

# NORTHWEST SCIENCE

Official Publication of the Northwest Scientific Association

Society Webpage: [http://www.vetmed.wsu.edu/org\\_NWS/Journal.htm](http://www.vetmed.wsu.edu/org_NWS/Journal.htm)

Manuscript submission: <http://www.edmgr.com/nwscience>

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## Information for Authors and Instructions for Formatting a Manuscript

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### Purpose and Scope

The pages of *Northwest Science* are open to original and fundamental research in the basic and applied natural sciences, with a focus on the geographic area of the Pacific Northwest, including Alaska, western Canada, and the Northwestern United States (WA, OR, ID, MT, and northern CA). At least two reviewers and an associated editor referee all submissions, with the final decision regarding publication resting with the editor. Papers from authors outside of the Pacific Northwest are welcome. The journal is published quarterly and sent to institutional and individual members of the Northwest Scientific Association. Papers are also indexed through a number of services, assigned digital object identifiers (DOI) and abstracts are freely available online at <http://www.bioone.org/loi/nwsc>.

The journal considers both refereed (research articles and notes) and non-refereed (forum essays and book reviews) manuscripts. **Research articles** present the results of original research that has not been previously published. They are generally 6-20 journal pages long. Authors should contact the editor prior to submitting longer papers. **Notes** are typically less than 5 journal pages long and present a concise description of a limited investigation that focuses on, for example, new methods, significant range extensions, and perhaps taxonomic observations. There is no specific format or content required for Notes, but all submissions are peer reviewed and must be scientifically credible. Authors are encouraged to contact the editor about the suitability of manuscripts to be published as notes. **Forum** submissions and **book-reviews**, edited by the subject editor for clarity but not peer reviewed, are by invitation only. Unsolicited submissions will be returned by the editor.

## Submission of Manuscripts

Submissions to *Northwest Science* are now made using Peer Track Essentials, an online manuscript submission and peer review tracking software system. To submit to the journal, follow the URL <http://www.edmgr.com/nwscience> using an Internet browser. New users will be required to register with the system to obtain a user name and password. Full instructions for submitting your manuscript and cover letter are provided on the site and authors will receive confirmation that a manuscript has successfully loaded into the system shortly after completion. The system requires you to paste the Title, Short Title, and abstract into the system software. The body of the manuscript and figures are uploaded as separate files (Microsoft word and JPEG file formats) into the system. The software then builds a PDF version of the manuscript, which will be viewable prior to submission. Author approval of this PDF file is required before final submission.

## Research Article and Notes - Format Guidelines

### GENERAL INSTRUCTIONS

The format and style of manuscripts should conform to general usage in recent issues (an example can be found here: <http://www.bioone.org/doi/abs/10.3955/0029-344X-82.S.I.1>). Manuscripts formatted for a different journal will be promptly returned to the author. Manuscripts should use 12 pt Times New Roman font, have 1-inch margins, and be entirely double-spaced. A single-space after a period is required, throughout the manuscript, instead of two (a holdover from the days of the typewriter rendered unnecessary with proportional fonts). Do not turn on line numbering, as it will automatically be added to the PDF created upon submission.

Manuscripts should contain the following sections: Title Page (example below), Abstract (250 words or less), Introduction, Methods (with separate Study Area if applicable), Results, Discussion, Literature Cited, Figure Captions, and Tables. Footnotes should only be used in tables, sparingly and when necessary.

**Title Page** – The first page should contain:

- Authors name(s),
- Institutional address from which the material emanated, including city, state/province, postal code,
- Title of Paper,
- Short Title – 5 words or less,
- Keywords – 5 or less,
- Corresponding author – include in footnote format, as “<sup>1</sup>Author to whom correspondence should be addressed. Email: [johndoe@xyz.com](mailto:johndoe@xyz.com)”,

- Current address – if an author has changed institutions, a footnote may be used to provide the current address.

**Abstract** – The second page of the manuscript contains the abstract, arguably one of the most important and neglected sections of a manuscript. Authors are strongly encouraged to give the abstract proper attention. A well written abstract briefly and succinctly summarizes the study, so that the general readership of the journal and searchable indices will understand the basic design, results, and major conclusions of the study. The abstract must be written with complete sentences and may not exceed 250 words. Because of the diverse readership of the journal, the abstract must include the following three parts: a statement of purpose; a statement describing the experimental design or approach and a summary of the results; and a summarizing sentence or two regarding the larger significance of the work.

**Body** – Start the text on the third page and use continuous pagination. Do not start new sections on new pages. Each section should be labeled with a heading (e.g., “**Introduction**”) that is left justified and bold type. Second level subheadings occur on a separate line, with all words capitalized and using normal type (e.g., “Statistical Analysis”). Third level subheadings appear at the start of the paragraph, with all words capitalized followed by a hyphen (e.g., Temperature and Soil Moisture – We found that temperature and soil moisture...”). The first paragraph of each new section *does not* contain an indent, whereas all subsequent paragraphs of that section contain an indent.

Literature citations within the text should contain the author’s name and year of publication (examples provided below). Multiple citations provided parenthetically should be ordered chronologically, not alphabetically. If more than two authors, use “et al.” to shorten the citation.

**Format A:**

- ...studied by Jones (1998)...
- ...studied by Jones and Smith (1999)
- ...studied by Jones et al. (2000)

**Format B:**

- ...was previously investigated (Smith 1991, Jones 1995, Harris 2000).
- ...results of other investigations (Smith 1991, 1995; Jones 1995; Brown 2002). Note in this second case, a comma separates two citations by the same author and a semi-colon separates all other citations.

When referring to tables and figures in the text, the words are capitalized and spelled out (e.g., Table 1, Figure 2). At first mention of a table or figure, change the font color to red. This will facilitate placement of the figure for typesetting if the manuscript is accepted for publication.

Numbers from one to nine will be spelled out, whereas Arabic numerals will be used for numbers 10 and larger. Exceptions include: a series of mixed numbers (e.g., 14 elk, 35 deer, 3 badger, and 1 bear) or when the number immediately precedes an abbreviation for a standard unit of measure (e.g., 5 g). Authors must use the International System of Units (SI), the 24 hour clock (0600 and 2230), negative exponents ( $\text{kg m}^{-2}$  rather than  $\text{kg/m}^2$ ), leading zeros for all numbers  $< 1$  (e.g., 0.01), italicized statistical symbols (e.g., *F*, *P*, *Z*), and a capitalized *P* for probability of statistical tests. Use brackets inside of parentheses (see two examples in paragraph below).

On first mention in the text, all species should be designated by common name followed by systematic binomial (italicized) and type of organism studied if it is not likely to be obvious to readers outside of the field (e.g., "...false bugbane [*Cimicifuga elata*], an herbaceous perennial plant."). Common names for species should not be capitalized unless the name is proper (e.g., Chinook salmon, Clark's nutcracker). Papers dealing with numerous taxa need not use common names, but the taxonomic reference should be cited (e.g., "Nomenclature follows Hitchcock and Cronquist [1976]). In general, when faced with citing a taxonomic authority or not, authors should follow the convention for their disciplines.

General guidelines for manuscript preparation follow the Council of Biology Editors CBE style manual.

Personal Communications should be kept to an absolute minimum, because they do not meet the requirements for first disclosure as defined by the Council of Biology Editors. If used, the full name and affiliation of the person being quoted is required. Personal communications are cited in the text, parenthetically, and not in the literature cited.

***Literature Cited*** – Only the titles of books shall have all major words capitalized. All other titles should only capitalize the first word. Journal names should be spelled out and capitalized. All authors and editors will be listed in the bibliographic citation (e.g., no et al. abbreviation in this section, only in the body of the text).

Citations should be in alphabetical order, double spaced, and first line indented (control-shift-T in MS Word PC version, and option-T in MS Word Mac version). Do not use spaces or tabs to create a first line indent.

Example: Duda, J.•J., and R.•J. Camp. 2008. Ecology in the information age: patterns of use and attrition rates of Internet-based citations in ESA journals, 1997-2005. *Frontiers in Ecology and the Environment* 6:145-151.

*Note: Above the “•” signifies a commonly overseen space, the red comma (,) follows the senior authors initials, and there are no spaces in the journal volume:pages. Only use issue number when the journal’s pages are not numbered consecutively between issues. The senior author last names goes first, followed by first name and middle name initial with subsequent authors being listed with initials first followed by last name.*

Make sure that all citations listed in the literature cited are found in the text and visa-versa. Also, please triple-check that each citation follows *Northwest Science* format – fixing incorrectly formatted citations is one of the most time consuming chores for the (volunteer) editorial staff. A good trick is to turn on the show/hide formatting button in your word processor (it looks like this: ¶ and can be found on the standard toolbar).

Typical examples of *Northwest Science* format conventions for literature cited are as follows:

#### *Journal articles*

Broadbooks, H. E. 1970a. Home range and territorial behavior of the yellow pine chipmunk *Eutamias amoenus*. *Journal of Mammalogy* 51:310-326.

Broadbooks, H. E. 1970b. Populations of the yellow pine chipmunk, *Eutamias amoenus*. *American Midland Naturalist* 83:472-488.

Cêska, A., and H. Romer. 1971. A computer program for identifying species group. *Vegetatio* 20:48-73.

Grizze, J. E., C. F. Starmer, and G. G. Kuch. 1969. Analysis of categorical data by linear models. *Biometrics* 25:489-504.

#### *Monographs or books*

Edmonds, R. L., J. K. Agee, and R. I. Gara. 2000. *Forest Health and Protection*. McGraw-Hill, New York.  
(number of pages unnecessary)

Nussbaum, R. A., E. D. Brodie, Jr., and R. M. Storm. 1983. Amphibians and Reptiles of the Pacific Northwest. University of Idaho Press, Moscow.

Franklin, J. F., and C. T. Dyrness. 1988. Natural Vegetation of Oregon and Washington. Oregon State University Press, Corvallis.

*Papers in proceedings or symposia*

Ryland, J. S. 1975. Parameters of the lophophore in relation to population structure in a bryozoan community. *In* H. Barnes (editor), Proceedings of the 9th European Marine Biology Symposium, Aberdeen University Press, Aberdeen, UK. Pp. 363-393.

Madany, M. H., and N. E. West. 1980. Fire history of two montane forest areas of Zion National Park. *In* M. A. Stokes and J. H. Dieterich (technical coordinators), Proceedings—Fire History Workshop. USDA Forest Service General Technical Report RM-81, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO. Pp. 50-56

*Theses, dissertations, and articles in press*

Donald, D. B. 1971. The limnology of the plankton of three temporary ponds in Alberta. M.S. Thesis, University of Calgary, Calgary, Alberta.

Wiser, H. C. 1961. Decomposition and homogeneity of continua on 2-manifolds. Ph.D. Dissertation, University of Utah, Salt Lake City.

Dunwiddie, P. W. *In Press*. Dichotomous key to conifer foliage in the Pacific Northwest. Northwest Science. *[if the publication date is unknown or uncertain]*

Vierling, K. T. 2000. Source and sink habitats of red-winged blackbirds in a rural/suburban landscape. Ecological Applications 10: *(in press)*. *[if the publication date is known and certain]*.

*Technical bulletins*

Daubenmire, R., and J. B. Daubenmire. 1968. Forest vegetation of eastern Washington and northern Idaho. Washington Agricultural Experiment Station Technical Bulletin 60. Washington State University, Pullman.

Goodwin, J. G., Jr., and C. R. Hungerford. 1979. Rodent population densities in pine forests. USDA Forest Service Research Paper RM-214. Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO.

#### *Online (Web) references*

USDA Forest Service. 1998. Fire Effects Information System. Prescribed Fire and Fire Effects Research Work Unit, Rocky Mountain Research Station, Missoula, MT. Available online at <http://www.fs.fed.us/database/feis/> (accessed 7 October 2004).

#### *Unpublished Reports*

Unpublished reports often contain useful data that contribute to the development of the study being reported. Even though they do not meet the criteria for first disclosure, if they have a date, author, and a location where the report is on file, they may be listed in Literature Cited if it is an essential piece of information. Unpublished reports and grey literature should be used sparingly. If the date is unknown, treat the report as a personal communication and cite it in the text. Do not use the report if the location is unknown. Do not cite unpublished data (i.e., data not analyzed or contained in a report).

Kraft, G. F. 1967. Annual report on the status of Lake Whatcom. Unpublished report on file at Department of Biology, Western Washington University, Bellingham.

#### *Personal Communications*

These should be kept to an absolute minimum, because they do not meet the requirements for first disclosure as defined by the Council of Biology Editors. If used, the full name and affiliation of the person being quoted is required. ***Personal communications are cited in the text, not in Literature Cited.*** For example:

...(David L. Peterson, U.S. Forest Service, personal communication).

***Tables*** – All tables must be cited in the text, but typed and double-spaced on separate pages and placed following the literature cited. Use letters as superscripts to indicate statistical differences among values being compared. Reported means should be accompanied by an appropriate measure of variance. The standard deviation (SD) describes the variability about the mean of individuals in a population and is generally free of assumptions about the statistical distribution of values. The standard error of the mean

(SE), on the other hand, describes the uncertainty of how well the sample mean represents the population mean. It is too common for authors to inappropriately chose to report the SE when they should report SD, simply because SE is almost always smaller than SD. Although this practice is widespread (e.g., *P. Nagele. 2002. Misuse of standard error of the mean (SEM) when reporting variability of a sample. A critical evaluation of four anesthesia journals. British Journal of Anaesthesia 90:514-516*) it is misleading to the reader, not an appropriate representation of the variability within a sample, and is strongly discouraged.

Tables present the biggest challenge to the staff at WSU Press, and their arrangement often determines the length of the printed article. Tables created with auto-format tools available in word processing programs cause unreasonable difficulties at WSU Press, whereas text and tab-stop-created tables allow the staff to fit tables easily. Final versions containing auto-formatted tables will be returned to authors so that the tables can be set with text and tab stops, which could delay publication. If you are uncertain whether the tables are properly created, open the file to the table and turn on Line Numbering (under Page Setup, Layout). If each line in the table has a line number, then the format is proper. If nothing in the table has a line number, then the table is auto-formatted and will need to be changed. Tips for creating tables with tab stops are easily found on the Internet. For complex tables that you are unsure of, contact the Editor for guidance.

**Figures** – Captions to figures should by typed as a group and placed at the end of the manuscript. Figure captions should allow the figure to stand-alone and be completely interpretable without the reader having to comb through the body of the paper. Color figures are not supported by the journal. Illustrations of study areas should have an inset locator map to provide geographic context (with landmarks, city, or state names labeled), a scale for distance, and an arrow to indicate north. Only essential information should be provided in the figure; any additional information and details may be given in the figure caption. Labels and text within the figure should be large enough to be legible on the small-scale print and this requirement should be especially noted for graphs. It is always a good idea to print out an image on an 8.5 x 11 inch piece of paper (do not select “Print-to-Fit” to see if the resolution and size are high enough to be publication quality. Graphs should avoid horizontal and vertical scale lines and lines or curves should be sufficiently dark. Photographs are acceptable at the discretion of the editor and should have sufficient contrast and intensity.

Figures must be of publication quality or they will be returned to the author and may delay publication, which is not trivial since Northwest Science is published quarterly. This requires that the resolution of all figures be at least 300 dpi (dots per inch). Another separate measure of concern is the size of the image, which should be a minimum of 5" x 7". If you do not have the ability to adjust the resolution of a figure or graph, but can adjust the size, make low resolution figures very large (e.g., 20" x 30") and the editorial staff can make these into high-resolution images. Usually, each high-resolution image file is between 1 and 3 megabytes (MB) in size.

**Peter M. Brown**<sup>1</sup>, Rocky Mountain Tree-Ring Research, Inc., 2901 Moore Lane., Ft. Collins, Colorado  
80526

and

**William T. Baxter**, California Department of Forestry and Fire Protection

802 N. Main Street, Ft. Bragg, California 95437

**Fire History in Coast Redwood Forests of the Mendocino Coast, California**

Running footer: Coast redwood fire history

3 tables, 4 figures.

<sup>1</sup>Author to whom correspondence should be addressed. E-mail: [pmb@rmtr.org](mailto:pmb@rmtr.org)