Names of Fishes

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INTRODUCTION

Commercial and sport fishermen, the food processing industry, consumers, scientists, writers, Federal and State agencies, students and teachers, and many others use names of fishes. Communication about these animals is often impaired because some kinds of fishes have no names, others have more than one name, and some names are used for more than one kind of fish. The obvious solution would be for every species of fish to have one name that was universally recognized as referring to it alone. This article briefly discusses some of the causes of the confusion surrounding fish names.

SCIENTIFIC NAMES

Because they are essentially less complex, let us first consider scientific (Latin) names. The rules for the formation and use of scientific names are governed by the voluntary adherence of zoologists to the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature, 1964), most recently revised and published in 1964. In essence, the Code tells us that a zoologist who finds a species that lacks a scientific name may describe the species and give it a Latinized name (subject to certain rules and recommendations).

The Latinized name is composed of two parts. Let us take as an example the goldfish, *Carassius auratus*. *Carassius* is the generic name; one or more species may be included in the genus and will have *Carassius* as the first part of its scientific name. The second part, *auratus*, is the specific name and refers to only one species of *Carassius*. Both names together, *Carassius auratus*, make up the scientific name for the species that we recognize as the goldfish. In formal usage, the name of the original describer is sometimes given; hence, a reader might encounter *Carassius auratus* (Linnaeus).

The starting point for scientific names is a book by the Swedish biologist Linneaus, published in 1758. No scientific names published before that date are admitted to the system. If, for any reason, a zoologist gives a scientific name to a species that already has one, the name with the earliest date after 1758 takes precedence. If, for any reason, the same scientific name is given to two species, the last-named one must be given a new name. This system offers a relative stable method of communication. "Poisson rouge" in French, "chin-yu" in Chinese, "chrusoparon" in Greek, "aranyhal" in Hungarian, "kingyo" in Japanese, "zolotoi ribki" in Russian, and "dorado" in Spanish are all different names for what we call the goldfish. Communication about goldfish is difficult without the universally recognized Latin name, *Carassius auratus*. It is a worldwide code word.

International currency notwithstanding, scientific names cannot replace common names for several reasons. Latin has no meaning for the average person; having two words in a name is cumbersome; and scientific names are subject to change, for as well as being a way of communicating they serve as a working tool of the scientist who classifies animals, and as classifications change scientific names may do likewise.

COMMON NAMES

Common names serve a variety of purposes and arise in many ways. In fact, the only characteristic they share is that they are not Latin. To understand common names properly, we should consider the different kinds.

Folk Names

Local or folk names are the largest class of common names. They are deeply entrenched in the language of a region, and are often obviously descriptive, but sometimes their origins are lost in the past. They may present as much variation within a single language as do goldfish names between languages. An example is *Micropterus salmoides*, widely known as the largemouth black bass. In a study of the common names applied to the fishes of the bass and sunfish family, Smith (1904) listed 53 different common names for this species. A few of them are: big-mouthed trout in Kentucky; chub and welshman in North Carolina and Virginia; cow bass and moss bass in Indiana; grass bass in Minnesota; gray bass in Michigan; green trout in Louisiana; marsh bass, bride perch and pointed tail in Ohio; and perch, trout and jumper throughout the South. Of course, many of these names have died out, but the fact that they once existed and were useful in communicating within a region illustrates what one writer (Macleod, 1956), described as " . . . colloquial names that have grown up spontaneously among ordinary people."

Another characteristic of folk names is the fact that they may reflect a different system of classification than do scientific names or invented common names. Two or more species (as defined by biologists) may not be distinguished and thus receive but a single folk name. One example is the dolphin fish (genus *Coryphaena*), which ichthyologists consider to be two species; laymen recognize but a single species. Conversely, a single biological species may receive several names based on size, life history stage, season, habitat or other characteristic. Consider the biological species *Salmo gairdneri*: individuals from resident freshwater populations are called rainbow trout, while fish belonging to sea run populations are called steelhead.

Invented Names

Another category of common names might be called coined or invented

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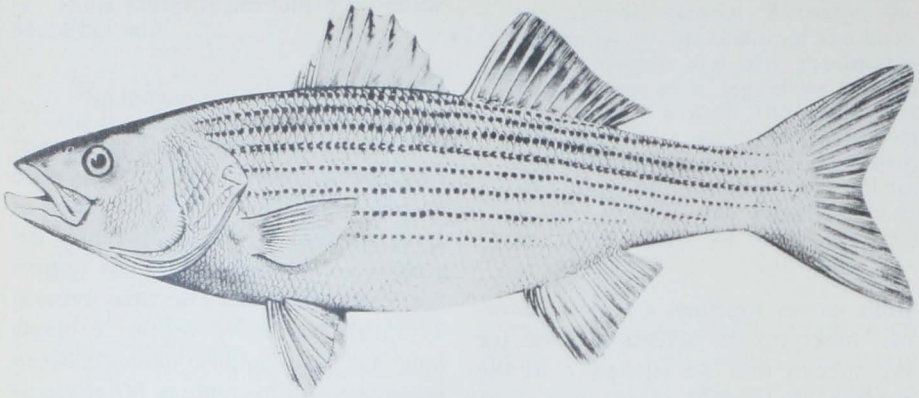


Morone saxatilis—rockfish in Maryland, striped bass in California.

names. Many kinds of fishes are known to scientists alone and have only Latin names. If, in writing of one of these animals a common name is required, one is invented. The American Fisheries Society (Bailey, 1970) has listed all known kinds of fishes living in the United States and Canada to a depth of 200 meters. Some of the fishes on this list previously lacked any common name, and others shared a common name with one or more species. In order to insure a single common name for every species on the list, a number of names were invented. Another reason for inventing names is the importation into the United States of species from non-English-speaking regions. The aquarium trade is the best example; a brief perusal of any authoritative book on aquarium fishes (for example, Sterba, 1962) will show many fishes from South America and Africa for which English language names have been invented. In a popular booklet on Californian deep-sea fishes, Fitch and Lavenberg (1968) invented common names for species that previously lacked them. In some situations, scientists who describe a previously unknown species and give it a Latin name also invent a common name. This practice is common in Japan.

USERS OF COMMON NAMES

One of the chief problems, however, concerns fishes that have more than one common name. Users of names have strong attachments to the familiar. Names of objects are so important to us that we tend to merge the name with the idea of the object. The idea of a piece of leather tied around the foot, and the name of the piece of leather as a shoe, are virtually inseparable. Therefore, in addition to serving as a shorthand way of communicating, names become part of the total concept of an object. Consider, for example, an angler who associates the fish that scientists know as *Micropterus salmoides* with the name green trout. If he is served in thinking about *M. salmoides* or in communicating with others about it by the name green trout, and if the name largemouth bass has no meaning, then to him green trout is that kind of fish, official pronouncements notwithstanding.

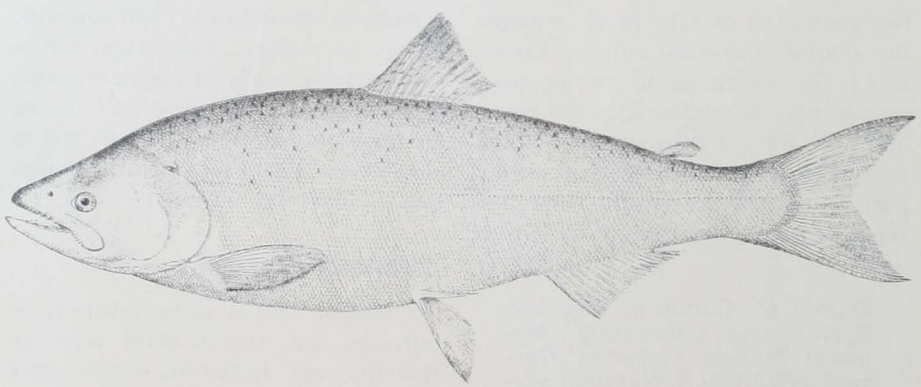
But even so, several fields of interest have a clear need for a single or at least a designated primary name with a high communication value, and the difficult task of evaluating and choosing among available names has been attempted.

In the annual National Marine Fisheries Service publication "Fisheries Statistics of The United States" a glossary is presented which lists scientific and common names, including for many species alternative common names. The names used are those with which the Service is best able to communicate with its varied clientele.

The Food and Drug Administration is concerned with names of food fishes and deals with a set of names that might be termed semilegal. This agency is charged with maintaining standards of identity and its regulations require that labeling must not be false or misleading. In deciding what common names may be used by the food processing and distributing industries, they select (when such exists) a name that is common or usual from the viewpoint of the general public who use and purchase fish products. Allowable names are decided on a case-by-case basis.

Because they often write for a wide audience, outdoor writers are another group requiring common names that do not vary regionally. The Outdoor Writers Association of America (1962) has attempted to promote stability by publishing a list of scientific and common names of principal American sportfishes. Although they hope their common names are widely accepted, they have annotated their list and presented many widely used alternative names.

The scientific community depends chiefly on The American Fisheries Society list of U.S. and Canadian fishes (Bailey, 1970), a comprehensive and authoritative guide to scientific names compiled by a committee of expert ichthyologists. Unfortunately, the general reference value of this list for common names is limited for several reasons. Alternate common names are not listed with each scientific and primary common name, but are, for the most part, relegated to the index. Alternate common name cover-



Oncorhynchus tshawytscha—king salmon in California, chinook in Alaska.

age is restricted. And no documentation is given for common names, not even to the point of indicating which are coined and which are folk names.

DISCUSSION

For legal reasons and other special purposes there is a clear need for certain kinds of fishes to have widely accepted "official" or "primary" common names. Such names may apply strictly to a single biological species, may apply to lesser categories, or may include more than one biological species; only the user's needs can dictate. Scientists have Latin names available and are dependent to a far lesser degree on common names for communication. There is no good reason to invent common names for species treated only by scientists.

There is great need for a general list of fish names, which reports on which common names are used. Such a list should have broad coverage of alternative names. Users should be able to learn whether names are invented or folk names. Sources of invented names should be described and also the degree to which they are used—that is, whether they are found only in books or have entered the spoken language as well. Folk names should be identified as to region, and their degree of usage should also be indicated. The extent to which common names coincide with biological species should be discussed. Such a general list, thoroughly documented and cross-indexed, would serve as an invaluable source of data for those who require information on, and must make decisions about, common names of fishes.

SUMMARY

Names of fishes are basically of two kinds, invented and folk names. Scientific names are invented and are usually, but not always, stable; however, they are not suitable for everyday use. Some common names are also invented and may be important, as for fishes imported from foreign language regions. Folk names may vary regionally. They originate in many ways and their usage is often deeply rooted. Various segments of the common name-using public often use different names for the same species or the same name for different species. A common name may not coincide exactly with the Latin name of a biological species. Because many common names have a high communication value and have also become part of the idea of the animal, it will probably be impossible for each species to have one common name that refers to that species alone. Users of common names for special purposes have attempted to list the names that serve them best. A well-documented general list, including alternative names, is needed.

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