. It is the object of extensive fisheries carried on with seines, gill nets, and pound nets, and is the most highly esteemed and important food-fish of these waters. Its abundance in the Potomac is chiefly dependent on artificial propagation, as a very large part of the run each season is caught before the fish have reached their spawning-grounds in fresh water. The average weight of males or "bucks" is 3 pounds and of females or "roes" $4\frac{1}{2}$ pounds.

41. *Brevoortia tyrannus* (Latrobe).* *Menhaden; "Bugfish"; "Alewife."*

This salt-water fish is a straggler within the District, occasionally ascending the river in dry weather as far as Fort Washington. At Bryan Point, Maryland, several hundred were taken at one seine haul in June, 1892.

ENGRAULIDIDÆ. The Anchovies.**42. *Stolephorus mitchilli* (Cuvier & Valenciennes).*** *Anchovy.*

Many specimens of this salt-water species have been taken in fall in the river channel off Bryan Point, Maryland, by the Fish Commission.

SALMONIDÆ. The Trouts and Salmon.**43. *Salvelinus fontinalis* (Mitchill).** *Brook Trout; Speckled Trout.*

In former years this fish inhabited Difficult Run, on the Virginia side of the Potomac below Great Falls, but was supposed to have been long since exterminated. Recently, however, a few have been taken in this stream. In all probability it also formerly occurred in the cooler tributaries of Rock Creek.

UMBRIDÆ. The Mud Minnows.**44. *Umbra pygmæa* (DeKay).*** *Mud Minnow.*

Frequents ditches and sluggish streams; very abundant in Eastern Branch and in ditches along the Washington and Ohio Railroad. Common in streams and ditches about Laurel, Md. Often found in water so shallow and foul that no other fish could live in it. Length, 3 to 4 inches.

LUCIIDÆ. The Pikes.**45. *Lucius americanus* (Gmelin).*** *"Pike"; Banded Pickerel.*

Not uncommon in Little River and other tributaries of the Potomac with grassy bottom. Length, 12 inches or less.

46. *Lucius reticulatus* (LeSueur).* *"Chain Pickerel"; "Pike"; Federation Pike; Eastern Pickerel.*

More or less abundant in Potomac River and tributaries on the grassy bottoms of coves and creeks; also found in the canal. Scarcer than formerly. Quite a number are sold in the Washington markets, brought from the river contiguous to the city. The fish reaches a length of 2 feet.

PŒCILIIDÆ. The Killifishes.**47. *Fundulus heteroclitus* (Linnæus).*** *"Minnow"; "Pike Minnow"; Killifish; Mummichog; Mud Minnow.*

Very abundant in the Potomac and its larger tributaries. Important as food for other fishes and as a bait for anglers.

48. *Fundulus diaphanus* (LeSueur).* *"Minnow"; Killifish.*

Abundant. A showy minnow, usually found ascending the shallow streams of the District in the spring and early summer months, loitering under bridges and starting out with great energy when startled by the noise of foot passengers or vehicles; in their fright they sometimes swim on shoal sandy bars and become stranded. A valuable bait-fish.

49. *Cyprinodon variegatus* Lacépède.* *Sheepshead Minnow; Variegated Minnow.*

A brackish-water species, rarely straying within our limits; once taken at Gunston Wharf, Va., by Col. M. McDonald, in spring of 1881.

ESOCIDÆ. The Marine Gars.

50. *Tylosurus marinus* (Walbaum).* *"Silver Gar"; Salt-water Gar; Needle-fish; Billfish.*

This salt-water fish is a regular visitant, coming in spring with the branch herring and remaining throughout the summer. It ascends the river as far as the Aqueduct Bridge. Usually observed swimming at the surface in scattered bodies. At times it is a nuisance to anglers on account of its bait-stealing habits.

SYNGNATHIDÆ. The Pipefishes.

51. *Siphostoma fuscum* (Storer)*. *Pipefish.*

A straggler from salt water, once taken at Gunston, Va.

PERCOPSIDÆ. The Trout Perches.

52. *Percopsis guttatus* Agassiz.* *Trout Perch; Sand-roller.*

This species is not abundant, so far as known, and has up to this time been taken only in Rock Creek and Cabin John Run.

APHREDODERIDÆ. The Pirate Perches.

53. *Aphredoderus sayanus* (Gilliams)*. *Pirate Perch.*

Professor Baird has reported that he saw a specimen of this fish from the Potomac many years ago. Recently found at Laurel, Md., by Mr. George Marshall, of the U. S. National Museum.

ATHERINIDÆ. The Silversides.

54. *Menidia beryllina* (Cope)*. *Silverside.*

This species was described in 1866 by the late Professor Cope from specimens taken in the Potomac near Washington. It is more or less common in the vicinity of Long Bridge and the mouth of Four-Mile Run.

CENTRARCHIDÆ. The Basses and Sunfishes.

55. *Pomoxis sparoides* (Lacépède)*. *"Strawberry Bass"; "Strawberry Perch"; "Crappie"; "Calico Bass"; "Speckled Perch."*56. *Pomoxis annularis* Rafinesque.* *"Crappie"; Bachelor.*

Both of these species were introduced into the Potomac River and the Chesapeake and Ohio Canal by the Fish Commission in 1894, and have become very common in places, noticeably Little River, Four-Mile Run, Eastern Branch, and in the river near Seven Locks; also throughout the canal as far as Harpers Ferry. *P. annularis* is the more abundant here. These are excellent game and food fishes and many are now caught by anglers. The two species are much alike and not usually distinguished by local fishermen, who apply the names "crappie," "strawberry bass," "strawberry perch," and "speckled perch" indiscriminately.

57. *Ambloplites rupestris* (Rafinesque). *Rock Bass; Red-eye Perch; Goggle-eye.*

Not native, but introduced by the United States Fish Commission in the Patuxent River near Laurel, Md., and in Rock Creek in the fall of 1894. Also distributed to individuals for pond culture in the District and adjoining parts of Maryland.

58. *Chænobryttus gulosus* (Cuvier & Valenciennes)*. *Warmouth; Red-eye Perch; Goggle-eye.*

Introduced into the Potomac by the Fish Commission about 1895, and apparently becoming common in a few places. First specimen was taken December 4, 1897, in Little River. In 1898 five were caught in Four-Mile Run.

59. *Enneacanthus gloriosus* (Holbrook)*. *Blue-spotted Sunfish; Little Sunfish.*

This very pretty sunfish frequents sluggish waters with aquatic vegetation. Specimens have been taken in Roach's Run, where it is fairly common, and in the Government fish ponds near the Washington Monument. Maximum length about 3 inches. An attractive and hardy aquarium fish.

60. *Enneacanthus obesus* (Baird)*. *Little Sunfish.*

Found under the same conditions as *E. gloriosus*, but not so common.

61. *Lepomis auritus* (Linnaeus).* "*Sunfish*"; "*Tobacco-box*"; *Long-eared Sunfish*; *Sun Perch*; *Bream*; *Redbreast*.

This is a common and well-known fish, often caught by anglers. It abounds in the Potomac, Rock Creek, Eastern Branch, and other waters, preferring eddies and holes with sandy bottoms. In winter many are caught with nets and sent to market.

62. *Eupomotis gibbosus* (Linnaeus).* "*Tobacco-box*"; "*Sunfish*"; *Bream*; *Pumpkin-seed*.

Abundant in the Potomac and all its principal tributaries, spawning and rearing its young along the shores with sandy bottoms, in which depressions are made for the better protection of the eggs, the parent fish carefully guarding eggs and young. Well known for its gameness and beauty of coloration, which make it the joy of youthful anglers. Below Washington many are caught in winter with nets and sent to the city markets.

63. *Micropterus dolomieu* Lacépède.* "*Black Bass*"; "*Small-mouthed Black Bass*."

More or less abundant throughout the Potomac River between Washington and Harpers Ferry; not common below Washington. This well-known and highly esteemed game fish is not a native of District of Columbia waters, but was introduced in the Chesapeake and Ohio Canal from the Ohio River about 1854 and thence reached the Potomac.

64. *Micropterus salmoides* (Lacépède).* "*Black Bass*"; "*Large-mouthed Black Bass*"; "*Chub*"; *Oswego Bass*; *Green Bass*; *Trout*; *Jumper*; *Welshman*.

Introduced in Shenandoah River in 1889 by the Fish Commission, and later plants were made in the lower Potomac, with the result that by 1896 the fish had become remarkably abundant in the vicinity of Washington, and it is now taken in large numbers by anglers and net fishermen. In the winter of 1898-99 many thousand pounds were caught with nets in Mattawoman, Occoquan, and Piscataway creeks and sent to market. One fisherman sent 1,700 pounds to market at one shipment.

PERCIDÆ. The Perches and Darters.

65. *Perca flavescens* (Mitchill).* "*Yellow Perch*"; "*Yellow Ned*"; *Ringed Perch*.

One of the most abundant food and game fishes of the District. Caught in large numbers with nets and also taken by anglers. Found in the city markets chiefly in winter and spring. Usually with well-developed roe at that time, spawning taking place in March or April. A handsome and hardy aquarium fish.

66. *Percina caprodes* (Rafinesque).* *Log Perch*; *Hog Molly*.

This large darter is not uncommon in gravelly streams of the District. It takes the hook freely and is sometimes caught by boys fishing from the city wharves.

67. *Hadropterus peltatus* (Stauffer).* *Shielded Darter*.

Not common. Recorded many years ago from a tributary of the Potomac in Anne Arundel County, Maryland, and from the upper Patuxent. Recently taken in Laurel, Md., and above the Long Bridge, on the Virginia shore of the Potomac.

68. *Boleosoma olmstedii* (Storer).* *Darter*; *Johnny Darter*.

Represented in District waters by a slight variety called *atromaculatus* by Dr. Girard. The common darter of this region, abundant in clear running streams. A good aquarium fish.

69. *Boleosoma effulgens* (Girard).* *Darter*; *Tessellated Darter*.

This species was based on eight specimens collected in Rock Creek by Professor Baird and described by Dr. Girard in 1859. It has since been recorded from the Little Falls, Rock Creek, and the headwaters of the Patuxent River, near Laurel, Md. It frequents rocky bottoms in rapid water, and is an interesting aquarium fish.

SERRANIDÆ. The Sea Basses.

70. *Roccus lineatus* (Bloch).* "*Striped Bass*"; "*Rockfish*"; "*Rock*."

Common in waters of the District, ascending the Potomac as far as Great Falls. Found here at all seasons, but most abundant in spring and summer. In former years Little Falls was a favorite resort for anglers in quest of this fish; there Daniel Webster, Thaddeus Norris, and other prominent persons made good catches. Size, game qualities, and food value make this one of our best fishes. "Rock" weighing as much as 90 pounds have occasionally been taken near Washington and examples of 20 to 60 pounds' weight are not uncommon.

71. *Morone americana* (Gmelin).* "*White Perch*"; "*Silver Perch*."

Abundant in the Potomac and tributaries, ascending the river as far as the Great Falls. A favorite with anglers, many of good size being taken in the channel of the river from Long Bridge to Little Falls. Some white perch are found in District waters at all seasons, but the principal run occurs in spring, the fish spawning here in April and May. Feeds on the spawn of shad and other fish, also on insects, minnows, young eels, etc.

HÆMULIDÆ. The Grunts.**72. *Orthopristis chrysopterus* (Linnaeus).*** *Pigfish*; *Hogfish*; *Red-mouthed Grunt*.

A straggler from salt water; young pigfish were once taken at Gunston, Va.

SCIÆNIDÆ. The Drums.**73. *Leiostomus xanthurus* Lacépède.*** *Spot*; *Goody*.

Young spots have occasionally been taken at Gunston Wharf, Va., and at Mount Vernon, during dry weather.

74. *Menticirrhus saxatilis* (Bloch & Schneider). *Kingfish*; *Whiting*; *Sea Mink*.

The young of this salt-water species were obtained by Colonel McDonald at Gunston Wharf, Va., in the spring of 1881.

EPHIPPIDÆ. The Angel-Fishes.**75. *Chaetodipterus faber* (Broussonet).*** *Angel-fish*; *Spadefish*; *Moonfish*.

Rarely straying in the Potomac as far as Gunston Wharf, Va., where Col. Marshall McDonald secured the young in 1881.

COTTIDÆ. The Sculpins.**76. *Cottus meridionalis* (Girard).** *Miller's Thumb*; *Blob*; *Muffle-jaw*; *Bullhead*.

Reported years ago from the Potomac. Observed in recent years by Mr. William Palmer in a stream above Great Falls, on the Virginia shore.

77. *Uranidea gracilis* (Heckel). *Miller's Thumb*; *Blob*.

Recorded from Rock Creek many years ago. No specimens recently taken.

GOBIIDÆ. The Gobies.**78. *Gobiosoma bosci* (Lacépède).*** *Clinging Goby*.

In the spring of 1881 a number of specimens of this goby were taken by Col. M. McDonald at Gunston Wharf, Va.

BATRACHOIDIDÆ. The Toadfishes.**79. *Opsanus tau* (Linnaeus).*** *Toadfish*; *Scorpion*; *Oyster-fish*.

This salt-water species is entitled to a place in this list by having been once obtained at Gunston Wharf, Va.

TRIGLIDÆ. The Sea-Robins.**80. *Prionotus carolinus* (Linnaeus).*** *Sea-robin*; *Gurnard*.

Several young specimens of the sea-robin were caught at Gunston Wharf, Va., in the spring of 1881.

SOLEIDÆ. The Soles.**81. *Achirus fasciatus* Lacépède.*** *American Sole*; *Hog-choker*.

Young specimens have been taken in Eastern Branch, Four-Mile Run, and Little River. Adults are common in spring on the fishing shores below Washington, but have not been observed in the immediate vicinity of the city.