AN ALPHABETICAL LIST
OF THE
FISHES
PROTECTED UNDER
THE FISHERIES ACT OF 1902,
With Remarks on each Species.
BY
JAMES C. COX, M.D.

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AN ALPHABETICAL LIST

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FISHES

Protected under the Fisheries Act of 1902, with remarks on each species.

Weights and Length.

02s. or 8½ in. 1. BREAM or BLACK BREAM—Chrysophyes australis of Gunther. This is a true bream. A typical Black Bream is not black; dark varieties of it occur in the heads of waters and lakes on our coast, but the typical Black Bream taken in clear tidal waters is of a lighter and more silvery appearance than those taken in the higher and fresher waters.

7 ozs. or 9½ in. 2. BLACK FISH—Girella tricuspidata of Quoy and Gaimard. Very generally distributed. They haunt the mud flats and rocky shores in the vicinity of muddy bottoms. This fish is a true weed eater; it attains a weight of five pounds.

6 ozs. 3. BLACK ROCK COD—Epinephelus demelii of Gunther. This has absolutely no affinity with the Red Rock Cod with which it is commonly grouped, and the two should not be associated as they are in our schedule. As a rule, this fish is taken on the more northern parts of our coast. It attains a weight of from 20 to 30 pounds; its colour varies: the ordinary colour of it is of a uniform greenish-black. The young of this fish differs in colouration from the mature form.

6 ozs. 4. CARP—Chilodactylus fuscus of Castelnau. This fish is also known as Red Morwong. It varies very much in tint, consequent on location. The young have dark vertical stripes, and are apt to be considered a different fish. It differs from the ‘Morwong proper,’ which is a light coloured fish inhabiting almost solely outside waters.
5. **FLATHEAD**—A vernacular generic name given to several species which are sold in the market. They belong to the genus *Platycephalus*, the common species of which is *P. fuscus* of Cuvier and Valenciennes, prevalent on mud flats and commonly attain a length of 3 feet. Other species also occurring in the market are *P. bassensis* of Cuvier and Valenciennes, known as Sand Flathead, and *P. longispinis* of Macleay. The common Rock Flathead *P. levi-gatus*, Cuvier and Valenciennes, of Melbourne, also occurs sparingly on our coast.

6. **FLOUNDER**—There are two common kinds in the market, the Large Toothed Flounder *Paralichthys arsius* of Hamel, and the Small Toothed Flounder *P. nov.-cambric* of Ogilby. There are several other species occasionally found in the market.

7. **GROPER**—The kinds known as the Blue and the Red are the recognised forms. The scientific name for the Blue Groper is *Acheiropus Gouldii* of Richardson; for the Red Groper *A. Badius* of Ogilby. The young of the former is of a reddish colour. The colours may be only sexual differences.

8. **GURNARD or GURNET**—There are two principal species recognised. First, the Red or "<i>Kumu</i>" Gurnard, *Cheilodonichthys kumu* of Serson and Garnier, generally caught in-shore by means of a net. (The red colour fades after death). Second, the Sharp-beaked Gurnard, *Pterygotrigla polyom-mata* of Richardson, always taken off shore with hook and line; this has a prominent and broad longitudinal silver band on each side, is of a salmon pink above and whitish below. The head is heavily armoured with strong spines. There are several other Gurnards on the coast but they are not at present of important economic value. The outside sharp beaked species is the larger of the two of economic value—those coming to market vary in weight, but the average runs from $\frac{1}{2}$ to $\frac{2}{3}$ of a pound and upwards. As the present schedule weight is 4 ounces, it is evidently only intended to apply to the inside species.

9. **HERRINGS**—The common Herring which migrates annually in a northerly direction at certain periods, the name of which is *Sardinella castelnaui* of Ogilby, is probably the species referred to in the
Weights and Lengths. HERRINGS—continued.

Schedule of weights. The fresh-water Herring occurring in all our eastern or coastal streams is Potamalosa Novæ-Hollandiae, Cuvier and Valenciennes.

16 ozs. 10. JEWFISH—Scolena antarctica of Castelnau. This fish in Queensland is called “Dew Fish,” in Victoria “King Fish,” and in South Australia, where it also occurs, it is known as “Butter Fish” or “Mulloway.” It is a fish of great commercial value. The young are known as “Silver Jews.” It attains a weight of 70 to 80 pounds; reaches the market of all weights up to that limit, but averages from 30 to 40 pounds. This fish is at certain seasons very destructive to our Whiting.

8 ozs. 11. JOHN DORY—Zeus australis of Richardson. A valuable fish, but under present process of fishing, is seldom seen in the market, although many specimens were taken by experimental trawling on the coast.

16 ozs. 12. THE KING FISH—Serioila lalandii, Cuvier and Valenciennes; known in Victoria as “Yellow Tail.” A pelagic fish occasionally but irregularly visiting our harbours in large shoals. The young of this fish is very seldom seen and is never found in the markets. A highly predaceous fish and very destructive to the Pilchards, during their migratory movements; it attains a length of 3 to 4 feet—2 feet is about the length commonly seen in the market.

5 ozs. 13. LONG TOM—There are two species of fish common in the market under this name. They are distinguished by the names of Slender Long Tom and Stout Long Tom. The scientific name of the Slender Long Tom is Tylosurus ferox of Gunther; the other is Tylosurus Macleayi of Ogilby, generally found on weedy flats and near the entrances to lakes.

12 ozs. 14. MORWONG—Two species of fish are grouped under this one name and give rise to much confusion. The more common form is the Jackass fish; the true Morwong is obtained less frequently. The two belong to the one genus Dactylosparus. The Jackass fish is D. macropterus of Forster, and the Morwong is D. carpopenemus of Cuvier and Valenciennes. They are outside rock fishes obtained by hook and line. The form known as Jackass fish is distinguished by a dark saddle-like band across the shoulders, hence its vernacular name. The Morwong is known in Tasmania as the Silver Perch.
15. **NANNYGAI—BERYX AFPINIS** of Gunther. A fish caught wide off shore, in colour it is of a bright salmon-pinkish red. It lives at a considerable depth as is indicated by its large attractive saucer eyes, its most pronounced character. A rock fish always taken by line, the average weight is about 8 to 10 ounces.

16. **PERCH**—This name is applied indiscriminately to various species of our coastal as well as to our fresh-water fishes, but properly speaking, should be restricted to the species known to science as **PERCA-LATES COLONORUM** of Gunther. It is common in all our eastern rivers and lakes from their outlets upward right into fresh water. It is one of our best angling fishes, taken by fly and insect bait. When the name Perch is used in connection with other species it always carries a prefix such for instance, as Silver Perch, a fresh-water fish to be referred to later—Pearl Perch, a fine edible fish taken in our more northerly waters. Perch is given in our schedule of protected fish as “Perch 6 ozs.” placed under the heading of marine fishes, but as pointed out above, this fish is not limited to salt water. Unfortunately under our schedule of fresh-water fishes we have placed “Perch (of kinds)” at 8 ounces, but all have in addition to their scientific names well established common names as a prefix, as follows: The Golden or Murray Perch, The Silver Perch, and Macquarie’s Perch. Other local names are given to the last three species.

17. **PIG FISH**—**DIASTODON UNIMACULATUS** of Gunther. There are two varieties of fish known under this vernacular name, the banded and the spotted. It is one of our red fishes, is a true parrot fish, and is essentially a rock fish. It is caught on outside grounds by hook and line or by trammel net. Whether the two kinds which come to market are distinct species or only varieties is not definitely settled.

18. **PILCHARD**—There is only one species on our coast; its scientific name is usually known as **CLUPEA SAGAX** of Jenyns. It appears in Waite’s recent list of New South Wales fishes as **CLUPANODON NEOPILCHARDUS** of Steindachner.
Weights and Length.

19. RED ROCK COD—SCORPÆNA CRUENTA of Richardson
This should not be confounded in any way with the Black Rock Cod with which it has no affinity. In our official list of lawful weights and sizes, the manner in which the two have been bracketed together is most misleading. A rock fish taken only by hook and line off rocky headlands and sunken reefs. Its colour harmonizes with its weedy surroundings, and on its head and body are numerous seaweed-like filamentous appendages which greatly assist the protective colouration in rendering the fish immune from attacks from its enemies. The term Red Rock Cod applies to two distinct species which have a close resemblance to each other. SCORPÆNA CARDINALIS of Richardson, the other species referred to, is of a more uniform cardinal red when fresh than S. CRUENTA. The latter Waite lists as the Spotted Red Rock Cod.

6 ozs. 20. SCHNAPPER—Under this name should be included the Red Bream of our official list which is the young form of this species. The scientific name of this fish is PAGROSOMUS AURATUS of Forster, but is generally known in Australian literature as PAGRUS UNICOLOR of Forster. Various sizes of this species are distinguished by different appellations. The Old Man Schnapper, the School Schnapper, the Squire, the Bull Nose, the Red Bream, and the familiar little Cockney characterised by dark vertical bars are different stages of this species. The schedule weight applying to all these forms is 6 ounces. The Cockney and Red Bream stages are commonly caught by hook and line in our harbours, and in this way are much destroyed; they are also destroyed by hawling nets being drawn up on to the shore, especially where the nets are fouled by seaweed etc. In the larger stages it has very seldom so far been obtained by the trawl or trammel net.

6 ozs. 21. SALMON—ARRIPIS TRUTTA, of Forster. This fish usually occurs in immense schools, but at present is not of great economic value, comparatively few of them being used as food. It commonly attains a weight of several pounds; our schedule weight is 6 ounces. The young form of it is known as "Salmon Trout" in consequence of the presence of Trout-like spots on the body; this is purely a local name, and the fish has no affinity with true Salmon or Trout—it is also known as "New Fish." The
### Weights and Lengths

**SALMON—continued.**

Younger stages are of more value from an edible point of view than the mature fish. Commonly taken on our outside beaches by nets. It is greatly preyed upon by Porpoises and larger predatory fishes.

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<tr>
<th>Weight/Length</th>
<th>Description</th>
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<tr>
<td>5 ozs. or 10(\frac{3}{4}) inches</td>
<td><strong>22. THE WHITING or SAND WHITING—SILLAGO CILIATA of Gunther.</strong> This is the common Whiting of the Sydney Markets, occurring abundantly on sandy bottoms in the harbours and near the entrances of our coastal lakes. Commonly it attains a weight of one pound and upwards; there is in the Fisheries Museum a specimen weighing 2 pounds and 4 ounces. It is one of the best and most valuable of our food fishes.</td>
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<td>2 ozs.</td>
<td><strong>23. SEA GAR FISH—HYPORHAMPHUS INTERMEDIUS of Cantor.</strong> As a rule taken in the lower portions of our harbours and estuaries, it does not ascend to the higher portions which are frequented by its ally, the River Garfish, HYPORHAMPHUS REGULARIS of Gunther. It is the largest of our Garfish and is generally about from five to six ounces in weight; its length being about 11 to 12 inches on an average. In our schedule &quot;other varieties&quot; of Garfish are legalised at a weight of one and a half ounces. The expression includes two other distinct species, they are not varieties of HYPORHAMPHUS INTERMEDIUS. One is the well-known River Garfish HYPORHAMPHUS REGULARIS of Gunther and the other is the ARRHAMPHUS SCLEROLEPIS of Gunther, known as the short-beaked Garfish. The River Garfish is a constant inhabitant of the heads of our harbours and estuaries all the year round, while the Short Beaked Garfish has hitherto only been taken at the Clarence River, and the rivers north of it. The River Garfish is not only taken at the mouths of our estuaries, but extends up to the limits of fresh-water. It is commonly seen in the market at a weight of from two to six ounces, and averages about 10 inches long. The two species of Garfish included in the term &quot;other varieties&quot; should be separately mentioned in our schedule, as they are not varieties.</td>
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<td>7 ozs. or 10(\frac{3}{4}) inches</td>
<td><strong>24. SEA MULLET—MUGIL DOBULA of Gunther.</strong> Is the staple food-fish of New South Wales. This fish migrates annually in a northerly direction close to the coast, and if interrupted in its progress by influences of weather or enemies will enter our estuaries—not to spawn, as was formerly supposed, for they...</td>
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spawn in the open ocean—but they do enter our estuaries and remain domiciled there after having shed their spawn. That form known to the fishermen as Hard-Gut Mullet is an immature stage of this species, and is also known in the Port Jackson district as the River Mullet. The very small forms of this fish are known as "Bully" Mullet. The term "other varieties" of this fish as mentioned in the schedule, includes a number of other species, the most abundant of which are the Flat Tail or Fan Tail Mullet, *Mugil Peronii* of Cuvier and Valenciennes, and the "Tallegalane" or Sand Mullet, *Myxus elongatus* of Gunther. Other kinds are less numerous, though some of them occur in quantity at certain seasons. Both of these species occur domiciled commonly in our estuaries all the year round. The schedule weight of all mullet included under the term "other varieties" is 4 oz.

25. **SEA PIKE**—Two species of the same genus are included under this name, *Sphyraena novae-hollandiae* of Gunther, and *Sphyraena obtusata* of Cuvier and Valenciennes. The first mentioned is the commoner form, neither of these is brought to our markets in great numbers, they are sold with the "mixed" fish. *Sphyraena novae-hollandiae* is a carnivorous and highly voracious fish, and is taken both inside and outside our estuaries and therefore the name Sea Pike is inappropriate. This species is more correctly known as the Short-finned Pike in contradistinction to the Long-finned Pike, the scientific name of which is *Dinolestes Lewini* of Griffiths. The term "other varieties," the schedule weight of which is 3 ounces, includes only the two species *Sphyraena obtusata* of Cuvier and Valenciennes, and *Dinolestes Lewini* of Griffiths.

26. **SERGEANT BAKER**—*Aulopus purpurissatus* of Richardson. It is an outside fish of a rich reddish spotted colour, a good table fish, It is taken by line on outside grounds, attaining a weight of 5 or 6 pounds; it is the only fish possessing an adipose dorsal fin generally seen in the market.

27. **SOLE**—*Synaptura nigra* of Macleay. It should be understood that by this term our common Black Sole is implied. It is an estuary fish, and is taken usually in shallow water on muddy and sandy bottoms. Several other species of Soles come to the market,
Weights and Lengths.  
SOLE—continued.

but they are not of much economic value at present; for instance, SYNAPTURA FASCIATA of Macleay, the Many-banded Sole; the Small-headed Sole, SOLEA MICROCEPHALA of Gunther; and the Tongue or Lemon Sole, SYMPHYRUS UNICOLOR of Macleay.

5 ozs. or 8½ in. 28. TARWHINE—CHRYSOPHRYS SARRA of Forskal. This is not an abundant fish in the market here, but there are always some to be seen. In appearance it is not unlike the common Black Bream with which it is sometimes confounded, but is not of such edible importance. It is most commonly found on the northern portions of our coast, and may be at once distinguished from the Black Bream by its "bull-nosed" appearance, larger eye, the possession of yellowish longitudinal stripes and a weaker anal fin.

12 ozs. 29. TERAGLIN—CYNOSCION ATLODUS of Gunther. It somewhat resembles the young of the Jewfish. Usually caught outside by hook and line, and finds a ready sale at the markets. It never attains the size of the Jewfish, and its scales are smaller, it is rather slimmer in form and has not so silvery an appearance as a Silver Jew. Commonly it is seen in the market from 2 to 4 pounds in weight.

5 ozs. 30. TREVALLY—CARANX GEORGIANUS of Cuvier and Valenciennes. A fish of fair edible qualities and commands a ready sale; it attains a weight of 5 to 6 pounds but those ordinarily seen in the market are usually less than one pound. It is a deep narrow fish generally of a silver hue below, passing into a golden hue on the upper surface. The young fry have dark vertical bars on the sides, in the same way as is seen on the very young forms of the Schnapper called Cockney. A typical Trevally has a graceful oval outline, in many of the larger specimens the upper profile of the head is concave. Occasionally large hauls of this fish are made. It is pelagic, of a roving disposition, but is taken by net in our harbours and lakes. A fish occurring occasionally in the market known as Black Trevally has no affinities with this species, its scientific name is Siganus nebulosus of Quoy and Gaimard.
31. **TRUMPETER WHITING—SILLAGO MACULATA of Quoy and Gaimard.** Is found daily in our markets, but less abundantly than the Sand Whiting. It was formerly taken in great abundance in the Parramatta River, and is still taken in all estuaries along the coast. It may be easily distinguished from the Sand Whiting by its duller tinge coupled with the presence of fairly large dark blotches, dispersed along the upper or back portions of the body. A much prized fish for its edible qualities; it attains a weight of about 10 ounces, with a length of about 12 inches.

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**FRESH-WATER FISHES.**

32. **BREAM—**This term is applied to various fishes in different inland waters of the Colony. Although the term "Bream of kinds" is found on our schedule of fresh-water fishes under protection at a schedule weight of 8 ounces, *no such thing as a true Bream exists in our fresh-waters.* The name is used indiscriminately for at least two species, viz.: *Macquaria australasica* of Cuvier and Valenciennes, the Macquarie Perch, and *Terapon ellipticus* of Richardson the Silver Perch. A fish exists in the fresh-waters of England known as "Bream," *Abramis brama* of Linne, and possibly may have been imported and introduced into our rivers; it is a true Carp, and therefore has no relation to our common Sea Bream.

33. **BLACKFISH—GADOPSIS MARMORATUS of Richardson.** By this term is understood the River Black Fish or Slippery of our waters. It is also known as the Native Trout on account of its marbled coloration, and from this character it has also received the title of the "Marbled River Cod." It is not a fish of great economic importance although abundant, commonly attains a weight of one pound, but is often found of greater weight. It is taken with hook and line and has a very wide range in the States of New South Wales, Victoria, and Tasmania.
Weighs and Lengths.

34. CAT FISH—COPIDOGLANIS TANDANUS of Mitchell. This is the River Cat Fish also known in parts as “Jew Fish,” though it bears no relation to the true marine Jewfish. It is of some value as a food fish inland, and is generally served up at hotels as “Jewfish.” It differs from the common coastal Cat Fish by being very much stouter and shorter in the body. It has barbed spines very similar to the marine form.

2½ pounds. 35. COD or MURRAY COD—OLIGORUS MACQUARIENSIS of Cuvier and Valenciennes. It is purely a freshwater fish inhabiting the western river system generally; found sparingly also in the upper reaches of the Clarence and Richmond Rivers, and was introduced some years ago into Lake George with great success. From an economic point of view this fish stands unrivalled, as it is always greatly sought after and finds a ready sale. It attains a weight of 100 pounds and upwards, but the average weight of those marketed is from 20 to 30 pounds. The name “Cod” as generally applied to this fish is rather misleading, as it has no affinity with the true Cod of European seas, its relationship being rather with our Perch. It is largely captured by means of a kind of trap known as a drum-net and by hook and line.

8 ozs. 36. PERCH (of kinds)—This, like the term Bream is also indiscriminately applied to different species of freshwater fishes in various parts of our inland rivers, though in the schedule it is meant to apply to the so-called Golden or Murray Perch, PLECTROPITIDES AMBIGUUS of Richardson, familiarly known also in many parts as “Yellow Belly.” It attains a weight of 7 to 8 pounds, specimens of from 4 to 5 pounds being quite common, and is greatly sought after on account of its edible qualities. It is confined to our western waters and is captured mainly in billabongs and lakes by means of short gill or meshing nets. In freshly taken specimens the lower or abdominal half is suffused with a bright orange golden tint from which its popular names of “Golden Perch” and “Yellow Belly” are derived. The term “of kinds” after Perch in the schedule would include such fish as have already been mentioned under fresh-water Bream, viz.: Macquarie’s Perch MACQUARIA AUSTRALASICA of Cuvier and Valenciennes, and the Silver Perch, TERAPON ELLIPTICUS of Richardson.
Weights and Lengths.

37. TENCH—TINCA TINCA of *Linne*.* This is an introduced European fish of little commercial value, it is a member of the Carp family. The common Carp of England *Cyprinus vulgaris* of *Linne*, has not so far been introduced into the waters of this State. What is known as the Carp in our waters is a variety of the common Gold Fish, *Carassius auratus* of *Linne*. (The Mauritius Carp. ?)

12 ozs. 38. TROUT (of kinds)—We have now several introduced species in our waters, the principal being the Rainbow Trout, *Salmo irideus* of Gibbons, others being the Brown Trout, *Salmo fario* of *Linne*, and the American "Brook Charl," *Salvelinus fontinalis* of Mitchell

CRUSTACEA.

10 inches. 39. CRAY FISH—*Palinurus hugelii* of *Heller*. This is our common salt-water Cray Fish, found abundantly along the greater portion of our coast.

9 inches. 40. CRAY FISH—*Palinurus Edwardsii* of *Miers*. This is the form known as the Southern or Tasmanian Cray Fish; it only occurs in any abundance, on the southern parts of our coast, it is usually of a smaller "run" than our common Cray Fish and is more of a reddish tinge, while our common Cray Fish is usually of a dark green colour when captured.

2 inches. 41. PRAWNS—Three distinct species of Prawns are sold in our market, all belonging to the Genus *Penæus*. The King Prawn, *Penæus canaliculatus* of Olivier; The School Prawn, *Penæus Macleayi* of Haswell; and the Tiger Prawn, *Penæus monodon*. Other Prawns or Shrimps also come to market but are not of sufficient economic importance to warrant their being placed on the schedule list.

6 inches. 42. "MURRAY RIVER LOBSTER." of Schedule—*Astacopsis serratus* of Shaw. This is the common Cray or Craw Fish of our inland waters, though it also abounds in the fresh-waters in the immediate vicinity of Sydney; its colour varies from a dark red to a light bluish-grey, beautifully marbled.