### Conservation Biology

### Style Guide for Authors

# Word Count

# Manuscripts must not exceed the following word counts even if reviewers have asked for additional material. The number of words includes all text from the Abstract through References; it does not include tables or figure legends or text in the body of tables. The Abstract should not exceed 300 words. Do not include an abstract with Letters, Comments, or Diversity pieces.

Contributed Paper: 8000

Review: 9000

Essay: 6000

Research Note: 4000

Conservation Method: 6000

Conservation Practice and Policy: 6000

Registered Report: stage 1, 3700; stage 2, 8000

Comments: 2000

Diversity (or Insight): 2000

Letters: 1000

More information on these categories and the types of papers published in *Conservation Biology* is in Instructions for Authors available under the Instructions and Forms tab at the top of *Conservation Biology*’s ScholarOne login page, http://mc.manuscriptcentral.com/conbio.

# Number of Tables and Figures

Include no more than 1 supporting element (i.e., table or figure) for every 1000 words (from the Abstract through References). If a table or figure has only a few data points, incorporate the data in the text.

# Appendices and Supporting Information

Supplementary materials should be provided as online supporting information (see details below).

**Section Headings and Order of Sections**

Contributed Papers, Research Notes, and Methods papers should contain the following sections in the following order: Abstract, Introduction, Methods, Results, Discussion, Supporting Information (standard paragraph required, see below), References, tables, and figures with legends. Do not combine sections (e.g., Results and Discussion). The Acknowledgments section will be added to the body of the paper after the manuscript has been accepted. Do not number section headings or subheadings. Do not include a Conclusion section (conclusions are part of the Discussion). Use only primary (Introduction, Methods, Results, etc.) and secondary (e.g., Data Analyses, Model Parameters, Practical Application) headings.

# Title

Most people will decide whether to read an article based solely on its title. Indexing and abstracting services and internet search engines also depend heavily on words in the title. And, researchers search for particular topics and then read the titles. If your title does not reflect the contents of your paper well or if the meaning of your title is not immediately clear, your paper is less likely to be read. Titles should be clear and concise.

*Types of Titles Not Allowed*

hanging titles (those with a colon, dash, or sometimes a comma)

titles that are complete sentences,

headline-like titles,

interrogative titles,

titles that reference colloquialisms or popular culture, and

titles that contain jargon that will not be understood by our international and interdisciplinary conservation audience

The problem with titles that are complete sentences is that they tend to create dogma (e.g., Wind Energy Development Does Not Affect Nesting Ecology of a Grassland Bird). Scientific knowledge is constantly evolving; thus, what is considered true currently may be questioned and proven inaccurate in the future. It does not follow that because science is evolving interrogative titles are thus a good idea. Interrogatives make poor titles because they are vague, disguise the answer to the question, and do not provide particular motivation to read the article. Hanging titles are overused and can almost always be shortened to a title that is more effective and eye-catching without being sensational. There is evidence that articles with short titles are cited more often than articles with long titles.

# Abstract

The Abstract should summarize the Introduction, Methods, Results, and Discussion in that order (i.e., it should be a miniversion of the paper). Key points from each of these sections should be identifiable within the Abstract. Do not include incomplete or uninformative descriptions (e.g., "A new method of analysis is described." or “We discuss how our approach promotes sustainable forest systems.”). Do not state conclusions that are not supported by evidence reported in the abstract. If reporting statistically significant results, provide effect sizes in the abstract. The results section of the abstract should provide numerical, quantitative, rather than qualitative, results where possible.

**Keywords**

Include on the cover page 5-8 words or phrases that will be useful for indexing and literature searches. Avoid general terms such as *conservation*.

**Article impact statement**

In ≤140 characters (including spaces and punctuation), convey the paper’s practical or policy importance. The statement may be a report of the primary result or theme if the practical or policy importance of the result is obvious. It should not be a reiterated or lengthened title or describe what is presented (e.g., “A method to x is presented.”). It should not contain personal pronouns or statements resembling “X was examined.”

**Statement on human or animal subjects**

When reporting on studies that involve human participants or animal subjects, supply a statement in methods that specifies the ethical guidelines with which you complied. Include permit numbers, if applicable.

# Acknowledgments

Place the acknowledgment paragraph on the cover page of your manuscript. (Reviewers are not provided with a cover page.) Do not spell out first (given) names. Provide the first initial of the first name, even if the initial starts a sentence. Do not use titles (e.g., Dr. or Professor). Refer to authors of the manuscript by their initials only (e.g., “S.T.W. was supported by a grant from the Torrey Foundation.”). Do not include people’s titles or institutions. If there is one, provide the author-contribution statement.

**Footnotes**

Do not use footnotes in the body of the manuscript.

**Citations**

Do not cite work or data that have not been published or are not available. Include such work or data in online appendices and cite it as such in the text. If data are from a publically accessible database, cite the database in text (author-year format) and in the References section.

**In-text citations**

In the body of the paper, list parenthetical citations chronologically from oldest to newest and use author-year format.

In most cases, enclose citations in text in parentheses. “Populations in sagebrush have higher reproductive success than populations in cheatgrass (Byrd & Elder, 2000).” is better than “According to Byrd and Elder (2000), populations in sagebrush . . . .”

“In press” means the cited paper has been accepted officially for publication. Provide the year of publication in the text (Bird, 2023), and in References provide the volume number and substitute “in press” for page numbers or DOI.

Software: capitalize the first letter only if the name of the program is a word (e.g., Partition, ArcInfo). If the name of the program is an initialization or acronym, use all capital letters (e.g., SAS).

Do not use trademark symbols.

Ensure that all references cited in text are listed in References and vice versa.

Do not use “in. lit.” citations. Provide the original citations.

**Unpublished information**

To further transparency and reproducibility, avoid citations of unpublished data and phrases such as *data not shown*. Provide data in online appendices (cite as Appendix S*x* in text) or in a publically accessible database (provide links).

**Reference section**

In general *Conservation Biology* citation style follows *Publication Manual of the American Psychological Association*, 7th edition.

Provide the full names of all journal titles. Italicize journal titles, book titles, and report titles.

If there are more than 20 authors, list the first 19 authors, insert ellipsis followed by name of last author (e.g., Howard G., Falk, F., Leong, K.M., Forester, J., Curtis, M., Gramza, R., Tosel, F., Wang, C., Gomez, S., Tradescant, J., Brooke, R., Oikowa, R., Minear, P., Coblentz, B., Stearns, V., Traub, R., Sweeney, M., Skinner, M., Miller, T., ...Teel, A.).

Personal communications should not be included in References.

Proceedings and abstracts from conferences may be cited only if they have a publisher or the name of the organization from which the document may be obtained can be provided.

Include databases in References.

**Supporting Elements (Tables, Figures, Online Appendices)**

# Content

**A reader should be able to interpret tables and figures without referring to the text and having read only the abstract.** Tables and figures should be self-explanatory and supplement rather than duplicate information in the text. Consequently, abbreviations and terms must be defined in the figure legend or in the table caption or footnotes. Common statistical notations need not be defined (e.g., CI, SD, SE). Use the same terminology in supporting elements and in the text. Do not present large amounts of data in tables. **Text boxes are not allowed.**

# Citation in text

Provide a summary or generalization of results and cite supporting elements parenthetically: “Models for species abundance were significant and explained 78% to 92% of variability (Table 2).” Do not report results as, for example, “Table 2 shows the outcome of models of species abundance.”

# Tables

**Tables must be editable in Word.**

Legends should be 1 sentence long. Use the legend to describe the contents of the table as it relates to the topic of the manuscript. A list of the table’s columns or row headings is not an informative table legend. Use footnotes to provide needed explanations of row and column headings, to provide more information about specific data, and to define terms.

Information too general: “Results of analysis of variance.”

Too much information: “Anti-Candida, -leishmania, and -tumor activity of extracts from 11 species of sea cucumber. NA indicates no activity (IC50≥ 500 µg/mL against Candida and leishmania, IC50≥ 80 µg/mL against LoVo cell line). The \* denotes that these activities are significantly different from those obtained from extracts isolated from the same species taken from the southern region.”

Define abbreviations in a footnote even if they are defined in manuscript text.

If there is only one footnote, use an asterisk (\*). If there is more than one footnote, use letters (a, b, c,). Order footnotes alphabetically from left to right and from top to bottom.

Do not use bold or italic type.

Unless an entry is a complete sentence or a proper noun, capitalize only the first word of the first entry in a row and do not use periods.

Do not split tables into separate sections (e.g., Table 1a and Table 1b). Make separate tables (Table 1, Table 2) or combine data under the same columns or rows.

Use indentation to set off secondary (or tertiary) entries within a column (see example below) and hanging indents for entries in tables that are primarily text.

Table 1. Logistic-regression models built with . . . *a*

Variable Symbol *p* df

General model *b* *fg* 0.0015 3

landscape ruggedness rug 0.0113

forest cover (%) bosque 0.0085

Human model

human population pob1

. . .

*a*Significance level of coefficients . . .

*b*Next-most parsimonious models at . . .

# Figures

Before publication, you will be required to supply figures in tif, eps, or pdf format. Resolution should be at least 300 dots per inch (dpi); 600 dpi is preferable for figures with lettering.

We encourage use of a serif type face on maps and graphs.

For guidance on best practices in graphic design, refer to the following link used with permission from *Oryx* - The International Journal of Conservation and Fauna & Flora International: http://scalar.usc.edu/works/graphics-for-conservation/index.

*Maps*

Scale bars and compass direction must be provided. Author portrayals of borders or other jurisdictional boundaries do not imply support of those representations by the journal or the Society for Conservation Biology.

*Graphs*

Label all axes and include units of measure in the label, for example, Number of species/km2, Basal area (m2/ha).

Capitalize the first letter of the axis labels: Time since burn (years), Burned area (%), Burned area (ha), Seed density (seeds/plot).

Include a key on the figure itself rather that describing shading or shapes in the figure legend.

Match typeface and type size among figures. On a graph, the type size of axis labels and units of measure should not differ substantially.

If a figure has more than 1 panel, use lowercase letters to designate the parts: (a), (b), (c). Each panel must be referenced clearly in the figure legend by its letter.

If there are many digits in numbers or relatively long descriptions along the x-axis, orient entries at 45 or fewer degrees.

All numbers along an axis must have the same number of significant figures: 1.0, 2.5, 2.0 (not 1, 2.5, 2).

The label for the y-axis should be oriented vertically to the left of the units (reading from bottom to top), and numerals should be horizontally oriented.

Center the labels along both axes.

Do not enclose graphs in a rectangle.

**Supporting Information (online appendices)**

Supporting information (i.e., online appendices) should be cited in the text of the paper (e.g., Appendix S1, Appendix S2). Regardless of material format (e.g., table, figure, text, video), every piece should be referred to as an Appendix (e.g., Appendix S1, Appendix S2, etc.) and not be labeled, for example, Table S2 or Fig. S1.

Before References, insert the supporting-information paragraph shown below.

Associated with each appendix there should be a brief description, as for tables and figures that are not appendices. These descriptions will be taken from the supporting information file or files and appear in a list associated with the online article. **Appendices are not proofread or copyedited.**

To maintain anonymity during peer review, do not use author names in supporting information files or file labels.

If you have deposited pertinent information on a publically accessible repository, put the link and a brief description of the material in the Methods or Results section, not in the Supporting Information paragraph. See also “Open Research Badges” in Instructions for Authors.

*Text for Supporting Information Paragraph*

Supporting Information

SUPPORTING INFORMATION

Additional supporting information may be found online

in the Supporting Information section at the end of this

article.

Additional supporting information may be found online

in the Supporting Information section at the end of this

article

Additional supporting information may be found online

in the Supporting Information section at the end of this

article

Additional supporting information may be found in the online version of the article at the publisher’s website.

**Language and Grammar**

**Clear language**

Our audience is broad and international. Clarity in language and syntax is important, especially for readers whose first language is not English. Avoid jargon and colloquialisms. If English is not your first language, we strongly recommend that you ask a native English speaker with experience in publishing scientific articles to proofread your manuscript.

**Terminology**

Some common terms in conservation science have multiple meanings (e.g., *biological diversity*, *wildlife*, *connectivity*). Clarify how you use such terms, and define specialized terms at first use in the Abstract and in the body of the paper.

# Abbreviations and acronyms

Do not begin a sentence with an abbreviation. Use abbreviations sparingly. Define all abbreviations, initializations, and acronyms at first use. For example: analysis of variance (ANOVA), International Union for Conservation of Nature (IUCN).

**Capitalization**

Geographic designations:Do not capitalize a term that indicates region unless it is being used as a proper noun (e.g., western states, Southeast Asia). Capitalization of terms used commonly in *Conservation Biology*: the tropics; North Temperate Zone, temperate zone; East Africa, North Africa, central Africa; central Asia; tropics, Neotropics; Amazon Basin; Central Honshu Lowland Forest (an endemic bird area); Cape Floristic Region (a hotspot of biological diversity); Atlantic Forest, taiga, Global South.

Threat categories:Do not capitalize threat categories used by institutions or authoritative bodies: threatened, endangered, critically endangered, conservation concern, etc.

Do not capitalize names assigned to variables or scenarios, for example, pool, release, forced renesting, release location.

Common names of organisms: do not capitalize unless a proper noun is part of it (Bell’s vireo)

# Active voice

In general, use *we* or *I* (i.e., active voice). For example: “We converted all GIS data to raster format.” rather than “All GIS data were converted to raster format.” Or, “Trained technicians surveyed the plots.” rather than “The plots were surveyed by trained technicians.” In particular, Methods should not be written entirely in passive voice.

# Tense

Use past tense in Methods (describing what you did), Results (describing what your results were), and in Discussion (referring to your results). Use present tense when you refer to published results. The principal exception to this rule is in the area of attribution and presentation. It is correct to say, for example, “Toffel (2008) found [past] that extracts from iron weed inhibit [present] fungal growth.” Report model results in past tense.

**Spelling**

Use U.S. rather than British spelling.

**Commas**

Use the serial comma.

**Solidus**

Do not use and/or; the meaning is unclear. Do not use a solidus in lieu of a comma.

**Word usage**

*Using*: In scientific writing, the word *using* is often the cause of dangling participles and misplaced modifiers.

Examples: “Using tissue-isolation protocol, mtDNA was isolated from dried skins.” Who is doing the *using* is unclear. Better: “We used tissue-isolation protocol to isolate mtDNA from dried skins.”

“Ivory samples were taken from tusks using a 16-mm drill bit on a 40-cm drill.” This implies that the tusks used the drill. Better: “We used a 16-mm drill bit on a 40-cm drill to take ivory samples from tusks.”

*Impact*: Use *affected*, not *impacted*.

*With*: A *with* phrase at the end of sentences often creates a dangling phrase. For example, “Many researchers calculated extent of occurrence by summing the area of all polygons in the species extant distribution map, with these polygons excluding areas in the geographic distribution of a species that were not habitat.” A possible revision that fixes the dangling phrase is “...distribution map; these polygons excluded areas in the geographic distribution of a species that were not habitat.”

*Compared with*: Use *compared with* or *relative to* rather than *compared to*. The circumstances in which *compared to* is correct are rare (2 unlike things being compared; e.g., “Shall I compare thee to a summer’s day.”)

*Habitat*: Consider that habitat is a species-specific construct and habitat by definition is suitable.

*Health*: Avoid use of this term relative to ecosystems. Its use in this context is still questioned.

# Multiple modifiers

Do not use multiple adjectival nouns to modify a noun that is the subject or the object of the sentence: “We studied illegal African elephant ivory trade.” or “infected bird populations’ responses.” Better: “We studied illegal trade in African elephant ivory.” and “responses of infected bird populations.”

# Split infinitives

A sentence should not sound awkward because it has been rearranged to avoid a split infinitive. When an adverb qualifies a verb phrase, the adverb usually should be placed between the auxiliary verb and the principal verb (e.g., this research will soon attract attention). Splitting an infinitive verb with an adverb can be useful for adding emphasis or making a sentence sound less stilted. Phrases such as the following are acceptable: the traps were seriously damaged in a storm; differences in abundance were highly significant; to strongly favor.

# Pronouns

Be careful with the pronouns *this,* *these,* and *it*. If you do not provide a qualifier, it is sometimes difficult to tell what these words refer to: “This program offers solutions to that problem.” Better: “This computer program offers solutions to the problem of incorrect sequencing of numbers.”

Use formal language. This means use of *one* rather than *you*, and when using personal pronouns *we* and *our* they should refer to you as the author rather than to people or conservation scientists in general.

**Quotation marks**

Quotation marks (single or double) should not be used to imply a word is being used in a unique way. Use double quotation marks only when quoting directly what someone wrote or said. Use single quotation marks around quoted text within quoted text (James Howard said, “We rely on Seneca’s inspirational words, ‘The best ideas are common property’ in our approach to technological development.”).

## Numbers, Variables, and Statistical Elements

Numeral versus word: We follow *Scientific Style and Format*, 7th edition. Most numbers in most circumstances, even those under 10, appear as numerals (i.e., they are not spelled out). The numbers 0 and 1 present exceptions; copyeditors will address these.

Longitude and latitude: l48oN, 78oW (no periods).

Percentages and degrees: use symbols (15% and 15°).

Fractions: spell out (one-half, one-third) unless used with units of measure (0.5 mm or 0.5 years).

Decimal point: insert 0 before a decimal point (0.4, not .4).

SD and SE: mean (SD)=44% (3) or mean of 44% (SD 3)

CI: 95% CI 2.1-10.5 or 95% -2.1 to 5.2 Use *to* when there is a negative number. Use one format consistently throughout the manuscript.

Dates: day, month, year (e.g., 6 October 1987). Do not use abbreviations such as 5/3/14 or 5-3-14.

Numbered lists: do not use numbered lists in the text. “We used x, y, and z to take soil samples” rather than “We used 3 techniques to take soil samples: (1) . . . , (2) . . . , and (3) . . .

Insert a space between numbers and the unit of measure (6 m, 14 mL).

Delimiters: in mathematical expressions the order of delimiters (i.e., fences) is braces { }, brackets [ ], and parentheses ( ): {[( )]}. In narrative text, the order is the opposite, ([ ]). In functional notation, nested pairs of parentheses are used.

Define all variables used in equations.

Italicize all single-letter variables. Do not italicize variables with more than 1 letter (e.g., “RU” meaning reproductive units as opposed to *RU*, in which *R* and *U* are separate interacting variables) or words used in association with variables (e.g., *x*forest).

Do not use capitalization, quotation marks, italicization, or bold face to distinguish variables (e.g., use bycatch 1, truthful, random, not *bycatch*, Truthful, or ‘random’).

Complete words used as a variable should be lowercase (e.g., species). Each letter in multiple-letter abbreviations that are not complete words should be capitalized (e.g., AMF is acceptable for area of managed forest; PATCH for patch area is unacceptable).

If *p* values are reported, also report confidence intervals (CIs) for each estimate in the text and in figures. In all cases, be explicit about what error bars represent.

Significant figures: Express calculated values (e.g., means, standard deviation) to not more than 1 significant digit beyond the accuracy of the original measurement. Report test statistics (e.g., *p* values, correlation coefficients) to not more than 3 significant digits.

Use the following abbreviations:

*p*,probability

df, degrees of freedom

*χ*2, chi-square

*F* (*F* test, variance ratio)

*FST* (fraction of total genetic variance among subpopulations)

CI, confidence interval or credible interval

SE, standard error (do not use ±)

SD, standard deviation (do not use ±).

**Scientific Names**

Common names of organisms should be lowercase (creeping thistle, common bushtail possum, gopher tortoise, common chaffinch). See Author Style guide for information on use of local and Indigenous names.

In the abstract and at first mention in the text, use common name followed by scientific name (genus and species) in parentheses: cane toad (*Bufo marinus*), Douglas-fir (*Pseudotsuga menziesii*), Florida scrub jay (*Aphelocoma* *coerulescens*). With a few exceptions, after scientific name has been provided use common name.

Organisms: *Clarkia springvillensis* (first use); *C. springvillensis* (thereafter, even starting a sentence); spp. or sp. or var. (no italics).

***Conservation Biology* Style Sources**

Day, R. A., and B. Gastel. 2011. How to write and publish a scientific paper. 7th edition. Greenwood, Santa Barbara, California.

Council of Science Editors. 2006. Scientific style and format. 7th edition. Council of Science Editors, Reston, Virginia.

Merriam-Webster. 2003. Third new international dictionary, unabridged. Merriam-Webster, Springfield, Massachusetts.

University of Chicago Press. 2010. The Chicago manual of style. 16th edition. University of Chicago Press, Chicago.

For citation format only: *Publication Manual of the American Psychological Association*. 7th edition.2020. American Psychological Association, Washington, DC.

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