

and after the ice leaves the bay, gill nets are kept constantly set, and visited from time to time. In these they catch whitefish chiefly, *Coregonus lauretta*, a few salmon, *Oncorhynchus gorbuscha*, and another undetermined species, and occasionally large individuals of a sea-run form of *Salvelinus malma*, the Pacific red-spotted trout.

This fishing lasts from the middle or end of July into September, but is never very productive. The trading parties that go east to the Colville river in the summer, also catch large quantities of fish. *Salvelinus malma* was so abundant in the summer of 1882, that the dogs were fed with it.

Another food fish appeared on the coast in the summer of 1882, which appears not to be utilized by the natives as they have not nets small enough to catch it. This is the caplin, *Malotus villosus*, which we netted by the thousand in the outlet of the lagoon close to the station, and found most excellent eating. The natives who live on the river running into Wainwright's inlet, seventy miles down the coast, also catch through the ice a good many smelts, *Osmerus dentex*, which are as delicious as the smelt of our coast. Fish, when cooked at all, are always boiled; as, indeed, all Esquimaux food is, but many are consumed raw or frozen. Very little of a fish is wasted except the scales and perhaps the larger bones.

To close my account of the fish of this region, it may be well to say that the Esquimaux tell of a large lake between Point Barrow and the Colville, in which there are fish "as big as a kaiak." This certainly has the appearance of a "fish story."

Corrected by Dr. Henshall - 2/15/08

COMPARATIVE EXCELLENCE OF FOOD FISHES.

BY DR. JAMES A. HENSHALL.

In this paper I design considering the relative merits of certain fishes as food, solely as to their comparative excellence of flavor, and not, in any sense, as to their nutritive qualities, as

commercial fishes, or as food for the masses. The inherent or innate excellence of flavor is alone considered; that is, the fish is supposed to be simply boiled, fried, broiled or baked, without the addition of extraneous substances, as sauces, condiments, etc., except the indispensable salt and perhaps a little black pepper. Moreover, I speak in the light of the ample personal experience of having eaten of all the fishes mentioned, from Montauk Point to Key West, and from Lake Superior to the Gulf of Mexico, and, with the sole exception of the salmon, of having eaten of them all perfectly fresh, or literally out of the water into the kettle, broiler or frying pan, which is the only true test of the peculiar flavor of each fish. Of course one is necessarily guided in such a matter by his own individual tastes and idiosyncracies, and due allowance must be made for this "personal equation," though I believe that most persons will agree with the conclusions drawn. But there is no accounting for gastronomic tastes likes and dislikes, which proverbially disagree, as evidenced by the old saying, "What is one man's meat is another man's poison," or to express it more appropriately in this connection, and to perpetrate an old Anglo-Gallic-ichthyc pun: What is one man's *poisson* is another man's poison. For the sake of convenience I will separate the different fishes into several groups: (1) fresh water, (2) anadromous, (3) estuary, and (4) marine. The various fishes in the several groups are arranged in their sequence according to their degree of merit.

FRESH-WATER FISHES.

The white-fish (*Coregonus clupeiformis*) is far ahead of all other fresh-water fishes in its exquisite delicacy and richness of flavor. Its flesh is pure white, firm, flaky and free from small bones; and while a "fat" fish, does not cloy the palate like the salmon, mackerel, and other "oily" fishes. But to realize the delicious savor and flavor of the white-fish, it is imperative that it be in its best condition, and that it be cooked as soon as possible after being taken from the water; for when in poor condition, or long out of the water, it loses entirely its characteristic excellence. The white-fish is essentially a broiler, being excessively fat in the fall before spawning, when it is in its best condition. Those

of Lake Superior and the Straits of Macinac are preferable to those of other waters of the United States. I have eaten broiled white-fish at the old Mission House, at Mackinac, for twenty-one meals a week and like Oliver Twist, asked for more. It resembles, more than any other fish, the pompano in flavor, and in my opinion is second only to that peerless fish in its excellence for the table.

The brook trout (*Salvelinus fontinalis*), when freshly caught, I consider, among the fresh-water fishes, next to the white-fish for the table; but as obtained at the restaurants, I prefer the black bass or pike-perch. When served up in camp beside a trout stream (the small ones fried, the large ones boiled), the flesh is pinkish, very firm, and of a delicate, delicious flavor, though rather too dry to suit some palates. It is a fish that will not bear transportation, however carefully packed, without losing its savor; and this is likewise true of all delicately-flavored fishes. Moreover, it will retain and absorb the "twang," and smack of the packing material or the container. Tr.

The black bass (*Micropterus*).—Next to the freshly caught and cooked brook trout, I rank the black bass of either species. Its flesh is pure white, firm, flaky, free from small bones and of a rich, sapid flavor when in proper condition. Just after the spawning period the flesh has a musky taste and odor, which is disagreeable to some persons. The character of the water has much to do with the excellence of the black bass for the table, and as it inhabits so many waters of different conditions of purity and temperature, there are as many opinions of its gustatory qualities. The small-mouthed bass is generally the best flavored, as it usually exists in the purest waters; but where both species co-exist in the same water there is no apparent difference in taste or flavor. I have eaten small-mouthed bass of some waters which were inferior to large-mouthed bass of others. Contrary to a popular impression, I will state that the finest-flavored black bass I ever ate, and even superior to any brook trout I ever tasted, were large-mouthed bass of certain streams in Florida, notably the upper waters of St. Lucie river, on the east coast, and the Weckawachee river, on the west coast. These are re-

markably clear and pure waters. Black bass should be fried or boiled, according to size.

The pike-perch (*Stizostedium vitreum*) is a staple fish during the early spring throughout the West, being shipped from the great lakes. It bears transportation well, the flesh being hard, white, flaky, and of good flavor; consequently it is much esteemed during the Lenten season. It is a very desirable fish for lakes and rivers which have a good depth of water, being very hardy and prolific, and one of the best percoid fishes. The smaller ones should be fried, those of six pounds and over should be boiled.

The mascalonge (*Esox nobilior*) may be classed as a good dinner fish in the fall and winter, when it is in its best condition; it has, however, been much overrated. It has yellowish or pinkish flesh, according to season, which is of good quality and fair flavor, with fewer small bones than any of the pike family. It is never a "fat" fish, and should be either boiled or cut in vertical slices and fried.

The Mackinaw trout (*Salvelinus namaycush*) varies greatly according to size, season and locality, as to its edible qualities. In the great lakes, where it is taken with the white-fish, it is lightly esteemed in comparison. In other waters, as in the lakes of the Eastern States, it is more highly prized. The flesh is yellowish white to red in different waters, and may be classed as rather good and well-flavored when in its best condition. In good condition it is a very fat or oily fish, and should be boiled or cut into vertical steaks and broiled.

Catfish (*Siluridae*). The various species of catfish and bullheads are good, bad, and indifferent as articles of food. Some of them are really excellent when properly cooked, and would prove an agreeable surprise to most persons who are prejudiced against them. The fork-tailed cat of the lakes and the Mississippi (*A. nigricans*), and the channel cat (*I. punctatus*), when of suitable size, and when parboiled and baked brown, are not to be despised by an epicure, the flesh being rich and savory, though not very firm.

There are a number of fresh-water "pan fish," fair in quality, which I consider best in the order named, as white bass (*R.*

chrysops), croppies (*Pomoxys*), rock bass (*A. rupestris*), the sunfish (*Lepomis*), yellow perch (*P. americana*), etc. Last and least in point of merit among fresh-water fishes (and which are just better than "no fish") are the pike, pickerel, buffalo, suckers, etc.

ANADROMOUS FISHES.

The salmon (*Salmo salar*) stands at the head of this group when "fresh run" from the sea. Its excellence is so well known that it needs no further notice here, more than to observe that after spawning no fish is more sorry or ill-flavored. The comparative excellence or worthlessness of anadromous fishes, before or after the breeding season, is more strikingly exhibited in the salmon than any other of the group.

The shad (*Clupea sapidissima*). Of the anadromous fishes, none is so well known or so much appreciated as the shad, whose rich, delicate and luscious flavor is pronounced by many to be superior to that of any other fish. Suffice it to say that he who has never partaken of that Lenten luxury, "planked shad," has an epicurean revelation in store that will surprise and delight him. The shad should never be served in any other way than planked or boiled. It well merits its name, *sapidissima*, and one can tolerate its numerous bones in consideration of its fine flavor.

ESTUARY FISHES.

This group comprises so many species, and of so wide a range, and some vary so much in edible qualities in different waters, that it is difficult to institute a just comparison.

The pompano (*Trachynotus carolinus*). Although a fish of Southern waters, the excellence of the pompano for the table places it at the head, not only of the estuary fishes, but of all known members of the finny tribe. It is incomparable with any other. While in the restaurants of New Orleans and Mobile it is the fish beyond compare, it is worth a trip to Southern Florida to realize the delectable, luscious savor of a freshly caught and broiled pompano. The salmon, white-fish, and shad alike pale before its superexcellence. A broiled pompano's head is a *boune-bouche* to eat and dream of for a life-time. See Rome and die,

eat pompano and live! The pompano has a creamy white flesh, of a gelatinous richness, without the oily taste of most broiling fishes. It must not be confounded with the dark-meated fish called pompano on the Carolina coast, which is a crevalle (*Caranx*). The bones of the pompano are few and soft, and one can eat them "bones and all."

The striped bass (*Roccus saxatilis*) enjoys a deserved reputation as a table fish. Its firm, white and delicious flesh is so well known that it needs no further comment. The memory of its savory flavor and odor, broiled at camp fires on the Chesapeake, steals over me as I write, with a conscious yearning for the flesh-pots of Egypt.

The sheepshead (*Diplodus probatocephalus*), while excellent in Northern waters is only tolerable in those of the extreme South. North of Cape Hatteras it is justly considered a great delicacy, broiled or baked; while in Florida it is not above mediocrity, having a piquant, pungent flavor that is decidedly unpleasant.

The bluefish (*Pomatomus saltatrix*) is another fish that varies in its eatable qualities in different waters, and which, perhaps, depends on the nature of its food. North of Cape Hatteras, it is well-flavored, of good quality and much esteemed, though inclined to be too oily; while in Florida waters it is excellent, far exceeding in richness and flavor those of the North. Its flesh is firm and white, and it should always be boiled or planked.

The whiting (*Menticirrus nebulosus*) is a small, but good fish, one of the best for chowders. It has a fine, white, flaky flesh of rich flavor, and is much esteemed as a breakfast fish, broiled or fried.

The weakfish (*Cynoscion regale*) is worthless, unless absolutely fresh, when it is peculiarly sweet and gelatinous, fried or boiled. The Southern species, the salt-water trout (*C. maculatum*), is equally as good a fish for the table.

The red snapper (*Lutjanus blackfordii*) has become a popular hotel and restaurant fish throughout the South and West, where it is shipped from the Gulf of Mexico. It is also extensively shipped to Havana. Being of large size it is a good dinner fish,

its flesh being rather coarse, but very white, firm, flaky, juicy, and of good flavor. It should be either boiled or baked.

The tautog (*Hiatula onitis*) has fine white flesh, and broiled or or fried is quite toothsome, with a rich lobster flavor. It does not lose its good qualities when out of water, so soon as most fishes.

The redfish (*Sciaen ocellata*) is essentially a Southern fish, though during the summer it ranges as far north as Cape Cod, when it is in its best condition. It grows to a large size, with firm white flesh, of no decided flavor. It is a tolerable dinner fish, and should always be boiled. It is also a fair chowder fish.

Crevallé (*Caranx*). There are several species of crevallé, the *C. hippos* being the most common in Southern waters. They are dark-meated fishes, firm and flaky, with a sharp, strong flavor (similar to the bonito), which is relished by some but disliked by others. It is an oily fish and should always be broiled. It is easily cured by smoking, when it forms an appetizing dish, far better when fresh, and superior, I think, to smoked halibut. There are quite a number of good estuary "pan-fish," among the best being the Lafayette (*L. xanthurus*) and white perch (*R. americanus*).

MARINE FISHES.

The Spanish mackerel (*Scomberomorus maculatus*) stands at the head and front of the pelagic or marine fishes. It is second as a table luxury only to the pompano and white-fish. It is a creamy, white-meated fish of great delicacy and richness of flavor when broiled. By many it is thought to be the best fish that swims.

The common mackerel (*S. scombrus*), when fresh and fat, as in the early fall, is one of the best fishes for broiling. As a breakfast fish it is greatly and justly prized, and is too well known to need further notice here.

The codfish (*Gadus callarias*). I mention the codfish out of respect and sympathy for my fellow man, and not for any love that I bear for it myself. It is, perhaps, only necessary to say that at the last annual meeting of your Association, your worthy

recording secretary declared that he preferred a fresh codfish to the brook trout or black bass.*

WEDNESDAY, MAY 14TH.

At half-past ten the President called the Association to order, and announced that the election of officers would take place at the afternoon session. The following Committee on Nominations was then appointed to propose officers for the ensuing year: Messrs. G. Brown Goode, R. E. Earll, C. A. Kingsbury, C. G. Atkins, and Tarleton H. Bean. The President further stated that all names proposed for membership in the Association would be voted upon during the afternoon session.

Mr. BLACKFORD: I beg to state that there is one name which I feel that we should add to the list of honorary members, viz.: Professor Spencer F. Baird. I think that this action would be no more than a fitting appreciation of his great work, and I therefore name Professor Spencer F. Baird as an honorary member of this Association.

The PRESIDENT: Professor Baird is nominated as an honorary member of this Association. All those in favor say "Aye." (There being no dissenting voices, the nomination was carried.)

The RECORDING SECRETARY: Mr. President, I have received a telegram from Mr. W. F. Witcher, formerly Commissioner of Canada, in which he expresses his inability to attend this meeting, on account of family sickness. I have here many letters from members and others who regret their inability to be present. To read them all would consume the morning. I would, however, ask your attention to three of them. The first is from the father of American fish-culture, who writes:

*Being a prominent member of the Ichthyophagus Club, any statement of his regarding the flavor of fishes should be received with due caution, inasmuch as by virtue of the onerous duties of his office—"head taster"—his sense of taste has presumably become perverted or impaired.