

MARINE AND COASTAL FISHERIES: DYNAMICS, MANAGEMENT, AND ECOSYSTEM SCIENCE

Guide for Authors

I. Manuscript Preparation

Manuscript Categories

Manuscripts may be up to 150 pages long (including tables and figures), the equivalent of 50 printed pages. (Longer papers should be submitted as Monographs, for which we require external publishing funds.) Manuscripts may be submitted to any of the following categories: (1) *Articles* comprise full scientific reports and critical reviews. (2) *Notes* are short papers of inherent value but limited scope, brief reports of important but unrefined experiments that the author is unable to repeat (for nontechnical reasons), and observations on methodology and protocol. (3) *Comments* are critiques of data and interpretations already published in *Marine and Coastal Fisheries*, responses to which will be invited from the original authors. We also publish corrections (errata) of papers previously published in this journal.

In submitting a paper, you are stipulating that, except where explicitly indicated otherwise, all of the statements, data, and other elements reflect your own work and not that of others. References to the work of others should be properly cited; exact quotations from other sources should be in quotation marks. Failure to follow these requirements may result in rejection of the paper and, in extreme cases, restrictions on publishing in this journal.

Useful Literature

Our standard for word definition and spelling is *Webster's Third New International Dictionary*, as updated by the latest edition of *Merriam-Webster's Collegiate Dictionary*.

For taxonomic and vernacular names of North American fish species, we follow the American Fisheries Society's most recent edition of *Common and Scientific Names of Fishes from the United States, Canada, and Mexico*. For other fish and invertebrate species, we encourage readers to follow the Society's companion publications: *World Fishes Important to North Americans* and *Common and Scientific Names of Aquatic Invertebrates from the United States and Canada* (*Mollusks*, 2nd edition, *Crustaceans*, and *Cnidaria and Ctenophora* are currently available in the latter series). Common names sanctioned by these lists may be used freely in this journal, but they must be accompanied by their respective scientific names when first mentioned in the abstract and text. Always use full common names: "Largemouth Bass," not "bass." Note that it is now AFS's style to capitalize the common names of all fish species and subspecies (but not hybrids and life history variants). Some plural forms of common names differ from the singular forms; consult the AFS style guide.

For analyses of fish population dynamics, we prefer the notation as used by W. E. Ricker

in his *Computation and Interpretation of Biological Statistics of Fish Populations* (Fisheries Research Board of Canada Bulletin 191, 1975). However, all symbols should be defined anew in each manuscript. Our standards for chemical names are the current editions of the *Merck Index* (Merck & Co., Rahway, New Jersey) and *Enzyme Nomenclature* (Academic Press, San Diego, California). Geneticists should use the “Gene Nomenclature for Protein-Coding Loci in Fish” by J. B. Shaklee et al. (*Transactions of the American Fisheries Society* 119:2–15, 1990).

An extensive style guide for AFS publications is available at http://fisheries.org/publications_style. In addition, several other style manuals provide useful guidance for the preparation of manuscripts, among them the latest editions of *Scientific Style and Format* (Council of Science Editors, Chicago) and the *Chicago Manual of Style* (University of Chicago Press, Chicago). *The Elements of Style* by Strunk and White (Macmillan, New York) continues to be an excellent guide to English usage. Accuracy and precision in scientific writing are just as important as accuracy and precision in scientific measurement. Lapses in either context invite criticism.

Format Conventions

The following document submission formats are acceptable:

MS Word

WordPerfect

Text

Rich Text Format

Whenever authors follow the style and format of the journal for which they write, they earn the appreciation of reviewers, editors, and typesetters and save themselves extra revisionary work. The following conventions apply to this journal:

- (1) Use line spacing of at least 1.5 for all material, including title, abstract, footnotes, references, tables, and table and figure captions.
- (2) Provide continuous line numbering for all manuscript pages. Number all pages sequentially, including title page, abstract, tables, and figures. Make sure that headers or footers will not be confused with the text.
- (3) Use a standard 12-point font throughout. Use boldface type only to indicate first-level heads and vectors. Use an italic font and not underlining to indicate italics.
- (4) Turn off all hyphenation and justification routines. Delete all horizontal and vertical lines from tables except the horizontal lines above and below the column heads and across the bottom of the table.
- (5) Avoid solid capital letters except for acronyms, which, along with abbreviations and symbols (including numerals), should never begin a sentence. Use an italic font only for scientific binomials (other Latin words and phrases are *not* italic), second- and third-level subheadings, single-letter variables and constants in mathematics and statistics, and for *occasional* emphasis.
- (6) Spell out one-digit numbers unless they are used with units of measure or are directly

compared with a larger number: four anglers; 5 cm; 8 bluefish and 16 striped bass. Use numerals for decimal fractions and numbers of two or more digits: 0.4 times; 17 tanks; 326 fish, but spell out any number that begins a sentence. Use commas in numbers of 1,000 and greater; use 0 before decimal fractions (0.05).

(7) Use the 24-hour clock for diel time (and spell out “hours”): 1435 hours, not 2:35 p.m. Calendar dates can follow either of two formats: day month year (17 July 1990) or month day, year (July 17, 1990); select one style and use it consistently throughout the paper, including in tables and figures.

(8) Follow the name-and-year system for literature citations (see References below).

(9) Keep text footnotes to a minimum and number them sequentially throughout the paper. Table footnotes take lowercase, superscript letters in alphabetical order, and the sequence starts anew with each table.

(10) Use metric units of measure without exception. Report physical measurements in accordance with the *Système International d’Unités* (SI). When one unit appears in a denominator, use a solidus (6 mg/L); use negative exponents and product dots ($26.4 \text{ g}\cdot\text{m}^{-3}\cdot\text{h}^{-1}$) for compound denominators.

(11) Indicate the national currency involved the first time a monetary value is given (e.g., Can\$6, US\$153).

(12) Give fish ages in Arabic, not Roman, numerals (age 3, not age III) and avoid plus (+) signs in the age notation. A fish is age 0 during its first year of life, which is assumed to end December 31 unless otherwise indicated. Define specialized age notations such as those used for anadromous species.

(13) Only symbols and abbreviations included in Webster’s dictionaries or listed at the end of these guidelines may be used without definition; all others must be defined at first use. As some symbols are not unique (for example, *N* can mean newton, nitrogen, normal, or north), a term should be spelled out if there is any chance of ambiguity. To facilitate communication with readers, avoid excessive use of abbreviations and acronyms, and avoid abbreviations in the abstract.

Manuscript Components

Manuscripts normally should be assembled in this order: title, authors, and addresses (on one page); abstract (on the second page); introduction, study area, methods, results, discussion, acknowledgments (run-in on successive pages); references; all text footnotes (including address changes); appendixes; tables; figure captions; figures. The following notes expand on these items.

Title.—The title should accurately reflect a paper’s content. The best titles—those that attract a reader’s attention and interest—are usually short (a dozen words or less) and crisp. Latin binomials covered in the Society’s *Common and Scientific Names of Fishes from the United States, Canada, and Mexico* should not be included in the title. Authors of scientific taxa also should be omitted from the title except when their names are absolutely needed for clarification.

Abstract.—All articles and notes require abstracts, but comments do not. The abstract should be a single paragraph of 200–300 words (75–200 words for notes) that summarizes the results and conclusions in concise and declarative prose. Abstracts should neither list the contents (this is presented; that is discussed) nor review the methods. Literature citations and footnotes are not allowed in abstracts. Abstracts obviate the need for formal text summaries. Because they are widely circulated by abstracting services, abstracts have much larger readerships than do full papers, and the abstract should represent the text fairly and accurately.

Introduction.—An introduction should set the context for the work to be reported and establish the purpose and importance of that work. It also should demonstrate the authors' awareness of the most pertinent literature, including review articles. However, a comprehensive literature survey may be deferred to the discussion section if this is more appropriate.

Study site.—A report of field studies may need a detailed site description, which can be given in a separate section of the manuscript. Limit the information to that needed for an understanding and interpretation of the results. If only a few words are needed to locate and describe the study site, include them in the introduction or methods. Maps are unnecessary if they only give information contained in standard atlases.

Methods.—Methodologies can be tedious to read, but it is better to be overly explicit than to omit details needed by a reader to evaluate the data or repeat the study. Previously published descriptions of equipment and procedures may be cited by reference, unless they are in theses, dissertations, agency reports, or other sources of limited availability. Clarity of expression is as important in the methods section as it is elsewhere in the paper. If the experimental protocol and equipment are particularly complex, they can be displayed in a table or figure. Similarly, the numerous variables needed for some mathematical developments may be listed and defined in a table. Long papers that report diverse research may benefit if methodological details are split up and regrouped together with the respective results. This can help the reader to associate the data with the respective procedures. In such cases, a formal methods section can be restricted to matters common to all or most of the experiments: sources of fish, equipment, chemical analyses, or statistical tests, for example. Some papers, such as those concerned wholly with techniques or models, as well as review articles, may need no separate methods section.

Results.—Results traditionally follow methods, and need not be explicitly labeled as such if a more descriptive subheading is available. If results are presented in tables or figures, it is pointless to describe them exhaustively in prose as well; the text can be devoted to summary statements and analyses. Display data in tables if precision is important, in figures if trends are paramount. Although long lists of raw data are undesirable, basic data should not be refined to the degree that a reader can neither verify the analyses nor use the information for other purposes. Statistical testing is an important part of most analyses, but it should not obscure biological insight. Most importantly, the statistical designs and models used should be appropriate for the study. Many criticisms of fishery work address statistical flaws; consult experts as necessary. Although most scientific decisions are based on a statistical probability of

error of 5% or less, we have no requirements regarding significance levels. Decision probabilities should balance the sacrifice of biological information against the consequences of being wrong.

Discussion.—The value of a paper can be greatly enhanced by a good discussion. This is the place to relate what has been learned to what is known, to create new syntheses, to search for generalities, and to establish basic principles. The weakest discussions are brief literature surveys appended to mechanical restatements of the results; these usually should be integrated with the results in a single section of the paper. The strongest discussions are true scientific essays that materially advance understanding of their respective fields, whether they concern fishing mortality or ecosystem function. Most discussions fall between these extremes because they are founded on limited research objectives, but a thoughtful and scholarly discussion can transform a pedestrian paper into a remarkable one. The quality of a discussion is inversely related to redundancy, wordiness, and unfounded speculation. It is better not to make a point than to burden it with a paragraph of qualifications. The work of others, when cited, should be attributed carefully and accurately. Transitions from evidence to intuition need explicit identifications.

Acknowledgments.—Place grant and contribution numbers in the acknowledgments. Acknowledge only people and institutions that contributed directly to the research or to the manuscript's quality. The psychic support of spouse, family, and friends can be rewarded in other ways.

References.—Select references with caution. We will not allow reference to progress reports, to unpublished papers or abstracts of papers given at conferences, or to manuscripts in preparation or under review—except to acknowledge (in the acknowledgments section) intellectual debt. Although theses, dissertations, final reports, and institutional documents of limited or no circulation often contain useful data and may be cited, such sources rarely have been subjected to external review and should be cited sparingly. Authors may be requested to provide unpublished reports if they are required by the referees. Reliance on unpublished reports reduces an author's credibility. If unpublished data or personal communications must be cited, do so parenthetically in the text, giving initials, surname, and affiliation (not address) of the source; for example, (A. B. Jones, Institute for Aquatics, personal communication). Obtain written permission from the appropriate people to cite unpublished data and personal communications, and be prepared to show such letters to the editor.

Literature citations in the text take either of two forms, depending on the context. Note the punctuation in the following examples:

(1) Johnson (1995), Jones and Smith (1996, 1998), Rice et al. (1997), and Berger (in press) found walleyes in Lake Pollock.

(2) Walleyes occur in Lake Pollock (Johnson 1995; Jones and Smith 1996, 1998; Rice et al. 1997; Berger, in press).

Cite both of two authors, but for three or more give only the first author plus "et al." Arrange multiple citations chronologically (oldest first) in a text sentence.

If their names are long, institutional authors may be cited as acronyms in the text, but such acronyms must be defined in the references. For example, “APHA et al. (1992)” cited in the text appears in the reference list as “APHA (American Public Health Association), American Water Works Association, and Water Environment Federation. 1992.” Cite “in press” for papers accepted for, but still awaiting, publication.

In the reference list, alphabetize entries first by the surnames of first authors or by the first word or acronym of corporate authors, then by the initials of first authors with the same surname, and finally by the surnames of coauthors. List multiple papers by the same author(s) chronologically by year of publication. Distinguish papers by the same author(s) in the same year by lowercase letters after the year (1998a, 1998b). Substitute “in press” for the year if a paper has been accepted for publication but page numbers are not yet available.

Completely spell out all bibliographic information, *including serial titles*. We allow only these abbreviations:

- (1) first and middle initials of authors and editors;
- (2) abbreviations that occur in the titles of articles and books and in the names of authors;
- (3) ordinal numbers (2nd edition, 4th Congress) other than those spelled out in titles.

Examples of common bibliographic formats follow.

(1) Articles in journals and other periodicals listed in *BIOSIS Serial Sources* (BIOSIS, Philadelphia), but see exception for AFS book series in (3) below: author(s); year; title; serial; volume; issue (if needed); inclusive pages. Include the issue number only when each issue starts with page 1.

Crawshaw, L. I., D. E. Lemons, M. Palmer, and J. M. Messing. 1982. Behavioral and metabolic aspects of low-temperature dormancy in the Brown Bullhead, *Ictalurus nebulosus*. *Journal of Comparative Physiology B* 148:41–47.

Hochachka, P. W. 1990. Scope for survival: a conceptual “mirror” to Fry’s scope for activity. *Transactions of the American Fisheries Society* 119:622–628.

Kennedy, V. S. 1990. Anticipated effects of climate change on estuarine and coastal fisheries. *Fisheries* 15(6):16–24. (Note that articles published in *Fisheries* prior to 2006 require issue numbers as well as volume numbers; those published from 2006 on require only volume numbers).

Kent, M. L., G. S. Traxler, D. Kieser, J. Richard, S. C. Dawe, R. W. Shaw, G. Prospero-Porta, J. Ketcheson, and T. P. T. Evelyn. 1998. Survey of salmonid pathogens in ocean-caught fishes in British Columbia, Canada. *Journal of Aquatic Animal Health* 10:211–219.

(2) Book: author(s); year; title; edition (other than 1st) or volume (if part of a series); publisher; city; state, province, or country (only if needed to locate city). Omit the number of pages.

APHA (American Public Health Association), American Water Works Association, and Water Environment Federation. 1992. *Standard methods for the examination of water and wastewater*, 18th edition. APHA, Washington, D.C.

Hoar, W. S., and D. J. Randall, editors. 1988. *Fish physiology*, volume 11, part B. Academic Press, New York.

Rheinheimer, G. 1985. *Aquatic microbiology*, 3rd edition. Wiley, New York.

Waters, T. F. 1995. Sediment in streams: sources, biological effects, and control. American Fisheries Society, Monograph 7, Bethesda, Maryland.

(3) Article in a book (including those in the AFS “serial” books—Special Publications, Symposia, and Monographs): author(s); year; title; inclusive pages; editor(s); book title; publisher; series name (if appropriate); city; state, province, or country (only if needed to locate city). Identify conference proceedings by year of publication, *not* by the year of the meeting, and give the publisher’s name and location (i.e., where the proceedings may be obtained), *not* the location of the meeting.

Adams, S. M., and J. E. Breck. 1990. Bioenergetics. Pages 389–415 in C. B. Schreck and P. B. Moyle, editors. Methods for fish biology. American Fisheries Society, Bethesda, Maryland.

Campton, D. E. 1995. Genetic effects of hatchery fish on wild populations of Pacific salmon and steelhead: what do we really know? Pages 337–353 in H. L. Schramm Jr., and R. G. Piper, editors. Uses and effects of cultured fishes in aquatic ecosystems. American Fisheries Society, Symposium 15, Bethesda, Maryland.

Livingstone, A. C., and C. F. Rabeni. 1991. Food–habitat relations of underyearling Smallmouth Bass in an Ozark stream. Pages 76–83 in D. C. Jackson, editor. The first international Smallmouth Bass symposium. Mississippi Agriculture and Forestry Experiment Station, Mississippi State University, Mississippi State.

(4) Dissertation or thesis: author; year; title; nature of document; university; city; state, province, or country (only if needed to locate city).

Chitwood, J. B. 1976. The effects of Threadfin Shad as a forage species for Largemouth Bass in combination with Bluegill, Redear, and other forage species. Master’s thesis. Auburn University, Auburn, Alabama.

Hartman, K. J. 1993. Striped Bass, Bluefish, and Weakfish in the Chesapeake Bay: energetics, trophic linkages, and bioenergetics model applications. Doctoral dissertation. University of Maryland, College Park.

(5) Government publication: author(s) or agency; year; title; agency; type and number of publication; city; state, province, or country (only if needed to locate city).

EPA (U.S. Environmental Protection Agency). 1986. Quality criteria for water. EPA, Report 440/5-86-001, Washington, D.C.

Gimbarzevsky, P. 1988. Mass wasting on the Queen Charlotte Islands: a regional inventory. British Columbia Ministry of Forests and Lands, Land Management Report 29, Victoria.

(6) Contract report: author(s); year; title; organizations that issued the report (if different from the author); organization that received the report; receiver’s city; state, province, or country (only if needed to locate city).

Smith, A. B. 1986. Turbine-induced fish mortality at Highrise Dam, 1985. Report of Robertson Consultants to Prairie Utilities, Jonesville, Alberta.

(7) Internet citations: author(s) or agency; year; title; publisher; URL; month and year accessed.

Baldwin, N. A., R. W. Saalfield, M. R. Dochoda, H. J. Buettner, and R. L. Eshenroder. 2000. Commercial fish production in the Great Lakes 1867–1996. Great Lakes Fishery Commission. Available: www.glfrc.org/databases/commercial/commerc.asp. (September 2000).

Note that only the first words and proper nouns of English titles are capitalized. In German titles, all nouns are capitalized. Retain italics when they are used in the titles cited.

Footnotes.—Bring all text footnotes together after the references. Keep them to a minimum. Typical footnotes give address changes for authors, availability of supplementary data, and disclaimers of product endorsement. Most other material, including personal communications

(which also should be minimized), can be included in the text or the acknowledgments.

Tables.—Organize tables to convey the greatest amount of coherent information with the least amount of wasted space and redundancy. If necessary, we will split wide tables across facing pages. We prefer not to print tables broadside (landscape) on the page. In most cases, problems of space can be minimized if a table is oriented such that the number of columns is less than the number of rows. Even within these constraints, it frequently is possible to combine small but related tables into a single concise and definitive statement.

Place a zero to the left of the decimal point for fractions smaller than one. Pay attention to the number of significant digits, regardless of what a computer may have printed out. Although fractions of a percent may be statistically justified in some cases, they rarely convey more meaning in fisheries work than do rounded, whole percentages.

Use the table caption or footnotes to identify nonstandard symbols and abbreviations. Footnotes take lowercase letter superscripts, which occur in alphabetical order. List footnotes below the table.

In column and row headings, capitalize only the first word, proper nouns, and appropriate symbols. Horizontal ruled lines (other than the three standard ones, i.e., those after the caption and the column headings and at the end of the table) seldom are needed in the body of tables, and vertical lines are never allowed. Use line spacing of at least 1.5 for the caption and entries and continue the table on additional pages, if necessary. Do not reduce type size for tables.

Figure captions.—List all figure captions sequentially on one or more pages. Identify in the captions all symbols that are not standard or defined on the figures, and include full disclosure whenever digital images have been electronically manipulated or enhanced.

Figures.—There is no additional charge for color photographs and graphics.

Labels should describe the x - and y -axes clearly. Place the y -axis label to the left of the axis and orient it to read sideways from bottom to top of the graph. Photomicrographs may be reduced during printing and should contain a scale bar directly on the photograph; give the equivalent length either on the bar or in the figure caption.

All letters should be at least 1.5 mm high (or 6-point type) after the figure is reduced; avoid bold fonts. A figure that is 20 cm wide when drawn can reduce to one column if the smallest original lettering is at least 4.5 mm high (18-point type). Letter size and line thickness (including axes) should vary no more than twofold on a figure. Figure reduction can cause symbols and shadings to look alike, dashed lines to become continuous, and dotted lines to disappear, so choose elements that will retain their clarity and contrast when reduced and published. Keep graphics simple and uncluttered. Avoid unnecessary use of three-dimensional charts, black borders, and shaded fill. If shaded fill is used, keep it in the range of 30–70% of black for best reproduction. Keep blank space to a minimum by placing axis labels near the axes, multiple panels close together, and “outlier” words (compass directions, scale bars, keys) within the margins of the figure. Carefully planned figures enhance a paper’s message and can reduce authors’ publication costs.

Multimedia.— Authors are encouraged to submit multimedia files with their manuscripts (e.g., video footage, audio clips, data sets, and enhanced figures).

Image submission formats:

TIFF

JPEG

GIF

PS

EPS

XLS

DOC

PPT

CDR

PSD

PDF

Video formats:

MPEG

QuickTime

II. Review Process

Every item submitted to *Marine and Coastal Fisheries* is subject to review. *Articles*, *Notes*, *Commentaries*, and *Forum papers* are assigned to a Subject Editor who recruits at least two experts in the relevant discipline to review the paper. However, we may return to authors without review any manuscript that we judge to be of low technical or compositional quality or simply inappropriate for this journal. Reviews of well-written papers are normally completed within 9–12 weeks after submission. To expedite the review process, authors should revise their papers promptly (within 1 month of the time the paper is evaluated by the Subject Editor). Revisions completed after that time will be considered new submissions and may have to go through the review process again (though short extensions will be allowed if there are justifiable delays).

Reviewers (and editors) react positively to concisely written and well-organized papers and are likely to give such papers priority attention. Careless preparation of manuscripts implies careless research and thought and may lead to negative critiques. Authors can greatly help their own cause if they (1) write direct, unambiguous, grammatically correct prose and avoid redundancy and wordiness; (2) clearly establish the intellectual context and practical or theoretical importance of their work; (3) provide all methodological information needed to understand and interpret their results, without unnecessary details; (4) prevent statistical or analytical sophistication from upstaging biological insight; (5) integrate their results broadly but relevantly with the published literature; (6) forgo trivia and unwarranted speculation; and (7) follow the journal's style and format.

Authors whose primary language is not English are strongly encouraged to seek help from a native English speaker when they prepare their papers for submission to the journal.

III. Production Process

Timeline

We strive to publish accepted manuscripts within six months from the time of initial submission. All items are subject to copyediting. The author will have the opportunity to review a proof of the article and submit any necessary edits before the article is published. To remain on schedule, the editorial office asks that authors promptly submit their corrections within 48 hours after receiving their proofs. Finalized articles will be posted immediately and added to the “Now building online” section.

Publication Fees

To offset the costs associated with maintaining an open-access journal (widely and freely available to everyone via the Internet) publication fees have been implemented. Publication fees are \$1,000.00 for 5,000 words or less and \$100.00 for every 1,000 words thereafter. Word counts are based on the number of words in the abstract and main body text only (it does not include the references, tables, figures, multimedia, or appendices). There are no charges for contributions to the Fisheries Forum.

The following discounts/waivers apply to the journal:

- Authors from an institution located in a country listed in the World Bank’s low-income category will not be charged ([click here to view the current list](#)).
- A 50% discount will be applied to AFS members (only upon request).
- A 10% discount will be applied to authors who have reviewed for the journal (the discount must be used within one year of reviewing a manuscript).

IV. How to Submit

Online Submission

Submit new manuscripts and associated correspondence at the journal’s online manuscript submission and peer review site: <http://mc.manuscriptcentral.com/mcf>. You may also access the manuscript submission site through the Publications pages on the American Fisheries Society’s Web site (www.fisheries.org). On your first visit to the journal site, you will need to register for an account. You will be able to submit text, tables, and figures online.

Submission Checklist

- The work submitted herein has not been published elsewhere, nor is it at present being considered for publication by another journal. If either of these conditions apply, the author must provide complete details in a covering letter to the editors. Failure to notify the editors is grounds for rejection.
- The text adheres to the formatting requirements outlined in the Format Conventions section.
- All multimedia files are in acceptable submission formats as outlined in the Multimedia section.
- If copyrighted materials such as figures, tables, trademarks, logos, etc. are used, the author has (1) declared in a cover letter that such material is submitted and (2) received written permission from the original publisher to use the materials.

V. Transfer of Copyright

Authors must sign a transfer of copyright to the American Fisheries Society (AFS). It is the policy of AFS to own copyright to its publications, and to the contributions contained therein, in order to protect the interests of the Society, its authors, and their employers and at the same time to facilitate the appropriate reuse of this material by others. For a list of rights reserved by the author, please refer to the Transfer of Copyright Agreement Form.

An author who is a U.S. or Canadian Government officer or employee and prepared the submitted article as part of his or her official duties does not own any copyright in it. If at least one of the authors is not in this category, that author should sign the transfer of copyright. If all authors are in this category, check the box at the bottom of the form and return it unsigned.

VI. Disclaimer

Authors are responsible for obtaining any necessary permission from copyright holders for reproducing previously published material, including charts, graphs, photos, tables, etc.

Mention of trade names does not imply endorsement by AFS. Information appearing in an article does not imply endorsement by AFS.

Where there are links to external Web pages, AFS does not endorse, warrant, or otherwise take responsibility for the contents of these Web pages.

Symbols and Abbreviations

The following symbols and abbreviations, along with others that are approved for the *Système International d'Unités* (SI) or that appear in Webster's dictionaries, may be used in the *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science* without definition; all others must be defined at first use.

Prefixes

giga (10^9)	G
mega (10^6)	M
kilo (10^3)	k
milli (10^{-3})	m
micro (10^{-6})	μ
nano (10^{-9})	n
pico (10^{-12})	p

Time and Temperature

day	d
hour	h
minute	min
second	s
degrees Celsius	°C
kelvin	K

(Spell out year, month, and week.)

Weights and Measures

catch per unit effort (define mathematically, e.g., number/net-night)	CPUE
centimeter	cm
meter	m
kilometer	km
gram	g
kilogram	kg
liter	L
deciliter	dL
hectare	ha
nephelometric turbidity units	NTU
practical salinity units	psu
fork length	FL

standard length	SL
total length	TL

(Spell out metric ton.)

Mathematics and Statistics

analysis of variance	ANOVA
analysis of covariance	ANCOVA
base of natural logarithms	e
coefficient of variation (define mathematically, e.g., $100 \cdot \text{SD}/\text{mean}$)	CV
common test statistics	$F, t, \text{etc.}$
confidence interval	CI
correlation or regression coefficient	
multiple	R
simple	r
covariance	cov
degree (angular)	$^\circ$
degrees of freedom	df
expected value	E
logarithm	
natural	\log_e or \ln
base a	\log_a
minute (angular)	'
not significant	NS
percent	%
probability	P
probability of type I error (false rejection of null hypothesis)	P_α or α
probability of type II error (false acceptance of null hypothesis)	β
radian	rad
sample size	N or n
second (angular)	"
standard deviation	SD
standard error	SE
steradian	sr
variance	
population	V or Var
sample	var

Physics and Chemistry

all atomic symbols	H, He, etc.
alternating current	AC
ampere	A
base pairs	bp
becquerel	Bq
calorie (joule preferred)	cal
candela	cd
chemical acronyms in dictionary	DDT, EDTA, etc.
coulomb	C
deoxynucleotide triphosphate	dNTP
dextro configuration	D
dextrorotary	<i>d</i>
direct current	DC
electron volt	eV
equivalent	eq
farad	F
gravity	<i>g</i>
gray	Gy
hertz	Hz
high-performance liquid chromatography	HPCL
hydrogen ion activity (negative log)	pH
joule	J
levo configuration	L
levorotary	<i>l</i>
lumen	lm
lux	lx
molar	M
mole	mol
newton	N
normal	N
ohm	Ω
ortho	<i>o</i>
para	<i>p</i>
pascal	Pa
passive integrated transponder	PIT
per thousand	‰
polymerase chain reaction	PCR
polyvinyl chloride	PVC
siemens (= mho, Ω^{-1})	S
tesla	T
tris(hydroxymethyl)-aminomethane	tris
volt	V

watt	W
weber	Wb

General

American Type Culture Collection	ATCC
colony-forming units	CFU
compass directions (maps and coordinates)	
east	E
north	N
south	S
west	W
corporate designations	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii	et al.
et cetera	etc.
filial generation	F
for example	e.g.,
geographical information systems	GIS
Global Positioning System	GPS
international units	IU
months in tables and figures	Jan, Feb, Mar, etc.
plaque-forming units	PFU
ploidy	n
sex in tables, figures, and hybrids	
female	♀
male	♂
that is	i.e.,
unit	U
United Kingdom	UK
United States	
noun	USA
adjective	U.S.