

Journal of Wildlife Management Guidelines

August 2011

Prepared by

WILLIAM M. BLOCK, Editor-in-Chief, *Journal of Wildlife Management*, United States

Department of Agriculture Forest Service Rocky Mountain Research Station, 2500 S.

Pine Knoll Dr., Flagstaff, AZ, USA

FRANK R. THOMPSON, Editor-in-Chief, *Journal of Wildlife Management*, United States

Department of Agriculture Forest Service Northern Research Station, 202 Natural

Resources, University of Missouri, Columbia, MO, 65211, USA

DAWN HANSEDER, Content Editor, *Journal of Wildlife Management*

ALLISON COX, Content Editor, *Journal of Wildlife Management*

ANNA KNIPPS, Editorial Assistant, *Journal of Wildlife Management*

Table of Contents

JOURNAL OF WILDLIFE MANAGEMENT POLICIES	4
PREVIOUS PUBLICATION.....	4
SECURING APPROPRIATE APPROVAL(S).....	5
<i>Animal care</i>	5
<i>Human subjects</i>	6
COPYRIGHT.....	6
FREEDOM OF INFORMATION ACT.....	7
EMBARGO POLICY.....	7
PAGE CHARGES.....	8
SUBMISSIONS	9
COVER LETTER.....	10
MANUSCRIPT TYPES	10
RESEARCH MANUSCRIPT (NOTE, ARTICLE, OR MONOGRAPH).....	10
<i>Research Manuscript Subject Matter</i>	11
COMMENTARY.....	14
LETTER TO THE EDITOR.....	14
INVITED PAPER.....	15
BOOK REVIEW.....	15
FORMAT AND STYLE	15
PAGE FORMAT.....	15
TITLE PAGE: RUNNING HEAD, TITLE, AND AUTHORS.....	16
ABSTRACT.....	18
KEY WORDS.....	19
TEXT PAGES.....	19
<i>Headings</i>	19
<i>Major Sections of Manuscript</i>	20
LITERATURE CITED.....	22
FIGURES AND TABLES.....	24
<i>Figures</i>	25
<i>Tables</i>	26
APPENDICES.....	29
SUPPLEMENTAL MATERIAL.....	29
STYLE AND USAGE	30
NUMBERS AND UNIT NAMES.....	31
TIME AND DATES.....	31
MATHEMATICS AND STATISTICS.....	32
EQUATIONS.....	33

ABBREVIATIONS AND ACRONYMS	34
PUNCTUATION	34
ENUMERATING SERIES OF ITEMS	36
COMMON AND SCIENTIFIC NAMES	36
MEASUREMENT UNITS.....	37
CITING LITERATURE IN TEXT	38
<i>Citing unpublished sources in text</i>	38
<i>Citing equipment and statistical software</i>	39
FORMAT FOR COVER ART SUBMISSIONS	40
REVIEW PROCESS	40
PEER-REVIEWED MANUSCRIPTS	41
<i>Appeal and resubmission</i>	42
<i>Accepted manuscripts</i>	43
<i>Page proofs</i>	43
APPENDIX A. ONLINE MANUSCRIPT SUBMITTAL	44
LOGGING IN TO YOUR SCHOLARONE ACCOUNT.....	44
SUBMIT A NEW MANUSCRIPT	45
REVISED MANUSCRIPTS	45
APPENDIX B. LITERATURE CITED	46
<i>Book</i>	46
<i>Court cases</i>	48
<i>Foreign language publication</i>	48
<i>Government publication</i>	48
<i>Journals</i>	49
<i>Journals in press</i>	49
<i>Multiple citations for the same author(s)</i>	49
<i>Newspaper, newsletter, and magazine articles</i>	50
<i>Software package</i>	50
<i>Symposia and proceedings</i>	51
<i>Theses and dissertations</i>	52
<i>Web citation</i>	52
APPENDIX C. REQUIRED ABBREVIATIONS FOR TABLES, FIGURES, AND PARENTHETIC EXPRESSIONS	53
APPENDIX D: EXAMPLE FORMAT FOR <i>JOURNAL OF WILDLIFE MANAGEMENT</i> SUBMISSIONS	56

These Guidelines apply to all *Journal of Wildlife Management (JWM, The Journal)* submissions. Publishing a professional manuscript proceeds most smoothly if authors understand the policy, procedures, format, and style of the outlet to which they are submitting a manuscript. These instructions supersede all previous guidelines. Manuscripts that clearly deviate from this format and style will be returned for correction before review.

JOURNAL OF WILDLIFE MANAGEMENT POLICIES

PREVIOUS PUBLICATION

Guidelines for previous publication are flexible in certain instances, such as technical analyses of findings published previously for lay audiences. If any portion of the manuscript has been published or reported elsewhere, explain all similarities between information in the manuscript and the other publication, and furnish a citation of such publications or manuscripts.

For all purposes of *JWM*, a paper is considered published if it:

1. Appears in a serial publication abstracted by *Biological Abstracts* or a similar reference volume.
2. Appears in a book (including conference proceedings) printed in >500 copies and widely distributed to libraries.
3. Has been published as part of a numbered series by an agency.
4. Is a symposium proceeding. The *Journal* will consider symposium proceedings on a case-by-case basis. Contact the EIC for approval before submitting your symposia proceeding.

A manuscript is not considered published if it:

1. Is a thesis or dissertation, but these need to be cited in the manuscript (see Citing Literature in Text below).
2. Is a brief abstract of a talk given at a professional meeting or symposium.
3. Is an unpublished report required by sponsors and not distributed as part of a numbered series or in other ways that might result in accession by libraries.

SECURING APPROPRIATE APPROVAL(S)

Scientists must ensure their research activities are conducted such that the welfare of animals they are studying (e.g., attaching radiotransmitters, marking animals) or the rights of humans (e.g., sending a survey) are considered. Consequently, all peer-reviewed manuscripts submitted for publication should demonstrate that these concerns have been addressed as required by their institution or organization. Include documentation in the Methods section.

ANIMAL CARE

Appropriate documentation that proper animal care and use was applied when using live vertebrate animals for research should be provided when required by organizations or institutions supporting the research. Examples include an Institutional Animal Care and Use Protocol number (as designated by most U.S. universities), the number of the permit or license issued to hold animals (such as with private breeders), or a statement that procedures were part of a study

plan approved by the agency. This policy covers all vertebrate animals, including mammals, birds, reptiles, amphibians, and fish.

HUMAN SUBJECTS

Appropriate documentation that proper approval was obtained to perform research involving humans (primarily surveys) should be provided when required by organizations or institutions supporting the research. An example of documentation is a Human Subjects Protocol number as designated by most United States universities or surveys conducted by federal scientists have gone through the federal review process.

COPYRIGHT

If a manuscript not in the public domain is accepted for publication, authors or their employers must transfer copyright to TWS. If the manuscript is single-authored by a United States government employee as part of his or her official duties, the manuscript is not copyrightable. Such work is called a “Work of the U.S. Government” and is in the public domain. However, if the manuscript was not part of the employee’s official duties, it may be copyrighted. If the manuscript was jointly written by government and nongovernment employees, the authors understand that they are delegating the right of copyright to the government employee, who must sign the copyright agreement. Manuscript submission implies entrusting copyright (or equivalent trust in public-domain work) to the editors until the manuscript is rejected, withdrawn, or accepted for publication. If the manuscript is accepted, TWS retains copyright.

FREEDOM OF INFORMATION ACT

The Freedom of Information Act (FOIA), Title 5 of the United States Code, section 552, generally provides that any person has the right to request access to federal agency records or information. All agencies of the United States Government are required to disclose records upon receiving a written request, except those records that are protected from disclosure. If TWS or *JWM* receives a FOIA request for information for any part of a manuscript that is under review at *JWM*, the manuscript will be rejected so the review process is not compromised. Authors will not have the opportunity to resubmit the manuscript. The *Journal* encourages authors to closely adhere to our Embargo Policy (below) when publicly discussing their manuscript before publication.

EMBARGO POLICY

The Wildlife Society and *JWM* reserve the right to halt consideration or publication of a manuscript if the Embargo Policy is broken. The *JWM* Embargo Policy follows:

- No news coverage of the manuscript may appear anywhere before the article has been published online via Wiley Online Library Early View. Embargoed information is not to be made public in any format including print, television, radio, or via internet before the embargo date. For information on online publication dates, please contact *JWM* staff (jwm@wildlife.org).
- Please do not participate in news conferences until after online publication.

- Authors with manuscripts in production may speak with the press about their work. However, authors should not give interviews on the work until the week before online publication, and then only if the journalist agrees to abide by the *JWM* embargo.
- Authors are welcome to present results of their upcoming manuscripts at professional meetings to colleagues.
- Comments to press reporters attending your scheduled session at a professional meeting should be limited to clarifying the specifics of your presentation. In such situations, we ask that you do not expand beyond the content of your talk or give copies of the manuscript, data, overheads, or slides to reporters.

PAGE CHARGES

Page charges are mandatory and the submitting author is required to acknowledge that she or he accepts responsibility for page charges should the manuscript be accepted for publication. All manuscripts are subject to page charges except Letters to the Editor and Book Reviews. Color page fees will be invoiced prior to production of page proofs. Page charges are as follows (as of Jan 2010):

If any author is a member of The Wildlife Society:

- \$90 per page for the first 8 pages
- \$150 for every page thereafter
- \$650 per color plate

If none of the authors is a member of The Wildlife Society:

- \$150 per page
- \$650 per color plate

One printed page equals approximately 2.5 typed pages.

Page charges will be billed at the time of publication. Color plate charges will be billed, and must be paid in full, before publication. Page charges will be waived if your manuscript is <2 printed pages, does not include color plates, and you are a member of The Wildlife Society.

Visit [The Wildlife Society](#) for membership information and rates.

SUBMISSIONS

Reviewers and editors judge each manuscript on data originality, concepts, interpretations, accuracy, conciseness, clarity, appropriate subject matter, and contribution to existing literature. Prior publication or concurrent submission to other reviewed journals precludes review or publication in *JWM* (see additional information in the Previous Publication section above). Fisheries manuscripts are discouraged unless information is part of an account that mainly concerns terrestrial vertebrates.

The *Journal* only accepts manuscripts submitted electronically via Scholar One Manuscripts (S1M). You can register for an account (which will give you a homepage in SIM), log in to an existing account, submit a manuscript for review, and track the progress of your manuscript at <http://mc.manuscriptcentral.com/jwm/>. Before submitting a manuscript, see instructions on how to use S1M (Appendix A).

COVER LETTER

Each publication is managed by an EIC. Direct cover letters to the EIC and provide information that bears on ethical and copyright considerations and other information that might facilitate review and editing. Cover letters must indicate that your manuscript is submitted for exclusive consideration by *JWM*. Without the exclusive consideration statement, the EIC will not initiate review. The statement ensures that data and findings have not been published previously or submitted elsewhere for simultaneous consideration.

MANUSCRIPT TYPES

The *Journal* accepts submissions for the following manuscript types: Research Manuscripts (Notes, Articles, or Monographs), Commentaries, Letters to the Editor, Invited Papers, and Book Reviews. See below for a description of each manuscript type and acceptable subject matter. Student Voices are also critically important to The Wildlife Society. These manuscripts should be submitted to *Wildlife Society Bulletin*. With the exception of Letters to the Editor and Book Reviews, all submissions are peer reviewed.

RESEARCH MANUSCRIPT (NOTE, ARTICLE, OR MONOGRAPH)

As a general rule, *JWM* and *Wildlife Monographs* consider manuscripts of various lengths; however, these submission lengths are flexible (e.g., some Notes are 30 pages and some Articles are 55 pages). Page numbers noted below include Literature Cited, tables, and figures. All text

must be double-spaced in Times New Roman 12-point font. Select from the following submission options based on the length of your manuscript:

1. ≤ 20 pages: *Journal of Wildlife Management* Research Note. Notes provide an outlet for publication of information that is relevant and important, but may lack spatial or temporal replication. Notes are not designed to serve as an outlet for publication of research that lacks appropriate scope or is better suited for regional or other outlets.
2. 21–50 pages: *Journal of Wildlife Management* Research Article.
3. 51–79 pages: *Journal of Wildlife Management* Article or *Wildlife Monograph*. The *JWM* EIC will decide on the appropriate submission venue for these manuscripts on a case-by-case basis.
4. >80 pages: *Wildlife Monograph*.

RESEARCH MANUSCRIPT SUBJECT MATTER

The *Journal* publishes manuscripts containing information from original research that contributes to the scientific foundations of wildlife management. Suitable topics include the results and interpretations of investigations into the biology and ecology of wildlife that can be used for management. The link to management of wildlife resources must be clear and concise. Manuscripts in *JWM* also address theoretical and conceptual aspects of wildlife management, including development of new approaches to quantitative analyses, modeling of wildlife

populations and habitats, and other topics germane to advancing the science of wildlife management. Manuscripts describing developments in or comparisons of techniques should be submitted to Wildlife Society Bulletin (<http://mc.manuscriptcentral.com/wsb>). Research Articles fall into four main subject matter categories, Management and Conservation, Human Dimensions of Wildlife Management, Special Sections, and Reviews.

MANAGEMENT AND CONSERVATION

Management and Conservation manuscripts describe effects of specific practices, policies, or disturbance events on populations of animals or plants. Examples include 1) effects of agriculture, livestock, forest, or range management practices; 2) effects of practices directed toward wildlife or its habitat, such as supplemental feeding, food plots or food plantings, cover plantings, prescribed burning, brush or tree-canopy reduction, soil disturbance, and habitats created by humans; 3) methods of reducing damage caused by wildlife, including translocation, aversive conditioning, population reduction, chemical application, scare device installation, and related practices; 4) tests of harvest regulations or procedures or effects of harvest management on populations; 5) effects of private or governmental policy on wildlife; 6) effects of wildfire, flood, drought, climate change, and other disturbance events on wildlife populations and habitats; and 7) other studies of wildlife ecology that potentially contribute to management or conservation.

HUMAN DIMENSIONS OF WILDLIFE MANAGEMENT

Human Dimensions of Wildlife Management manuscripts discuss sociology, values, attitudes, perceptions, and psychology of natural resource stakeholders and managers. Examples include 1) contributions on political or legal issues, 2) special topics in wildlife management, 3) environmental impacts, 4) refinement of state or federal natural resource programs or policies, 5) administration of wildlife programs or agencies, 6) regional or national surveys of wildlife management programs or policies, 7) social movements affecting wildlife management, and 8) economics of wildlife management. These manuscripts also address principles, logic, and ethics under which wildlife managers and the profession operate. These manuscripts may also address education of natural resource stakeholders, hunter education, university curricula, and related topics.

SPECIAL SECTIONS

Special sections are an opportunity to present a series of papers focused on a topic that timely, relevant, and of interest to the readers of JWM. Typically, these sections consist of 4–8 papers that provide an in-depth presentation of a particular topic. Submit a brief prospectus outlining the topic and proposed paper titles and authors to the EIC for consideration. All manuscripts submitted as part of a special section will undergo the same review process as regular journal articles and must meet journal standards.

REVIEWS

Review articles are an opportunity to provide an in-depth overview of a particular topic. A

variety of topics are amenable to reviews including but not limited to analytical approaches, study design, effects of a management practice, effects of a disturbance, and the like. Review articles need not conform to typical format headings and can be flexible to accommodate the topic. They will undergo the same review process as any contributed paper.

COMMENTARY

Commentaries are essays that question values, priorities, precepts, and philosophical foundations under which wildlife management operates. These manuscripts can uncover dogma, false assumptions, and misguided policy or stimulate thought and innovation. Commentaries are in response to an issue, movement, policy, or program that could affect wildlife or its habitat, and subject area can be broad. The manuscript must be well documented and prepared professionally. The purpose of Commentaries is to promptly print important information. The EIC appoints an Associate Editor for these manuscripts.

LETTER TO THE EDITOR

Letters to the Editor (hereafter Letters) are short contributions that address issues relevant to *JWM*. Appropriate topics include comments on recently published manuscripts or on topics or methods relevant to *JWM* or wildlife management. Letters should be >1,000 words and consist of a short title, author name and address, text, and Literature Cited if necessary. Letters are selected by the EIC and are not subject to peer-review, but they may be assigned to an Associate Editor for review or a recommendation. Once accepted, Letters will be published in the next

possible issue.

INVITED PAPER

The EIC has the option to solicit Invited Papers that review and synthesize important topics that pertain to the scientific foundations of wildlife management. Invited Papers must include a Management Implications section, are not necessarily subject to peer-review, and are not subject to page charges.

BOOK REVIEW

Book Reviews provide a brief synopsis and commentary on a book relevant to some aspect of the field of wildlife science and management. Before submitting a Book Review, please contact the *JWM* Book Review editor.

FORMAT AND STYLE

A manuscript must adhere to *JWM* guidelines before it will be approved and sent out for review. Appendix D provides an example of how to format text files for submission.

PAGE FORMAT

Upload files in the following order:

1. Cover letter

2. Text file arranged as follows: manuscript text, Literature Cited, figure captions (not figures), and tables. Please submit text as a .doc file.
3. Figure(s) compiled into one file or submitted in individual files. Label and mount figure parts (e.g., Fig 3A, Fig 3B) together into one figure as they are meant to appear in print. Failing to do so may result in additional charges during typesetting.

Scholar One converts all submitted files to pdf files for initial evaluation and review. To ensure accurate conversion of manuscripts, we only accept text and table files in the Word (.doc) format. We only accept figure files in the following formats: .tif, .jpg, pdf, .doc, .eps, .xls, and .ppt. Do not submit files in Word Perfect, including equations that were not created within the standard Word template.

General guidelines:

1. Double space all text, including title, authors' addresses, text, long quotations within text, literature citations, table footnotes, table titles, table bodies, and figure captions.
2. Do not justify the right margin.
3. Use Times New Roman font, 12-point type throughout the manuscript, including title, headings, and tables.
4. Do not use italic or boldface type for emphasis in text, tables, or figures.
5. Maintain margins of 2.5 cm (1 inch) on all sides of the page.

The following guidelines apply to all text files. On page 1 single-space the following information in the upper left corner: date (update with each revision) and the corresponding author's name, address, telephone, fax, and e-mail (see Appendix D). Thereafter, double-space all text including authors' addresses, manuscript title, figure legends, and tables. If the corresponding author's email address changes following submission of the manuscript, update the user profile on the ScholarOne website, and notify the editorial staff (jwm@wildlife.org).

Type the running head (RH) on the first line following the correspondent's address. The RH is limited to 45 characters. Left-justify the RH and capitalize each important word (e.g., "Implanting Transmitters in Snakes"). The RH is preceded by a dot (or raised period) and the last name(s) of ≤ 2 authors. For ≥ 3 authors, use the name of the first author followed by "et al." (e.g., Foster et al.). For example:

RH: Chamberlain et al. • Implanting Transmitters in Snakes

The title follows the RH and is left-justified in bold font with important words capitalized as in the RH. The title identifies manuscript content and may not include abbreviations or acronyms. Titles should not exceed 10 words unless doing so forces awkward construction. Do not use scientific names in the title except for organisms that do not have, or are easily confused by, common names.

Authors' names are left-justified in upper-case letters. Each name is followed by the author's affiliation in italic letters. The affiliation is usually where the author was employed during the study. Indent the second and subsequent lines of an author's address 5 spaces using the hanging indent function. In each address, use available United States Postal Service (USPS)

abbreviations, zip codes, and the country (abbreviate “USA,” but spell out all others). Write out words like Street, Avenue, and Boulevard, but abbreviate directions (e.g., N and NW). Include the address after each author, even if multiple authors have the same address. Footnotes (not footers) should be used to note the corresponding author’s email address, to reference the present address of an author when it differs from the byline address, and to indicate a deceased author. Each footnote starts with a numerical superscript.

ABSTRACT

Begin with the word **ABSTRACT** (left-justified) in upper-case bold font. The abstract text begins after a regular letter space on the same line and is one paragraph not exceeding 1 line per page of manuscript text (3% of length of text), including Literature Cited. Research Note abstracts cannot exceed 1 line per 2 pages, including Literature Cited. The abstract includes:

- 1) Problem studied or hypothesis tested. Identify the problem or hypothesis and explain why it is important. Indicate new data, concepts, or interpretations directly or indirectly used to manage wildlife.
- 2) Pertinent methods. State methods used to achieve the results summarized in the Results (keep the methods brief unless a new, greatly improved method is reported).
- 3) Results. Emphasize the most important results, whether or not they agree with your hypotheses.
- 4) Utility of results. Explain how, when, where, and by whom data or interpretations can be applied to wildlife problems or contribute to knowledge of wildlife science.

KEY WORDS

Key words follow the abstract. The phrase **KEY WORDS** (left-justified, upper-case bold font) is followed by a regular space and ≤ 10 key words in alphabetical order, ending with a period.

Do not include Akaike's Information Criteria (AIC) in the Key Words. Include essential words from the title and others that identify: 1) common and scientific names of principal organisms in the manuscript; 2) the geographic area, usually the state, province, or equivalent, or region if its name is well known; 3) phenomena and entities studied (e.g., behavior, populations, Global Positioning System [GPS], habitat, nutrition, density estimation, reproduction); 4) methods (only if the manuscript describes a new or improved method); and 5) other words not covered above but useful for indexing. For example:

KEY WORDS author, format, guidelines, instructions, manuscript, policy, style.

TEXT PAGES

Using the Header function, insert page numbers and author name(s) (e.g., Smith, Smith and Jones, Smith et al.) on all pages following the title page. Number each line of the text continuously (i.e., do not restart numbering on each page).

HEADINGS

Reduce or eliminate the need for subheadings by writing clearly and logically. Avoid writing sections that consist of only one paragraph. Examples of the 3 heading types follow.

STUDY AREA

First-level heading: upper-case lettering, bold type, and flush left. Text follows flush left on the succeeding line.

Burrow Availability Hypothesis

Second-level heading: bold type, flush left, with important words capitalized. Text follows flush left on the succeeding line.

Assessment of available natural burrows.— Third-level heading: indented 5 spaces, italicized, and followed by a period and em dash. Text follows directly after the heading on the same line.

MAJOR SECTIONS OF MANUSCRIPT

Articles include the following first-level headings: Abstract, Introduction (no heading), Study Area, Methods, Results, Discussion, Management Implications, Acknowledgments, and Literature Cited. It is not permissible to combine Study Area and Methods or Results and Discussion. Merging these sections leads to superfluous wording, unnecessary discussion, and confusion. Most articles will include all major sections, but some sections may not be appropriate for all articles.

The **Introduction** (no heading) starts below the publication name and contains a concise synthesis of literature specific to the manuscript's main topic. In the latter part of this section, state clearly and concisely the objectives of the study and the hypotheses tested. Do not summarize methods or results in the Introduction section.

Use past tense for **Study Area** descriptions (e.g., average annual precipitation was 46 cm, vegetation was primarily grass). Exceptions include geological formations that have been present for centuries (e.g., mountains). **Methods** should be brief and include dates, sampling schemes, duration, research or experimental design, and data analyses. Cite previously published methods without explanation. Identify new or modified methods and explain them in detail. Methods must be described in adequate detail for a reader to duplicate them if initiating a new study. Include animal-welfare protocols in the Methods section (not in Acknowledgments). Include protocol numbers parenthetically following the relevant statement.

Present **Results** in a clear, simple, concise, and organized fashion. Avoid overlapping text with information in tables and figures, but highlight the most important results in the text; do not explain analyses that should have been described in the Methods section. Always try to describe the magnitude of the biological effect in addition to the results of statistical analyses. That is, terms such as “fewer” or “smaller” tell us little, and stating that something was “statistically different ($P < 0.01$)” without giving the actual difference conveys little meaning to the reader. For example, stating, “*A* was 25% larger than *B* ($P < 0.001$)” conveys more information than simply stating, “*A* was significantly larger than *B*.” Present Results in past tense (e.g., body mass loss occurred during winter). Reserve comments on interpretation of results for the Discussion.

The **Discussion** provides an opportunity for interpreting data and making literature comparisons. Begin the Discussion by synthesizing your results with regard to your objectives and then relate your work to other literature and research. Systematic discussion of every aspect of research leads to unnecessarily long manuscripts; be concise and relate your findings directly

to your overall project goal, objectives, and hypotheses as appropriate. Reasonable speculation and new hypotheses to be tested may be included in the Discussion. Do not repeat results in this section, and comment on only the most important results.

The **Management Implications** section should be short (usually about 1 paragraph) and direct but explain issues important to management and conservation that are derived directly from or addressed in your results. Do not restate material from the Results or Discussion sections, and do not make recommendations that are beyond the scope of your study. Address specific management opportunities or problems in this section.

The **Acknowledgments** (note preferred spelling) section appears immediately before Literature Cited. This section should be brief and include initials (rather than first names) of individuals cited. Acknowledgments should be straightforward without ornate and qualifying adjectives or personal remarks. For example: “We thank G. A. Baldassarre, M. Boyce, C. E. Braun, H. E. Hodgdon, R. L. Lee, and M. Kirsch for review comments and contributions to this manuscript. G. C. White assisted with revision of the mathematics and statistics subsection. Portions of this manuscript have been extracted from Ratti and Ratti (1988) and Gill and Healy (1980) with permission of The Wildlife Society. This is Contribution 836, University of Idaho Forest, Wildlife, and Range Experiment Station. L. M. Smith was supported by the Caesar Kleberg Foundation for Wildlife Conservation.”

LITERATURE CITED

Also see: Citing Literature in Text below

Type the Literature Cited immediately following the text, and do not insert a page break. See Appendix B for specific examples. Double-space Literature Cited and use 5-space hanging indents for second and subsequent lines of a citation. Spell out all words in the Literature Cited (i.e., do not use abbreviations or acronyms). However, the following 3 exceptions are allowed in author and publisher locations: 1) Washington, D.C., 2) U.S. (e.g., U.S. Forest Service), and 3) USA. Spell out all author names instead of using dashes.

In the Literature Cited, alphabetize by authors' surname(s), regardless of the number of multiple authors for the same publication. Within alphabetical order, the sequence is chronological (see Appendix B "Multiple Citation for the Same Author[s]" for an example).

Use title-case (not small caps) for all names in Literature Cited, and place a comma between all names, even if there are only 2 (e.g., Schmidt, B. R., and J. Pellet). Use 2 initials (where appropriate) with one space between each initial. Only reverse the name order of the first author (e.g., Thogmartin, W. E., J. R. Sauer, and M. G. Knutson). For serial publications, show the issue number only if the pages of each issue are numbered separately. As in the text, spell out ordinal numbers (e.g., Third edition). Do not include words such as Publishing, Inc., or Company. Use the word Thesis to denote Master of Science (M.S.) or Master of Arts (M.A.), and use the word Dissertation for Doctor of Philosophy (Ph.D.). Do not write the total page number of books at the end of the citation. Only include the software in literature cited if you are referencing the software manual. Otherwise, simply cite the product in text following the examples in Citing Literature in Text section below. For foreign language publications, note the language of publication at the end of the citation in brackets (e.g., [In Spanish.]).

At the end of the Literature Cited section type “*Associate Editor:*” (the name of the Associate Editor will be filled in later). See Appendix B for example citations.

FIGURES AND TABLES

On a new page following the Literature Cited, compile figure captions (not figures) and tables. Submit figures as a separate file(s). Submit only essential tables and figures. Do not submit tables if the information overlaps with information presented in the text, can be easily printed in the text with less journal space, or presents the same data in another table and a figure. Number tables and figures independently. Do not combine multiple tables or figures on one page; however, place all the parts of a figure on one page as they are meant to appear in print (e.g., Fig. 3A, Fig. 3B). Reference tables and figures parenthetically (Table 4, Fig. 3) and avoid statements such as, “The results are shown in Tables 1–4.”

Tables and figures should be able to stand alone (i.e., be self-explanatory) and avoid reference to the text. Accordingly, define relevant abbreviations and acronyms in each table and figure (except items that appear in Appendix C). When possible, minimize the use of abbreviations, especially with long lists of variables. The space saved is not worth the tedium for the reader trying to understand the table. Table and figure titles must include the species or subject of the data studied and when and where (region or state and country) the data were collected. In rare cases, titles or footnotes of tables and figures may be cross-referenced to avoid repeating long footnotes or the same data; however, this violates the self-explanatory rule and

should be avoided. If a table includes a list of species, order species taxonomically and not alphabetically.

FIGURES

Most figures are either line (or computer) drawings or pictures (picture is used to distinguish scene or object photographs from photos of drawings). If possible, photographic prints should not exceed 20 cm × 25 cm. Do not submit color figures unless you are able to pay for printing (\$650/color plate in Jan 2010).

Begin figure captions on a new page immediately following the Literature Cited. Figure captions tend to be longer than table titles because figures are not footnoted. The caption may be several sentences and include brief suggestions for interpreting the figure content. Like table titles, figure captions should allow the figure to be self-explanatory (do not include abbreviations without defining them in the caption), describing the variables displayed and where and when data were collected. Do not include statistical results in the caption. Type the label of each figure (e.g., Figure 1, Figure 2) on the page containing that figure. Label and mount figure parts (e.g., Fig 3A, Fig 3B) together into one figure as they are meant to appear in print. Failing to do so may result in additional charges during typesetting.

Upload figures files separately (do not include them in the main document) and use the following guidelines to assure image quality is adequate for printing. Pictures must have sharp focus in the most important parts of the image, have high tonal contrast, and have a reference scale if size is important. Letters, scales, or pointers can be drawn on the prints, but they must be

of professional quality. Sets of 2–4 related pictures can be handled as one figure if prints are the same width and will fit in a space 85 mm × <180 mm when reduced for printing, but please mount them together prior to submitting the figure. All image files must have a resolution of >200 dots per inch (dpi) at final printing size.

Consider whether a drawing can be printed column width (85 mm) or is so detailed that it must be printed page width (180 mm). The difference depends mainly on size of characters and lengths of legends drawn on the figure. If page width is necessary, consider omitting some detail and look for ways to shorten legends. Column-width figures are preferred. Ensure that all characters are ≥ 1.5 mm tall after reduction for printing. Hand-drawn lines and lettering and typewriter characters are not acceptable.

Only capitalize the first word and proper nouns on axis labels and keys. Lettering within figures follows the same guidelines as manuscript text. Use italic letters only where they are essential to the meaning, as in mathematical terms and most metric units (see Mathematics and Statistics section above and Appendix C). Identify arbitrary symbols in a figure key within the figure or in a note that is part of the caption.

TABLES

Do not prepare tables for small data sets, those containing many blank spaces, zeros, repetitions of the same number, or those with few or no significant data. Put such data or a summary of them in the text.

Construct tables for column-width ≤ 85 mm (approx. 3.5 inches) printing. If the table will not fit in one column width, construct it for page-width printing ≤ 18 cm (approx. 7.25 inches). Some extra-wide tables can be printed vertically, but such tables usually waste space. Extra-long and extra-wide tables require persuasive justification.

Table titles may differ, but we recommend this sequence: 1) name of the characteristic that was measured (e.g., mass, age, density), 2) measurement unit or units in parentheses (e.g., cm, no./ha, M:100 F, or %), 3) name of organism or other entity measured (e.g., “of Canada geese”), and 4) location(s) and date(s). Each part of the sequence can include >1 item (e.g., “Carcass and liver fat [%] and adrenal and kidney weight [mg] of white-tailed deer in Ohio and Michigan, USA, in 1975”). Do not include statistics or statements of results (e.g. *P*-values) in the title. Avoid beginning the title with superfluous words (e.g., The..., Summary of..., and Comparisons between...) and words that can be presented parenthetically as symbols or abbreviations (e.g., %). Symbols such as *n* and % in the title seldom need repetition in table headings. Do not use abbreviations in table title (e.g., AIC), except within parentheses after defining the abbreviation. However, use standard abbreviations and symbols (Appendix C) in the table body and in footnotes (see Appendix D for an example).

The lines printed in tables are called rules, and they should be used according to the following standards (see Appendix D for an example table):

1. None drawn vertically within the table.
2. Each table contains at least 3 rules – below the title, below the column headings, and at the bottom. Insert each as one continuous line. Do not use bold or extra-thick rules.

3. Use rules that straddle subheadings within the column heading (see Appendix D).
4. None to show summation; use “Total” or equivalent in the row-heading.
5. Do not use rules to join the means in multiple-range tests. Use Roman upper-case letters instead of rules (e.g., 12.3A^a, 16.2A, and 19.5B) where the superscript “a” references a footnote (e.g., “^aMeans with the same letters are not different ($P > 0.10$)”; *JWM* 50:22). Upper-case letters may be used in a similar fashion to reference the relationship of data among columns.

Type main headings flush left, and indent their subheadings (e.g., *JWM* 50:86). For column- and row-headings, only capitalize the first word and proper nouns (e.g., No. of times detected in NV), and do not use bold font. In the data field, do not use dashes (often misused to mean no information) or zeros unless the item was measured, and 0, 0.0, or 0.00 correctly reports the precision (measurement). Similarly, respect digit significance in all numbers, particularly percentages. Do not use percentages where n is <26 , except for 1 or 2 samples among several others where n is >25 . Where the number of significant digits varies among data in a column, show each datum at its precision level (i.e., do not exaggerate precision). For P values only use 3 digits past the decimal, and do not list $P = 0.000$; the correct form is $P \leq 0.001$. Do not use naked decimal points in the data field (e.g., use 0.057 instead of .057).

For footnote superscripts use asterisks only for probability levels and lower-case Roman (not italic) letters for other footnotes. Place letters alphabetically in the following sequence: in the title, then left-to-right, and then down. The most common errors in tables are the use of undefined abbreviations (e.g., AIC_c , K), single spacing, and incomplete titles.

APPENDICES

Include appendices in the text file after all figure captions and tables (see Appendix D for an example). Use first-level headings for Appendix titles.

SUPPLEMENTAL MATERIAL

Supplemental material is manuscript information that adds depth to the manuscript but is not essential to readers' understanding of the manuscript (e.g., spreadsheets, detailed equations, video or audio files, in-depth tables and figures). All supplemental material will be reviewed by the editors and content edited by *JWM* staff. However, *JWM* does not copyedit, typeset, or format supplemental material, thus the material must be ready for publication when the manuscript is submitted for review. Upload supplemental material in Scholar One in a separate file and choose "Supporting Information for review and online publication only" from the "file type" drop-down menu.

Reference the supplemental material website parenthetically in your manuscript. For example, "We created a project-cost worksheet to assist other researchers planning monitoring projects (see Table S1, available online at www.onlinelibrary.wiley.com)."

Because supplemental material is published separately from the manuscript, it needs to stand alone. List all references cited in the supplemental material at the end of the supplemental material file. References that only appear in the supplemental material should not be listed in the Literature Cited section of the manuscript. Arrange the supplemental material file as follows:

Supplemental Material

Date

Citation for your manuscript

- Example citation for manuscripts in review: Bender, L., and M. Weisenberger. 2009. Criticisms Biologically Unwarranted and Analytically Irrelevant: Reply to Rominger et al. *Journal of Wildlife Management*: in review.

Begin supplemental material text here (table, equations, photo, etc.).

Literature Cited

STYLE AND USAGE

Manuscripts with publishable data may be rejected because of poor writing style (e.g., long and complex sentences, superfluous words, unnecessary information, and poor organization). Most editors are patient with this problem and are willing to offer helpful suggestions. However, reviewers may be less tolerant of poor writing, which may result in negative reviews. Use a direct and concise writing style and minimize repetition among sections of your manuscript. Avoid using 1-sentence paragraphs. Many common problems may be avoided by use of a carefully prepared outline to guide manuscript writing. Many problems can be corrected by having your manuscript critically reviewed by colleagues before submission for publication.

The most common error in manuscripts is use of passive voice. Use first person and active voice throughout the manuscript to avoid superfluous or unclear wording. For example, instead of writing “false absences were estimated” write, “we estimated false absences.”

NUMBERS AND UNIT NAMES

Use digits for numbers (e.g., 7 and 45) unless the number is the first word of a sentence or is used as a pronoun (e.g., at least one escaped), in which case the number is spelled out. Indicate units after each item (e.g., elevations ranged 3,000 m to 5,000 m) and use standard abbreviations for measurement units that follow a number (e.g., 75% and 30 kg) unless the number is indefinite (thousands of hectares), is a “0” (zero) or “1” (one) standing alone, or is the first word in a sentence. In such cases, spell out the number and unit name or recast the sentence. Avoid using introductory phrases (e.g. a total of ...). Spell out ordinal numbers (e.g., first, second) in text and Literature Cited, but use digits for cases such as 3-fold and 2-way. Convert fractions (e.g., 1/4, one-third) to decimals or percentages except where they misrepresent precision.

Hyphenate number-unit phrases used as adjectives (e.g., 3-m² plots and 3-yr-old M) but not those used as predicate adjectives (e.g., plots were 3 m², M were 3 yr old). Insert commas in numbers $\geq 1,000$ (except for pages in books, clock time, or year dates). Do not insert a comma or hyphen between consecutive, separate numbers in a phrase (28 3-m² plots). Do not use naked decimals (i.e., use 0.05, not .05). When identifying items by number, use lowercase for names (e.g., plot 1, site 5, day 3).

TIME AND DATES

Use the 24-hour system: 0001 hours through 2400 hours (midnight). Date sequence is day month year, without punctuation (e.g., 4 March 2000). Do not use an apostrophe for plural dates

(e.g., 1970s). Spell out months except in parentheses, table bodies, and figures, in which 3-letter abbreviations are used with no period (e.g., 31 Mar 1947).

MATHEMATICS AND STATISTICS

Use italic font for Roman letters used as symbols for quantities (e.g., n , X , F , t , Z , P , and \bar{x} ; Appendix C). Report degrees of freedom used in a statistical test as subscripts to the relevant test statistic. Insert symbols from the symbol directory in your word processing program as opposed to creating the symbol with keyboard functions (e.g., chi-square should appear as χ^2 [found in the symbol directory], as opposed to X^2). Use the minus sign from the symbols menu ($-$) to indicate minus and negative values instead of using the keyboard hyphen. Use times (\times) to indicate multiplication or dimensions instead of using an asterisk ($*$) or a lowercase x . These mathematical symbols may also be copied and pasted from this document.

Insert a space on both sides of symbols used as conjunctions (e.g., $P > 0.05$), but close the space when symbols are used as adjectives (e.g., >20 observations). Where possible, report exact probabilities ($P = 0.057$, not $P > 0.05$). A subscript precedes a superscript (X_i^3) unless the subscript includes >3 characters. Break long equations for column-width printing (85 mm) if they appear in the main body of the manuscript; long equations and matrices can be printed page-width (180 mm) in appendices.

Avoid redundant use of the word “significantly” (e.g., write “the means differed [$P = 0.016$]” instead of “the means differed significantly [$P = 0.016$]”). Report results of statistical tests or central tendency as in the following examples: ($t_1 = 2.47$, $P = 0.013$), ($F_{3,12} = 33.10$, $P =$

0.01), ($\chi_{10}^2 = 22.1, P = 0.029$), or ($\bar{x} = 7.8, SE = 3.21, n = 46$). Present P -values <0.001 as $P \leq 0.001$. Type the names of statistical programs or analytical methods (that are not acronyms) in capital letters (e.g., PROC LIFEREG, POPGEN, Program MARK).

EQUATIONS

Equations require precise internal spacing and formatting and are correctly constructed using Equation Editor (not saved as an embedded picture). This can be completed in most versions of Word by choosing insert-object and then selecting Microsoft Equation from the menu. Simple mathematical expressions, such as symbols with simple subscripts or superscripts and Greek letters can be typed as text, using the symbol directory. However, care must be taken to be sure that the font and font size are the same wherever the symbol is used, and inconsistencies can arise when text symbols are mixed with symbols generated with an Equation Editor. For example, the Greek letter phi can be represented by both φ and ϕ , which leads to confusion when both appear in the manuscript but are to imply the same symbol. Mathematical symbols for estimators are typically given “hats” (carets, e.g., $\hat{\mu}$) and require the use of Equation Editor, as does proper construction of the symbol for an estimated mean (\bar{x}). Only use equation boxes for complex equations with: 1) characters that have hats, tildes, or other expressions that would not translate well into straight text; 2) sums, products, and similar statements; and 3) brackets around matrices and complex expressions. For in-line equations using division, use “/” instead of stacking above and below a horizontal line, and all symbols in text need to be pulled from the symbols function or Unicode. Use $\{[O]\}$ in mathematical sentences. Statistical terms that are not

to be italics (e.g., ln, E, exp, max, min, lim, SD, SE, CV, and df) can appear in equation boxes as text without italics by changing the style to “text” while editing the equation box.

ABBREVIATIONS AND ACRONYMS

The use of numerous abbreviations and acronyms can detract from the flow of a paper. This is particularly the case when used for variables, agencies, and organizations. Use of abbreviations and acronyms should be done judiciously. Some abbreviations and acronyms are well-established and may be used in the text without definition: metric units, DNA, USPS abbreviations, and certain measurement units (see Appendix C). Define all other abbreviations or acronyms the first time you use them in the abstract and text (e.g., Geographic Information System [GIS], analysis of variance [ANOVA], Akaike’s Information Criterion [AIC]).

Reestablish acronyms in the text that were first established in the abstract. Do not start sentences with acronyms, and do not use an apostrophe with plural acronyms (e.g., ANOVAs). Abbreviate state names in parentheses except when they appear in the title of an academic institution or agency.

PUNCTUATION

Use a comma after the next-to-last item in a series of >2 items (e.g., red, black, and blue). Do not use a comma to separate a compound sentence before the conjunction unless the sentence will be confusing otherwise (e.g., “Use an infrared scope at night and use a regular scope during the day,” not “Use an infrared scope at night, and use a regular scope during the day.”). Write

clearly enough so that you do not need to put quotation marks around words or phrases unless they are direct quotations. Follow these 3 rules to avoid common hyphenation errors: 1) a phrase containing a participle or an adjective is hyphenated as a compound when it precedes the word modified, and it is written without a hyphen when it follows the word modified (e.g., “a small-mammal study” and “a study of small mammals” are both correct but have a different meaning than “a small mammal study”); 2) a modifier containing a number is usually hyphenated (e.g., a 6-yr-old mammal); and 3) a 2-word modifier containing an adverb ending in -ly is not hyphenated (e.g., a carefully preserved specimen).

Avoid ambiguous use of nouns as modifiers (e.g., wolf researchers, woman hunters). Use prepositions to avoid using nouns as adverbs (e.g., nesting by birds, not bird nesting; hunting with dogs, not dog hunting) and to avoid noun strings exceeding 3 words (e.g., radiotelemetry locations of dens in fall, not fall den radiotelemetry locations).

Closing quotation marks are always placed after periods and commas, but they may be placed either before or after other punctuation. Brackets must appear in pairs, but the sequence varies. Use ([]) in ordinary sentences, use {[()]} in mathematical sentences, and use (()) only in special cases such as chemical names. Brackets are used to enclose something not in the original work being quoted (e.g., insertion into a quotation or a translated title).

Do not use a slash (/) to indicate “and” or “or” or to express a range; use only to indicate “divided by” or “per.” Use trademarks (i.e.,™, ®) at the first mention of a product name, where appropriate, and not thereafter (if introduced in the abstract, re-establish the information in the text).

ENUMERATING SERIES OF ITEMS

A colon must precede a series of numbered items unless the list is preceded by a verb or preposition. For presentation of a simple series, place numbers followed by a closing parenthesis only (see example in Key Words section) and separate phrases with commas or semicolons.

When enumerating lengthy or complexly punctuated series, place the numbers at the left margin, with periods but no parentheses, and indent run-on lines (see Measurement Units section below).

COMMON AND SCIENTIFIC NAMES

Do not capitalize common names of species except words that are proper names (e.g., Canada goose [*Branta canadensis*], Swainson's hawk [*Buteo swainsoni*], and white-tailed deer [*Odocoileus virginianus*]). Scientific names follow the first mention of a common name, except in the title. If a scientific name is established in the abstract, re-establish it in the text. Place scientific names following common names in parentheses and italic font with the first letter of the genus name capitalized and the species name in lower-case letters. Abbreviate genus names with the first letter when they are repeated within a few paragraphs, provided the meaning is clear and cannot be confused with another genus mentioned in the manuscript with the same first letter; e.g., we studied snow geese (*Chen caerulescens*) and Ross' geese (*C. rossii*).

Do not use subspecies names unless essential, and omit taxonomic author names. Use "sp." (singular; not italicized) or "spp." (plural) to indicate that the identity of species within a genus was unknown. For example, "The field was bordered by willow (*Salix* sp.) and we trapped

several species of mice (*Peromyscus* spp.).” Use the most widely accepted nomenclature for all species mentioned in your manuscript (e.g., American Ornithologists’ Union Check-list [www.aou.org/checklist/north/]). Omit scientific names of domesticated animals or cultivated plants unless a plant is endemic or widely escaped from cultivation or is a variety that is not described adequately by its common name.

MEASUREMENT UNITS

Use Systeme Internationale d’Unites (SI) units and symbols (see Appendix C). Place a space between numbers and units or symbols (e.g., 10 m, 80° C). Do not use hyphens between numbers and units unless you are using a number-unit phrase to modify a noun (e.g., correct usage: 12-mm mesh, 3-yr study, 12 mm in diam, and 2 mm wide; see section on Style and Usage). Use English units (or, rarely, another type of scientific unit) in parentheses following a converted metric unit only in cases that may misrepresent: 1) the statistical precision of the original measurement or 2) the correct interpretation of the results. However, these non-SI units are permitted:

1. Area: hectare (ha) in lieu of 10^4 m^2 ;
2. Energy: calorie (cal) in lieu of Joule (J);
3. Temperature: Celsius (C) in lieu of Kelvin (K);
4. Time: minute (min), hour (hr), day, etc. in lieu of seconds (sec);
5. Volume: liter (L) in lieu of dm^3 .

CITING LITERATURE IN TEXT

In most cases reference citations parenthetically at the end of a sentence; e.g., “Mallard brood survival was higher in the wettest years (Rotella 1992).” Cite published literature by author and year; e.g., Jones (1980), Jones and White (1981). Use “et al.” for publications with ≥ 3 authors; e.g., (Jones et al. 1982). Do not separate the author and date by a comma, but use a comma to separate a series of citations. Use chronological order for citations in a series; e.g., (Jones 1980, Hanson 1986). If citations in a series have >1 reference for the same author(s) in the same year, designate the years alphabetically (in italics) and separate citations with semicolons; e.g., (Jones 1980*a, b*; Hanson 1981; White 1985, 1986). If citations have >1 reference for the same author in different years, designate the years chronologically after the author’s name (e.g., Andrews 2001, 2005; Chamberlain 2002; Foster 2006). For citations in a series with the same year, use alphabetical order within chronological order; e.g., (Brown 1991, Monda 1991, Rotella 1991, Allen 1995). Do not give >5 citations in the text to reference a specific issue or scientific finding. For a quotation or paraphrase, cite author, year, colon, and page number(s); e.g., “We used Neyman allocation to minimize variance (Krebs 1989:216).”

Cite documents that are cataloged in major libraries, including theses and dissertations, as published literature. Published literature includes symposia proceedings and United States Government reports that have been widely distributed. Cite all other documents as unpublished data in the text only.

If references are not easily available or are not widely distributed, cite them in the text only.

Unpublished sources include reports that are not published or widely distributed, manuscripts that have not yet been accepted for publication, and personal communications and observations.

Avoid overusing unpublished information, as these citations are not as credible as published literature and will make your text cumbersome. Cite unpublished references in the text as follows:

1. Personal communications: (J. G. Jones, National Park Service, personal communication);
2. Unpublished report: (D. F. Timm and E. J. Jones, North Carolina State University, unpublished report);
3. Unpublished data (including manuscripts in review): (D. F. Brown, Arizona Game and Fish Department, unpublished data).

Always include the affiliation in the first citation, even if citing unpublished data or personal observation of one of the authors, but do not repeat the affiliation in subsequent references (e.g., J. G. Jones, personal communication). Do not list >2 authors for an unpublished source.

A manuscript accepted for publication is cited as a published manuscript in the text using the anticipated publication year. In the Literature Cited section, show the year after the name(s) of the author(s) and “in press” after the volume number. Do not cite manuscripts that are in review; use the unpublished style listed above. Refer to detailed instructions for Literature Cited style (Appendix B).

For field equipment, note the manufacturer name and location parenthetically the first time you mention the equipment in the text (e.g., Interface, Missoula, MT). Inclusion of information for purchasing equipment or software is inappropriate and not permitted.

Only include software in Literature Cited if you are referencing the software manual or other publication describing the function of the program (e.g., “...Program MARK (White and Burnham 1999)”), otherwise simply cite the software within the text. In text citations should include the manufacturer information (manufacturer, city, and state [or country if not USA] of manufacture) immediately following the first use of the statistical product name (e.g., SAS Institute, Inc., Cary, NC; Environmental Systems Research Institute, Inc., Redlands, CA). For in text citations of statistical software packages freely available online, note the software name, website, and website access date parenthetically the first time you mention the software in the text (e.g., R Version 1.5, www.r-project.org, accessed 25 Apr 2009).

FORMAT FOR COVER ART SUBMISSIONS

Submit cover art only after your manuscript has been accepted for publication. If you have a photo or other art that you would like us to consider, please email your photo as an attachment to jwm@wildlife.org. We prefer .eps or .tif files, and .jpg files must be the highest resolution (≥ 300 dpi). Submissions must be presized to 8.5×8.5 inches or larger. If your photo is selected for cover art, you will need to complete a signed release form.

REVIEW PROCESS

Upon receipt, editorial staff examines a manuscript for proper style, format, and appropriate subject matter. If style and format are seriously flawed, the manuscript likely will be returned for revision before being sent to reviewers. If subject matter is obviously inappropriate, the EIC will return the manuscript to the author with an explanatory letter.

The editorial staff or EIC selects an Associate Editor (AE) who handles the initial review process. The manuscript is assigned to ≥ 2 reviewers. All reviews are submitted electronically via ScholarOne Manuscripts (S1M). Reviewers' comments are sent to the AE, who usually takes 1 of 3 actions after assessing the manuscript and review comments: 1) the manuscript is forwarded to the EIC with a recommendation to publish without revision (extremely rare), 2) the manuscript is returned to the author with review comments and suggestions for revision (ranging from minor to major), or 3) the manuscript is rejected.

Several revisions may be necessary before the AE recommends rejection or acceptance to the EIC. Typically, manuscripts returned to authors for revision must be resubmitted as a revision in S1M within 6 months or the manuscript will be rejected, requiring resubmission as a new manuscript. However, the EIC may require revisions in less time, depending on circumstances surrounding the manuscript. Final acceptance or rejection of manuscripts is decided by the EIC. Typically, the EIC follows the AE's recommendation, but this is not guaranteed.

PEER-REVIEWED MANUSCRIPTS

The editorial staff assigns peer-reviewed manuscripts that have been approved for review to 2 qualified reviewers. The staff considers expertise, affiliation, geographic location, date of last review, and performance on previous reviews when selecting reviewers.

Manuscripts returned to authors for revision must be revised and returned to the AE within a reasonable deadline set by the AE or the manuscript will be withdrawn from the review process, requiring resubmission of the manuscript for further consideration. Once a completed revision is returned, the revised manuscript is reviewed again by the AE (and sometimes sent out for additional peer review) and forwarded to the EIC with either a recommendation to reject or accept the manuscript for publication. The revision process often requires several iterations before the AE makes a final recommendation.

Final acceptance of a manuscript is decided by the EIC. The EIC bears final responsibility for the value and quality of materials that appear in *JWM* and makes decisions accordingly. These decisions may differ from reviewers' comments seen by authors and recommendations made by reviewers, including the AE. In rare instances, the EIC's decision to accept or reject a manuscript will not agree with the recommendation made by an AE.

APPEAL AND RESUBMISSION

Authors may email the EIC to question the reasons for rejection or to request a reconsideration of a previously rejected submission. Reconsideration of a rejected manuscript requires a convincing rebuttal letter from the author(s). Author(s) should not revise and resubmit a rejected

manuscript without first writing a letter requesting reconsideration, which saves time for the EIC and the author(s).

ACCEPTED MANUSCRIPTS

Once a manuscript is accepted, it enters the queue for publication. Accepted manuscripts go through 2 stages before publication: 1) final edit by *JWM* staff and the EIC for content-related issues and general formatting and 2) copyediting and typesetting by production staff. Authors are contacted during both stages. Authors will receive a content edited version of their manuscript within approximately one month after acceptance. Authors will have two weeks to upload their final version of the manuscript based on changes directed by the content editor and the EIC. Manuscripts will not be assigned to an issue until the final version has been received. All correspondence is conducted via email, so authors should make sure the email address on their homepage is current at all times.

PAGE PROOFS

The final production stages of the TWS publications are handled by Wiley-Blackwell Publishing (Hoboken, NJ). Page proofs of each manuscript are created by Wiley-Blackwell and sent to each corresponding author. During the page proof stage, press deadlines are fast approaching and author corrections to page proofs are urgently needed, preferably within 48 hours of receipt. Corrections should be e-mailed, faxed, phoned in, or sent by overnight or 2-day delivery,

depending on their complexity. Authors must clearly communicate their recommended changes, mark proofs clearly, or describe changes in detail. Make only essential changes to page proofs.

APPENDIX A. ONLINE MANUSCRIPT SUBMITTAL

We outline the basic steps of the online submission process in this Appendix. Before submitting manuscripts, please review the *Journal of Wildlife Management Manuscript Guidelines* and ensure that your manuscript is formatted accordingly. Manuscripts that seriously deviate from the requested format will be returned to authors, which could result in unnecessary delays.

Submit manuscripts on the *Journal of Wildlife Management* ScholarOne Manuscripts (S1M) website: <http://mc.manuscriptcentral.com/jwm>.

LOGGING IN TO YOUR SCHOLARONE ACCOUNT


To create a new S1M account or find out if you already have an account, go to The *Journal's* S1M website, click 'Register here,' and provide the requested information. Please note that you do not have to be an author to have an account. If you forget your login name or password, enter your email address into the 'Password help' link on the S1M main page, enter the requested information, and S1M will email you your login name and a temporary password. If you do not receive the email within a few hours, please contact the editorial office at jwm@wildlife.org.

A set of menu options is available from the main navigation menu at the top of the screen. On the login screen enter your username (your email address) and password and click on the '**Log In**' icon.

SUBMIT A NEW MANUSCRIPT

To submit a new manuscript, enter your author center, click on the star icon (as shown below), and follow the step by step instructions provided in S1M.

- Clicking on the various manuscript status links under "My Manuscripts" will display a list of all the manuscripts in that status at the bottom of the screen.

My Manuscripts	Author Resources
<ul style="list-style-type: none"> 1 Unsubmitted Manuscripts 0 Resubmitted Manuscripts in Draft 0 Revised Manuscripts in Draft 0 Submitted Manuscripts 0 Manuscripts with Decisions 0 Manuscripts I Have Co-Authored 1 Withdrawn Manuscripts 0 Manuscripts Accepted for First Look 0 Invited Manuscripts 	<p> Click here to submit a new manuscript</p> <p>This section lists the subjects of the five most recent e-mails that have been sent to you regarding your submission(s). To view an e-mail, click on the link. To delete an e-mail from this list, click the delete link.</p>

REVISED MANUSCRIPTS

To submit a revision, enter your author center, click on the star icon next to the revision option, and follow the step by step instructions provided in S1M.

- Clicking on the various manuscript status links under "My Manuscripts" will display a list of all the manuscripts in that status at the bottom of the screen.

My Manuscripts	Author Resources
<ul style="list-style-type: none"> 0 Unsubmitted Manuscripts 0 Resubmitted Manuscripts in Draft 0 Revised Manuscripts in Draft 1 Submitted Manuscripts 1 Manuscripts with Decisions 0 Manuscripts I Have Co-Authored 0 Withdrawn Manuscripts 0 Manuscripts Accepted for First Look 0 Invited Manuscripts 1 Manuscripts Awaiting Revision 	<p data-bbox="789 520 1260 552">★ Click here to submit a new manuscript</p> <p data-bbox="789 562 1260 594">★ Click here to submit a revision</p> <p data-bbox="773 646 1260 751">This section lists the subjects of the five most recent e-mails that have been sent to you regarding your submission(s). To view an e-mail, click on the link. To delete an e-mail from this list, click the delete link.</p> <p data-bbox="805 793 1260 867"> Journal of Wildlife Management and Wildlife Monographs - Decision on Manuscript ID JWM-11-0181 [email ref: DL-SW-2-a] Delete </p>

APPENDIX B. LITERATURE CITED

A list of example citations follows.

BOOK: GENERAL FORMAT

McCullough, D. R. 1979. The George Reserve deer herd: population ecology of a K-selected species. University of Michigan, Ann Arbor, USA.

Miller, K. V., and L. Marchinton. 1995. Quality whitetails: the why and how of quality deer management. Stackpole, Mechanicsburg, Pennsylvania, USA.

Note: If the state appears in the publisher or agency name, do not repeat it after the city.

BOOK: MORE THAN ONE EDITION

Smith, R. L. 1974. Ecology and field biology. Second edition. Harper and Row, New York, New York, USA.

BOOK: MORE THAN ONE PUBLISHER

Sowls, L. K. 1955. Prairie ducks: a study of their behavior, ecology, and management.

Stackpole, Harrisburg, Pennsylvania, and Wildlife Management Institute, Washington, D.C., USA.

Gutiérrez, R. J., A. B. Franklin, and W. S. LaHaye. 1995. Spotted owl (*Strix occidentalis*).

Account 179 in A. Poole and F. Gill, editors. The birds of North America, The Academy of Natural Sciences, Philadelphia, Pennsylvania, and The American Ornithologists' Union, Washington, D.C., USA.

BOOK: MORE THAN ONE VOLUME

Palmer, R. S. 1976. Handbook of North American birds. Volume 2. Yale University Press, New Haven, Connecticut, USA.

BOOK: EDITOR AS AUTHOR

Temple, S. A., editor. 1978. Endangered birds: management techniques for preserving threatened species. University of Wisconsin Press, Madison, USA.

BOOK: REPRINT

Leopold, A. 1933. Game management. 1946, Reprint. Charles Scribner's Sons, New York, New York, USA.

BOOK: CHAPTER

Zeleny, L. 1978. Nesting box programs for bluebirds and other passerines. Pages 55–60 in S. A. Temple, editor. *Endangered birds: management techniques for preserving threatened species*. University of Wisconsin Press, Madison, USA.

COURT CASES

Cite complete title and year of case in text only.

FOREIGN LANGUAGE PUBLICATION

Angulo, E. 2003. Factores que afectan a la distribución y abundancia del conejo en Andalucía. Dissertation, Complutense University, Madrid, Spain. [In Spanish.]

GOVERNMENT PUBLICATION

Lull, H. W. 1968. *A forest atlas of the Northeast*. U.S. Forest Service, Northeast Forest and Experiment Station, Upper Darby, Pennsylvania, USA.

GOVERNMENT PUBLICATION: PART OF A NUMBERED SERIES

Anderson, D. R. 1975. Population ecology of the mallard: V. Temporal and geographic estimates of survival, recovery, and harvest rates. U.S. Fish and Wildlife Service Resource Publication 125, Washington, D.C., USA.

GOVERNMENT PUBLICATION: AGENCY AS AUTHOR

National Research Council. 1977. Nutrient requirements of poultry. Seventh edition. National Academy of Science, Washington, D.C., USA.

Note: Cite in text as National Research Council (1977) or parenthetically as (National Research Council 1977).

JOURNALS: GENERAL FORMAT

Miller, M. R. 1986. Molt chronology of northern pintails in California. *Journal of Wildlife Management* 50:57–64.

Steigers, W. D., Jr., and J. T. Flinders. 1980. A breakaway expandable collar for cervids. *Journal of Mammalogy* 61:150–152.

Note: Issue numbers are included only if the pages of each issue are numbered separately.

JOURNALS IN PRESS: YEAR AND VOLUME KNOWN

Zelenak, J. R., and J. J. Rotella. 1997. Nest success and productivity of ferruginous hawks in northern Montana. *Canadian Journal of Zoology* 75:in press.

JOURNALS IN PRESS: YEAR AND VOLUME UNKNOWN

Giudice, J. H., and J. T. Ratti. In press. Biodiversity of wetland ecosystems: review of status and knowledge gaps. *Bioscience*.

Note: Manuscripts in review may not be included in the Literature Cited.

MULTIPLE CITATIONS FOR THE SAME AUTHOR(S)

- Peek, J. M. 1963. Appraisal of a moose range in southwestern Montana. *Journal of Range Management* 16:227–231.
- Peek, J. M. 1986. *A review of wildlife management*. Prentice-Hall, Englewood Cliffs, New Jersey, USA.
- Peek, J. M., and A. L. Lovaas. 1968*a*. Differential distribution of elk by sex and age on the Gallatin winter range, Montana. *Journal of Wildlife Management* 32:553–557.
- Peek, J. M., A. L. Lovaas, and R. A. Rouse. 1968*b*. Population changes within the Gallatin elk herd, 1932–1965. *Journal of Wildlife Management* 31:304–316.
- Peek, J. M., and R. A. Rouse. 1966. Preliminary report on population changes within the Gallatin elk herd. *Wildlife Science* 82:1298–1316.

NEWSPAPER, NEWSLETTER, AND MAGAZINE ARTICLES

- Associated Press. 1997. Feathers could fly over dove hunting. *Columbus Dispatch*. 28 December 1997; section E:15.
- Eisler, P. 1996. Voters to get a shot at hunting laws. *USA Today*. 25 April 1996; section A:4.
- Hogan, M. 1997. Political season as important as hunting season. *Safari Times* 9(8):18.
- Jones-Jolma, D. 1993. The fight to reform trapping in Arizona. *Animals' Agenda*. March–April:20–24.
- Note:* Citing from newspapers, newsletters, and magazines is discouraged and is only acceptable in certain rare circumstance (e.g., in manuscripts dealing with public perceptions).

SOFTWARE PACKAGE

SAS Institute. 2001. Version 8.02 user manual. SAS Institute, Cary, North Carolina, USA.

Note: For statistical software packages, only include the software in Literature Cited if you are referencing the software manual. If you are only referencing the software program, please see Citing Literature in Text - Citing Equipment and Statistical Software.

SYMPOSIA AND PROCEEDINGS: COMPLETE VOLUME

DeGraaff, R. M., technical coordinator. 1978. Proceedings of workshop on management of southern forests for nongame birds. U.S. Forest Service General Technical Report SE-14, Washington, D.C., USA.

SYMPOSIA AND PROCEEDINGS: INDIVIDUAL ARTICLE

Dickson, J. G. 1978. Forest bird communities of the bottomland hardwoods. Pages 66–73 in Proceedings of workshop on management of southern forests for nongame birds. R. M. DeGraaf, technical coordinator. U.S. Forest Service General Technical Report SE-14, Washington, D.C., USA.

SYMPOSIA AND PROCEEDINGS: PART OF A NUMBERED SERIES

Palmer, T. K. 1976. Pest bird control in cattle feedlots: the integrated system approach. Proceedings of Vertebrate Pest Conference 7:17–21.

SYMPOSIA AND PROCEEDINGS: COMPLETE VOLUME (NOT PART OF A NUMBERED SERIES)

McAninch, J. B. 1995. Urban deer: a manageable resource? Proceedings of the symposium of the 55th Midwest Fish and Wildlife Conference. North Central Section of The Wildlife Society, 12–14 December 1993, St. Louis, Missouri, USA.

Note: Include dates and location with these citations.

SYMPOSIA AND PROCEEDINGS: INDIVIDUAL ARTICLE (NOT PART OF A NUMBERED SERIES)

Stout, S. L., and R. Lawrence. 1996. Deer in Allegheny Plateau forests: learning the lessons of scale. Pages 92–98 *in* Proceedings of the 1995 Foresters Convention. Society of American Foresters, 28 October–1 November 1995, Portland, Maine, USA.

Note: Include dates and location with these citations.

THESES AND DISSERTATIONS

Brelsford, M. A. 1991. Effects of grazing by wapiti on winter wheat and winter rapeseed, and the effects of simulated wapiti use on winter wheat in northern Idaho. Thesis, University of Idaho, Moscow, USA.

Tacha, T. C. 1981. Behavior and taxonomy of sandhill cranes from mid-continental North America. Dissertation, Oklahoma State University, Stillwater, USA.

WEB CITATION: PROFESSIONAL SITE

Council of Biology Editors [CBE]. 1999. CBE homepage. <<http://www.councilscienceeditors.org>>. Accessed 7 Oct 1999.

WEB CITATION: ARTICLE IN AN ELECTRONIC JOURNAL (EJOURNAL)

Browning, T. 1997. Embedded visuals: student design in Web spaces. *Kairos: A Journal for Teachers of Writing in Webbed Environments* 3(1). <<http://english.ttu.edu/kairos/2.1/features/browning/bridge.html>>. Accessed 21 Oct 1997.

WEB CITATION: GOVERNMENT PUBLICATION

National Oceanic and Atmospheric Administration [NOAA]. 2005. National Weather Service internet services team. Monthly precipitation for Reno, Nevada. <http://www.wrh.noaa.gov/rev/hydrology/monthly_precip.php>. Accessed 23 Aug 2005.

APPENDIX C. REQUIRED ABBREVIATIONS FOR TABLES, FIGURES, AND PARENTHETIC EXPRESSIONS

Abbreviate the following terms in parentheses, tables, and figures. Abbreviate all standard measurement units (indicated with an asterisk) in the text when they appear after a number, but do not abbreviate other listed terms in regular text. Do not define terms listed in this table; however, all additional abbreviations must be defined the first time they appear in the text.

Term	Abbreviation or symbol
Adult	ad
Amount	amt
Approximately	approx.
Calorie	cal*
Celsius	C*
Chi-square	χ^2
Coefficient	coeff.
Confidence interval	CI, $a \leq x \leq a$

Confidence limits	CL, $x \pm a$
correlation, simple	R
Determination, multiple	R^2
Determination, simple	r^2
Degrees of freedom	df
Diameter	diam
Diameter, breast height	dbh
Directions	N, S, E, W, NE, NW, etc.
Equation(s)	eq(s)
Female	F
Fewer than, less than	<*
F ratio	F
Gram	g*
Gravity	G
Hectare	ha*
Height	ht
Hotelling's T^2	T^2
Hour(s)	hr
Joule	J*
Juvenile	juv
Kilocalorie	kcal*
Lethal concentration, 50%	LC ₅₀
Lethal dose, median	LD ₅₀
Limit	lim
Liter	L*
Logarithm, base e	ln or log _{e}
Logarithm, base 10	log ₁₀
Male	M
Maximum	max.
Meter ^a	m*
Metric Ton	t
Minimum	min.
Minute	min
Month names	Jan, Feb, etc.

More than, greater than	>*
Multiple correlation	R^2
Number (of items)	no.
Parts per billion	ppb*
Parts per million	ppm*
Percent	%*
Population size	N
Probability ^a	P
Sample size	n
Sample mean (of x)	\bar{x}
Second	sec
Spearman rank correlation	r_s
Standard deviation(s)	SD
Standard error(s)	SE
Student's t	t
Temperature	temp
Trace ^b	tr
Variation	CV
Versus	vs.
Volt	V*
Volume: liquid, book	vol, Vol.
Weight	wt
Wilcoxon test	T
Year(s)	yr
Z-statistic	Z

^a Use P to indicate a specific probability value (e.g., $P < 0.001$) but not in more broad definitions in column-headings or axis labels [e.g., Probability that a juv survives first yr]).

^b Define in a footnote (e.g., tr = <1%).

Begin Study Area text here. Text text text text text text text text text text text text text text text text text text text text text text text text text text text text text text.

METHODS

Begin text here. text text text text text text text text text text text text text text text text text text text text text text text text text text text text text.

Second-level Heading

Begin text here. text text text text text text text text text text text text text text text text text text text text text text text text text text text text text.

Third-level heading.—Begin text here. Text text text text text text text text text text text text text text text text text text text text text text text text text text text text text.

1 RESULTS

2 Begin text here. text text text text text text text text text text text text text text text text text text text text text text text text text text text text text.
3 text text text text text text text text text text text text text text text text text text text text text text text text text.

4 DISCUSSION

5 Begin text here. text text text text text text text text text text text text text text text text text text text text text text text text text text text text text.
6 text text text text text text text text text text text text text text text text text text text text text text text text text.

7 MANAGEMENT IMPLICATIONS

8 Begin text here. text text text text text text text text text text text text text text text text text text text text text text text text text text text text text.
9 text text text text text text text text text text text text text text text text text text text text text text text text text.

10 ACKNOWLEDGMENTS

11 Begin text here. text text text text text text text text text text text text text text text text
12 text text text text text text text text text text text text text text text text.

13 **LITERATURE CITED**

14 Citation 1. text text text text text text text text text text text text text text text text text
15 text text text text text text text text text text text text text text text text text text text

16 Citation 2. text text text text text text text text text text text text text text text text text
17 text text text text text text text text text text text text text text text text text text text

18 Citation 3. text text text text text text text text text text text text text text text text text
19 text text text text text text text text text text text text text text text text text text text

20 *Associate Editor:*

21

22 Figure Captions (Begin figure captions on a new page. Please note that figures must be submitted
23 in a separate document and may not be included in the text file.)

24 Figure 1. text text text text text text text text text text text text text text text text text
25 text text text text text text text text text text text text text text text text text,

26

27 Figure 2. text text text text text text text text text text text text text text text text text
28 text text text text text text text text text text text text text text text text text.

29

30 Start tables on a new page, and place each table on a separate page. Don't forget to define
 31 abbreviations and terms that are not in Appendix C in each table title or as footnotes (e.g., AIC_c ,
 32 K , ANOVA).

33 Table 1. Example of correct format of tables accompanying manuscripts submitted to *Journal of*
 34 *Wildlife Management*.

35

36

 Animal group

37

38

 Avian

 Mammalian

39

40

Site^a

 Insectivorous

Carnivorous

 Insectivorous

Carnivorous

41

42

Xeric

5

3

2

4

43

44

Mesic

7

5

1

3

45

46

Hydric

12

7

5

8

47

^aFor footnotes, use lower-case, Roman letters. Indent the first line of the footnotes 2

48

spaces, and left-justify all run-on lines. Use asterisks for probability levels.

49

50 **APPENDIX A. TITLE OF THE APPENDIX**

51 Begin appendix text here. text text text text text text text text text text text text text text text text text
52 text text text text text text text text text text text text text text text text text text text text text text text
53 text text text text text text text text text text text text text text text text text text text.

54