

GUIDELINES FOR MANUSCRIPTS SUBMITTED TO THE INTERMOUNTAIN JOURNAL OF SCIENCES

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ABSTRACT

The staff and editorial board of the *Intermountain Journal of Sciences (IJS)* provide guidelines for authors who wish to submit manuscripts for publication. Manuscripts should follow the format and style presented in the guidelines to assure prompt review and publication. Organization of manuscripts will vary somewhat to accommodate the content of an article.

Key words: author, format, guidelines, *Intermountain Journal of Sciences*, manuscript style.

INTRODUCTION

The *Intermountain Journal of Sciences (IJS)* and its sponsoring organizations¹ encourage scientists, practitioners, educators and students to submit their research, application, or viewpoints for consideration in *IJS*. This article provides authors with guidelines, using examples of style and format, for preparation of manuscripts and serves as an update to the style guidelines for *IJS* published earlier (Dusek 1995, 2nd revision 2016). *Note: the layout of this article replicates the size, format & style of the final appearance of an IJS publication.*

The general format of articles appearing in *IJS* has been approved by the editorial board. Organization may vary to accommodate content of an article; e.g., research, application or viewpoint. This update also includes changes adopted by the editorial board in December 2000 that became effective with Volume 7 (2001).

The editorial board and staff intend for these guidelines to provide authors with timely review and publication of their manuscripts. Manuscripts that deviate significantly from the approved style and format will be returned to the author(s) for corrections prior to being sent out for peer review.

¹Sponsoring organizations include the Montana Academy of Sciences and Montana Chapters of The American Fisheries Society and The Wildlife Society.

POLICY

Scope

IJS and its sponsoring organizations offer an opportunity to publish papers presented at annual meetings of the respective organizations and have replaced printed proceedings through publication of *IJS*. Although manuscripts from papers presented at these meetings would receive publication priority if space were limited. The editorial board also encourages nonmembers to submit manuscripts for consideration in *IJS*.

Review of Manuscripts

The Editor-in-Chief (EIC) determines acceptability and need for revision based on recommendations from an associate editor. Associate editors and referees are selected on the basis of their expertise and knowledge of the specific subject area. Associate editors judge each manuscript on originality, technical accuracy, interpretation and contribution to the scientific literature. Previously published material will not be accepted for publication in *IJS*.

PAGE CHARGES AND COPYRIGHTS

The editorial board approves page charges, which cover the cost of publication and are adjusted as the cost of layout and printing change. Page charges for published manuscripts are currently \$60/printed

page and are assessed upon acceptance of manuscripts for publication. Page charges to sponsoring organizations for printing abstracts from annual meetings are currently \$40/printed page. Costs associated with significant alteration to page proofs, except for errors in the layout, will also be assessed to authors. Unless it is in the public domain, copyright is retained by the author(s).

COPY

Manuscripts should be submitted digitally in MS Word, 216 x 280 mm (8.5 x 11 in), double-spaced, with margins of 32 mm (1.25 in) on all sides. Do not hyphenate words along the right margin or right-justify the text. Use a footer with the senior author's last name in the lower left corner and the page number in the lower right corner on pages 2 through the LITERATURE CITED.

We recommend an upper limit of 25-30 double-spaced pages not including tables and figures. This amounts to about one page of published material per 2½ pages of double-spaced manuscript.

SUBMISSION

All manuscripts should be submitted under the PUBLISH tab of the *IJS* website at www.intermountainjournal.org. The submittal form requires specific contact information. You will be required to submit your manuscript as a Microsoft Word DOC or DOCX file. Additionally you will be required to submit a PDF made from the Word file that you are submitting. We need both for comparison to make sure everything transferred as you submitted it. This PDF replaces the hard copy. You will have the opportunity to submit supporting attachment files (ie. figures, drawings, photos, etc.) as high resolution jpg, tiff, png or pdf file types. To increase the resolution of the figure files we require that you submit them individually as one of the above file types. (See Figures for more information.)

Prior to selecting the submit button you will be asked to confirm the following: *"I AGREE that the manuscript consists of work of which no part has been*

previously published. Honors dissertations and graduate theses are not considered published material and may be published in part or in their entirety in IJS".

You will receive notification in your email that *IJS* received your files. Once the Editor-in-Chief has reviewed your manuscript you will be notified regarding provisional acceptance.

TITLE AND AUTHORS

The date of submission (update with each revision), senior author's name, mailing address, and daytime phone number appear single-spaced in the upper left corner above the title on page 1. All text that follows should be double spaced.

The title should be centered, Title Format (upper and lower case) and brief — preferably no more than ten words. Please avoid the use of scientific (Latin) names in the title.

Author and organization should be flush left, separated with commas and a new line for each author. Authors should include first name, middle initial and last name. If needed, a second line should be indented five spaces (hanging indentation). Include the postal code in the author's address. The authors' address should reflect their affiliation at the time the work was done; if the address has changed by the time of publication, the current address should appear in a footnote on the title page (page 1).

HEADINGS AND ORGANIZATION

Headings

Headings other than the title are appropriate whenever length of the manuscript exceeds three double-spaced pages or whenever the text conveys two or more major ideas. Three levels of headings should be sufficient. **First-level headings** include all title-case letters, are flush left, and may include bold face type. **Second-level headings** are flush left with only the first letter of each word capitalized. The second-level heading may also be in bold face type. Please indent **third-level headings** at the

beginning of paragraph with the first letter of each word capitalized; these headings should be italicized followed by a period and two hyphens. Text follows the *run-in heading*. Samples are shown in this layout.

Organization

Manuscripts dealing with original research are expected to include the following major headings: abstract, introduction, study area when applicable, methods and materials, results, discussion, conclusions, acknowledgments and literature cited. Authors may combine a description of the study area with the methods and materials. In other articles, authors may follow the introduction with major headings that appropriately address their topic.

Abstract—An abstract, located immediately below the author's name, should express precisely the key information presented in the manuscript in a short paragraph of less than 300 words and not exceed 10 percent of the length of the manuscript. Manuscripts of three or less pages do not require an abstract.

Abstracts should be a brief distillation of the purpose, methods, results and conclusions. Where appropriate, an abstract should also include scientific and common names of organisms and/or specific drugs and chemical compounds.

Key Words—Key words immediately follow the abstract. Please include 4-10 words that signify what is most important about the paper and are useful for indexing. The phrase "**Key words**" should be bold, italicized and followed by a colon.

Major Sections—The introduction immediately follows the key words and concisely states the problem or opportunity, goals or purpose, scope, sources of relevant information and the project's relation to previous or concurrent work. The purpose describes why the work was undertaken and the scope identifies when, where and under what conditions. Identification of the sponsoring agency or organization may also be included in the introduction. A statement of expected applicability or benefits completes the introduction.

Authors should use past tense to present study area description, methods and materials and results. New methodologies should be explained in detail so that they can be replicated; authors should cite previously published methods without a detailed description. For clarity, a description of analytical procedures should follow a description of procedures used in data collection. The pattern of the results and discussion should follow that established in the methods and materials.

STYLE

Editorial style, including punctuation, generally follows Freeman and Bacon (1990). Authors submitting manuscripts dealing with the biological sciences may wish to consult the most recent version of the Council of Biology Editors' style manual (CBE Style Manual).

We encourage authors to use a scientific/technical style in manuscript preparation. This often includes use of technical terms, phrases and jargon (common terms used in an uncommon way). Authors should use these terms in a manner that is understood by their targeted readership. To communicate with a broad, interdisciplinary audience for example, authors should provide an informal definition when technical terms, phrases or jargon are first used. This example should similarly apply to terms in which the context is limited to a single discipline, agency or small working group.

Remember that poor writing often contributes to unfavorable reviews and lengthy delays in publication of otherwise well-conceived manuscripts. Avoid sentences that are long and clumsy with pompous and abstract phrases (e.g., use "trees" instead of "residual timber resources" if they imply the same meaning). Use concise, direct sentences when practical using pronouns and active verbs (e.g., "We concluded..." rather than false subjects and passive verbs (e.g., "It was concluded..."). When using multiple parenthesis and brackets please follow this order: ({[()] }).

Well-conceived illustrations provide a powerful medium for communicating scientific results. The text should summarize and support the data in tables and figures and not repeat it. If reasonable, the *IJS* editorial board recommends illustration captions or titles contain the location and date of the research or work performed.

Numbers and Measurements

Numbers are spelled out when they begin a sentence or are less than 10 and not accompanied by a unit of measurement. The numerical form is always used for dates, expressions of time, page numbers, decimals, numerical designations, ratios and for numbers greater than and including 10. For a very large, rounded number (e.g., 1 million), use a combination of numbers and letters. Always use numbers when expressing decimals or percentages. Spell out “percent” when used in text but use the symbol (%) when used in chemical formulas, tables, figures or in parentheses. Dates should be written day-month-year without punctuation (e.g., 15 June 2016). Use the 24-hour system to express time (0001-2400 hours).

Use metric units of measurement. This system is preferred among the sciences and many areas of engineering. Although not required, authors may provide English equivalents. For example, “The study area encompassed 40 ha (100 ac).” Units should be abbreviated when following a number. Do not follow an abbreviated unit of measure with a period.

Mathematical and Statistical Terms

Italicize Roman letters used to symbolize quantities (e.g., *n*, *t*, *x* and *P*). Do not underline Greek letters or trigonometric functions. Displayed expressions (e.g., formulas) are separated from the text — centered with two spaces above and below.

LITERATURE CITED

References should be mentioned in the text in a manner such as Seward and Davis (1990), or embedded in text (Daubenmire 1968, Hess 1986, Lyon and Canfield

1991). When listed in sequence within text, authors should be listed in order of year of publication. In the Literature Cited section, all references should be listed in alphabetical order by the first author’s last name. If citing the same author for more than one reference, cite in order of publication year. If co-authors differ among several citations of the same senior author, list those references with the author’s last names, initials for given names. Please refer to the following examples.

Conference Proceedings with a Volume No.

Hess, L.L. 1986. Use of electronic spreadsheets in mathematics. Proceedings of the Montana Academy of Sciences 46: 101-108.

Book

Daubenmire, R. 1968. Plant communities: a textbook of plant synecology. Harper & Row, New York, NY. 300 pp.

Symposia Proceedings Article

Lyon, L.J. and J. E. Canfield. 1991. Habitat selections by Rocky Mountain elk under hunting season stress. Pp. 99-105 in A. G. Christensen, L. J. Lyon, and T. N. Lonner, compilers., Proceedings of elk vulnerability: a symposium. Montana State University, Bozeman.

Refereed Journal Article

Seward, W. P. and L. E. Davis. 1990. Cambrian and upper Devonian carbonate lithologies of the Whitefish-MacDonald Range, northwest Montana and southeast British Columbia, a preliminary report. Northwest Science. 64:208-218.

FOOTNOTES AND APPENDICES

Footnotes, other than those in tables, are used in *IJS* for two purposes: 1) to denote a change in an author’s address, agency affiliation, or deceased author and 2) to denote that the article is the published manuscript of a presentation given at an annual meeting of one of the co-publishers. These footnotes appear at the bottom of the title page and should be numbered consecutively.

We allow use of appendices if essential to the paper. They should be labeled Appendix A, Appendix B, etc. Appendices usually contain background information, tables of detailed results and lengthy analyses. They are appropriate if a knowledgeable reader would need the information to interpret the conclusions.

TABLES, GRAPHS AND IMAGES

Tables

Each table must be mentioned in the text and numbered consecutively with Arabic numerals. When embedded in text of a sentence or embedded in parentheses, “Table 1” is written out. Tabular material should stand alone and not be repeated within the text. Footnotes to tables start with “1” for each table and are separate from text footnotes.

Do not insert tables within the text of the manuscript. Rather, arrange them consecutively at the end of the manuscript and preferably with no more than one table per page. All tables should be double-spaced and in appropriate table format that includes table number and caption, column headings (boxhead), body and footnotes. Use tabs not spaces in setting up your columns. A sourceline should follow the footnotes in cases where information is from a source other than the author. If reasonable, the IJS editorial board recommends that table captions contain the location and date of the research or work performed (see examples this page).

Keep tables as simple as possible with columns of data clearly separated. Do not use vertical lines in tables. Tables may continue beyond a single page, but continuation headings should appear on subsequent pages. Tables are preferred to be constructed for single column width printing (64 mm or 2.5 in.) or double column width printing (134 mm or 5.25 in.). If the table is larger than page width, we may have to landscape it in the publication. In that case the width is (216 mm or 8.5 in.)

Figures

All figures should be mentioned in the text. When embedded in text of a sentence, “Figure 2” is written out. If enclosed in parentheses, abbreviate reference to the figure (Fig. 2). The final size will be determined by page width (134 mm or 5.25 in.) and only if necessary landscape (216 mm or 8.5 in.). **Make sure all lines within a figure, as well as the axis lines, are heavy enough and the lettering and numbers**

Table 1. Fisher’s discriminant function coefficients for classification of seral stages with key species within a greasewood/ western wheatgrass-blue grama ecological type in Eastern Wyoming, 1995.

Species	Late	Intermediate	Early
Greasewood	0.00945	0.00338	0.00116
Western wheatgrass	0.00293	0.00407	0.00121
Constant	-34.664	-10.408	-2.021

Table 2. An example of assigning seral stages by using Fisher’s discriminant coefficients with data collected in 1995 from the field in Eastern Wyoming and a new index. Index = [(transect 1 cover + transect 2 cover)/2]* [(transect 1 frequency + transect 2 frequency)/2].

Seral Stage	Greasewood				Western wheatgrass				Constant	=	Score
	(Coeff ¹	*	Index	+	Coeff	*	Index)				
Late	(0.00945	*	814	+	0.00293	*	2418)		-34.664	=	-19.87
Intermediate	(0.00338	*	814	+	0.00407	*	2418)		-10.408	=	2.18²
Early	(0.00116	*	814	+	0.00121	*	2418)		-2.021	=	1.85

¹ Coeff = coefficient
² Assigned seral stage

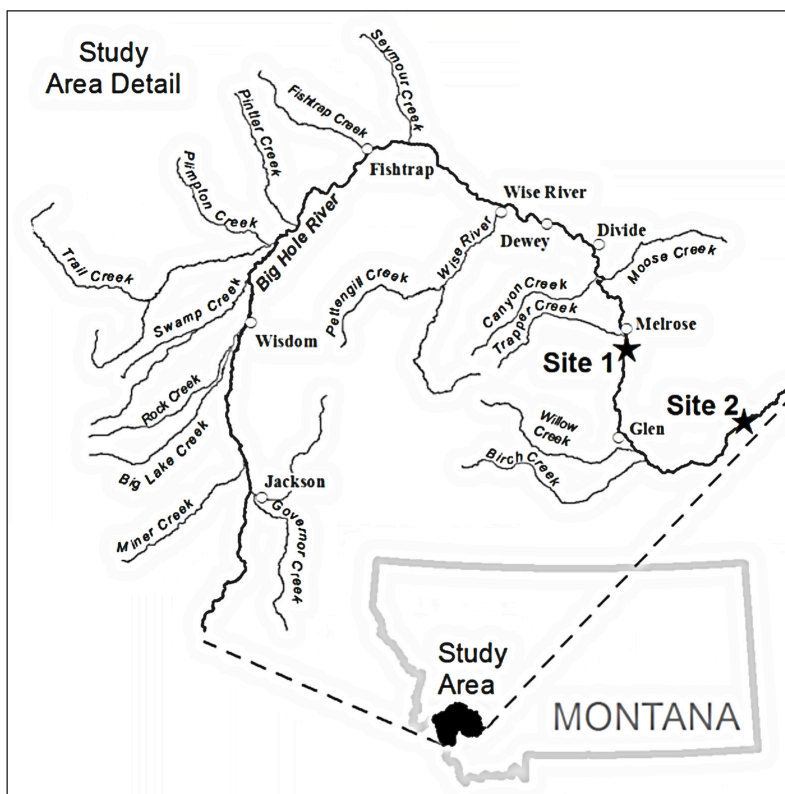


Figure 1. Location of sites sampled on the Big Hole River in Montana, 1960 and 2011 (stars)..

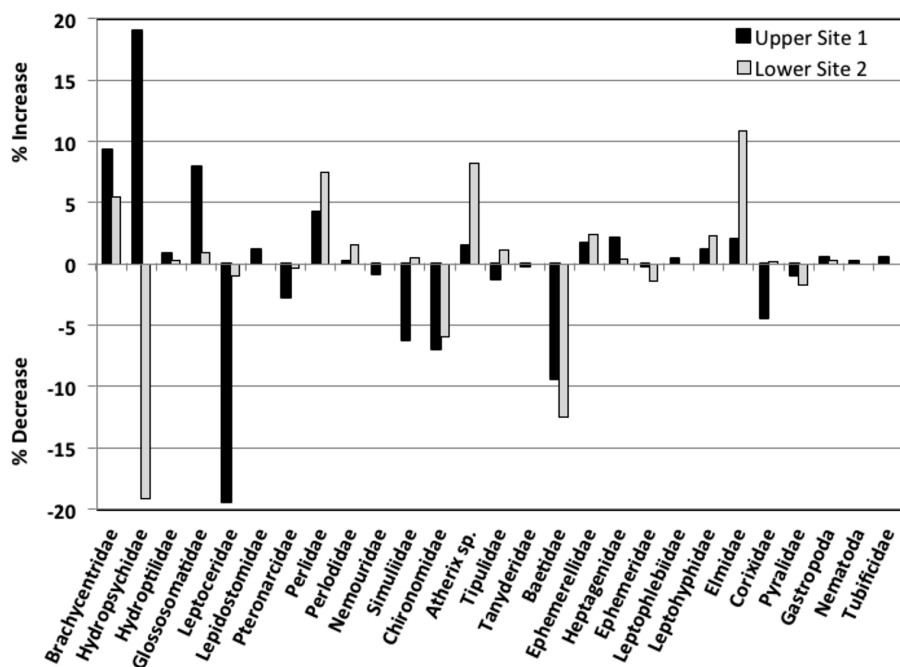


Figure 2. Differences in macroinvertebrate taxa (family level) composition between 1960 and 2011 samples on the Big Hole River in Montana..

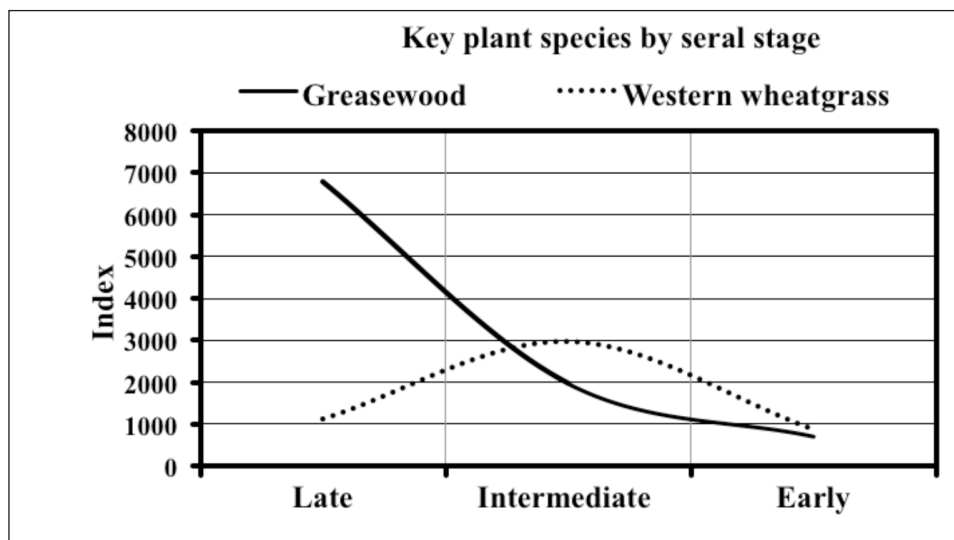


Figure 3. Index means of key variables, greasewood and western wheatgrass displayed throughout three seral stages in the greasewood/western wheatgrass-blue grama ecological type in Eastern Wyoming, 1995.

(Arial font) are large enough to permit reduction for publication. Figures will be reduced to either single column width (64 mm or 2.5 in.) or double column width (134 mm or 5.25 in.).

Line drawings and photos can be submitted of any reasonable size. It is preferred that black and white photos and figures be used although color may be used if authors are willing to pay the extra cost for color printing. Please submit line drawings and photos as digital files and treat the same as figures. Photos need a credit line. Do not insert figures into the text or put a caption on the figure. Arrange them consecutively following tables with no more than one figure per page. Type captions in order on a separate page. If reasonable, the IJS editorial board recommends that captions contain the location and date of the research or work performed (see examples herein).

All figures, drawings and photos should be submitted as separate digital high resolution files (300 dpi). Please save the

figures separately and do not insert them into the word document. We can accept high resolution jpg, tif, png and pdf files. If you cannot provide these types of files please contact us to make other arrangements.

ACKNOWLEDGMENT

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LITERATURE CITED

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- Freeman, L. H. and T. R. Bacon. 1992. Shipley Associates style guide. Rev. ed., Shipley and Associates, Bountiful, UT.