

*Herpetologica* and *Herpetological Monographs* Instructions for Authors – 2012a

<b>Recent Changes</b> .....	1
<b>General Information</b> .....	2
<b>Manuscript Submission and Processing</b> .....	2
<b>Reprints, Proofs, and Revisions</b> .....	3
<b>Manuscript Preparation</b> .....	3
<b>Overall Document Format</b> .....	3
<b>Manuscript Sections and Formatting</b> .....	4
Sample title page .....	5
Introduction .....	5
Headings .....	5
Sample headings .....	6
Acknowledgments .....	6
Literature citations in the text .....	7
Literature Cited section .....	7
Formatting for most common types of references .....	<b>Error! Bookmark not defined.</b>
Sample references .....	9
<b>Citing Tables and Figures in the Text</b> .....	10
Sample table .....	10
Figure legends .....	11
Figure graphics .....	11
<b>General Style and Usage Guidelines</b> .....	11
<b>Other Common Word Usage</b> .....	12
<b>Dashes and Hyphenation</b> .....	12
<b>Italics</b> .....	12
<b>Numbers</b> .....	13
<b>Mathematical Signs and Symbols</b> .....	13
<b>Measurement Units and Abbreviations</b> .....	13
Statistical abbreviations .....	14
Other common abbreviations .....	14
<b>Special considerations for taxonomy papers</b> .....	14

**Recent Changes**

- Beginning in 2012, the formats for in-text citations and Literature Cited will be standardized among the *Journal of Herpetology*, *Herpetologica*, and *Herpetological Monographs*. The changes for *Herpetologica* and *Herpetological Monographs*, as well as the complete new guidelines, are given below.
- Page charges have been reduced for HL members, and color charges have been reduced. Open access can now be purchased.
- We now capitalize standard names in *Herpetologica* and *Herpetological Monographs*. See: Crother, B. I. (Ed.). 2008. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, pp. 1–84. SSAR Herpetological Circular 37.
- Geographic coordinates can be in any standard format (e.g., decimal degrees, or degrees minutes seconds, without spaces between numbers and symbols); specify the datum for the coordinates.
- We now use the degree symbol for temperatures, with no spaces between number, symbol, and unit.
- All references for citations of taxonomic authorities must be given in full in the Literature Cited.

## ***General Information***

*Herpetologica* and *Herpetological Monographs* publish original papers dealing largely or exclusively with the biology of amphibians and reptiles. Manuscripts are especially encouraged that quantitatively test important hypotheses, address important theoretical issues, and carefully analyze the diversity, systematics, and evolution of amphibians and reptiles. *Herpetologica* publishes manuscripts that are no longer than approximately 35 pages, including title, text, Appendices, tables, figures, & legends. *Herpetological Monographs* publishes manuscripts that are approximately 40 manuscript pages or longer. For guidance on submitting manuscripts of 35–40 pages, please contact an editor about which is the most appropriate journal for the manuscript. *Herpetologica* and *Herpetological Monographs* do not publish notes or short communications, although short manuscripts may be considered for *Herpetologica* by the editor on a case-by-case basis. Submitted manuscripts will be judged on the appropriateness of the topic for the journal and on their scientific merit, including the importance of the hypotheses or theories addressed and the quality of the study and the writing.

Authors are accountable for legal and proper acquisition and use of study animals. Therefore, the corresponding author should indicate in the cover letter during submission that all contributors observed appropriate ethical and legal guidelines and regulations. Guidelines and regulations that may apply include: (1) the ASIH-HL-SSAR Guidelines for Use of Live Amphibians and Reptiles in Field Research; (2) state, federal, and international laws about studying, collecting, and transporting live or preserved specimens, in which case the cover letter and manuscript should document the relevant permits obtained for the work; (3) legal acquisition of animals from reputable dealers; and (4) Institutional Animal Care and Use Committee approval for the care of animals and study procedures used, in which case the cover letter and manuscript should document the relevant IACUC approval. Submitted studies that deviate from acceptable practices are subject to rejection.

## ***Manuscript Submission and Processing***

**Manuscripts must be submitted electronically** using the online submission system:

For *Herpetologica*: <http://www.edmgr.com/herpetologica/>

For *Herpetological Monographs*: <http://www.edmgr.com/herpmonographs/>

In preparing the manuscript and graphics, follow the guidelines given below. Manuscripts ready for submission should be uploaded in Word (\*.doc) or WordPerfect (\*.wpd) format, preferably for PC. Manuscripts can also be uploaded as PDF files, but these must be accompanied by the original word-processor files. We prefer figures to be uploaded as graphics files separately from the manuscript text file. Figures should be in TIFF, GIF, JPG, Postscript, or EPS formats, not in PDF files. For initial submission and review, figures can be embedded at the end of the manuscript file or uploaded separately. However, separate graphics files will be required before a manuscript can be accepted. All figures should be in order and clearly labeled. The online system will automatically merge the manuscript file and all graphics files into a single PDF file for use by the Editor, Associate Editors, and reviewers. Authors should retain a copy of the original manuscript file and all original artwork and photographs until the review and decision process is complete.

*Herpetologica* and *Herpetological Monographs* now have photographs on the covers that relate to articles in each issue. Authors who have particularly attractive or interesting images (such as photographs or photographs overlaid with data figures) that relate to their manuscripts may suggest their use on the cover of the journal. Mention such images in the cover letter accompanying the manuscript submission, or submit images to the Editor for consideration.

Each submitted manuscript will be assigned to an appropriate Associate Editor, who in turn will seek two or three external peer reviews of the manuscript. Upon receiving the reviews, the Associate Editor will make a recommendation to the Editor and may add their own comments or suggestions to those of the reviewers. The Editor will then decide whether to reject the manuscript, request further revisions of it, or accept it for publication. When a

manuscript is accepted for publication, the corresponding author will be asked to provide original artwork and photographs, as well as a revised and corrected manuscript file and separate graphics files.

We also encourage submission of supporting material associated with a manuscript to an online database or repository; whenever possible, accession or catalog numbers for such materials should be given in the manuscript. The supporting material should not be essential for inclusion in the manuscript, but should be beneficial to readers. Examples of such materials include more detailed methods, data sets, additional tables or figures (including color figures), video and audio files, etc. Allen Press provides an online repository, as do other web sites such as GenBank, Dryad, and other sites. For additional information about preparing or submitting supplementary information, please contact the Editor.

**Reprints, Proofs, and Revisions.**—Once accepted manuscripts have been typeset, page proofs are sent to the corresponding author prior to publication. The corresponding author should distribute the proofs to coauthors. Each author should check proofs carefully against the edited manuscript. Printer's errors are best detected when two persons read proofs together—one reading aloud from the proofs, the other following on the typescript. The editorial staff of *Herpetologica* and *Herpetological Monographs* does not read article page proofs; hence, authors must assume full responsibility for detecting errors at this stage.

Both the edited manuscript and the corrected proofs should be returned to the Editor within 48 h to prevent a delay in publication. Revision of content, wording, or style should not be made in proofs; all such revisions should be made prior to the proofing stage. Authors will be charged for changes in proofs other than correction of printer's and editor's errors. The charge for alterations to proofs is \$5 per alteration after the first five. Authors are invoiced for the charge.

Reprints and high-quality PDF files of articles may be purchased from Allen Press, using the forms provided, at the time page proofs are received.

**Charges.**—Authors who are current members of the Herpetologists' League are requested to pay page charges of \$25.00 per printed page up to 15 pages and \$75.00 per printed page beyond 15 pages. Authors who are *not* members of the Herpetologists' League are *required* to pay full page charges of \$75 per page of published article. In the case of multi-authored papers, at least one of the authors must be a member of the League before a manuscript is finally accepted in order to be eligible for the reduced page charges for members. All authors are assessed costs for any special handling that may be required for their illustrations, such as color photographs. The charge is \$600 for the first color plate in an article and \$300 for each additional one. Color figures may be published online by Allen Press as supplements to black and white figures in a published article; the charge for online publication of color figures is \$75 per figure.

### ***Manuscript Preparation***

*Herpetologica* and *Herpetological Monographs* do not follow a published style manual. For specific guidance on preparing the manuscript, follow the instructions given here. For additional examples of appropriate formatting and style, contact the Editor.

In preparing graphics, follow the guidelines below and those provided by Allen Press ([http://allenpress.com/system/files/pdfs/library/apmk\\_digital\\_art.pdf](http://allenpress.com/system/files/pdfs/library/apmk_digital_art.pdf), or go to [www.allenpress.com](http://www.allenpress.com), then Resources, Education Library, How-To Guides, Guide to Digital Art Specifications).

**Overall Document Format.**—All manuscripts must use American English spelling and grammar conventions. Use the active voice. Submit the manuscript as a Word (\*.doc or \*.docx) or WordPerfect (\*.wpd) document, preferably for PC, with the following format:

- North American letter page size (8.5 by 11 inches; 21.6 by 27.9 cm)
- 1 inch (2.5 cm) margins on all sides
- 12 point text

- Double-spacing throughout entire manuscript (including literature cited, figure legends, table legends, and table contents)
- Continuous line numbers
- Left-justification
- No automatic hyphenation
- All pages, including tables and figure legends labeled in the upper right-hand corner with the author's name and page number (e.g., using the header function in word-processing programs)
- If bibliographic software is used to format the citations and references, then the fields should be removed (but for revisions be sure to keep a copy of the original document containing the fields).

### ***Manuscript Sections and Formatting***

Manuscripts are usually arranged in the following order: title, author's name, author's address, abstract (then second abstract in other language, if used), key words, text (usually with sections described below), literature cited, appendices, tables, figure legends, figures.

***Title Page.***—Should include the title, author's name, and author's address; no periods

- Title centered, in all capital letters, with scientific names of species in italics
- Title should be brief and informative
- Authors names are centered, in small caps and title case (i.e., first letter of each name in large cap, remaining letters in small caps), with commas appearing outside any superscripts (if used)
  - Multiple author names should be matched to addresses by superscript numbers, with no space between author name and superscript number or between superscript numbers.
  - E-mail address of corresponding author and any address changes noted by superscript number; do not use hyperlinks in e-mail addresses.
- Addresses are centered, italicized, major words capitalized, with postal codes used for states; country names are used; no periods in state and country abbreviations
- Footnotes used to designate present address and correspondence e-mail address
  - Indented, with space between superscripted number and first word of footnote
  - Small caps, no underline or hyperlink, hyphen in "e-mail"

- Sample title page:

SYSTEMATICS OF THE *BUFO MICROSCAPHUS* COMPLEX: ALLOZYME  
EVIDENCE

ALBERT SMITH<sup>1,5,6</sup>, BARRY GOLD<sup>2,3</sup>, CARLA WHITE<sup>4</sup>, DANIELLE ZOE<sup>3</sup>, AND ETHAN JONES<sup>3</sup>

<sup>1</sup>*Tropical Biosphere Research Center and Department of Biology, University of the Ryukyus, Nishibara, Okinawa 903-01, Japan*

<sup>2</sup>*Center for Population Biology, University of California, Davis, CA 95616, USA*

<sup>3</sup>*Department of Zoology, The Natural History Museum, Cromwell Road, London SW7 5BD, UK*

<sup>4</sup>*School of Biological Sciences, Division of Zoology and Tropical Ecology, James Cook University of North Queensland, Townsville Q4811, Australia*

<sup>5</sup> PRESENT ADDRESS: Department of Zoology, University of Uppsala, Villavagen 9, S-75236, Uppsala, Sweden

<sup>6</sup> CORRESPONDENCE: e-mail, [desmith@aol.com](mailto:desmith@aol.com)

**Abstract.**—The abstract follows the author's name and address. It should state the major points of the paper as clearly and concisely as possible without the need for reference to the text and without citation of references. The abstract heading should be indented and in small caps, followed by a colon (e.g., ABSTRACT: The Bog Turtle...). A second abstract in any modern European language may be included.

**Key Words.**—Key words separate the abstract from the introduction. They are used for indexing the article, and hence should identify the major aspects of the manuscript, such as the key methods, key variables, study locations, study organisms, subfield, or theory addressed. Close attention should be given to choosing key words because they will be used to index the article in online databases, which are used by potential readers to find the article.

- Key words are indented, listed in alphabetical order, and each word or phrase is separated by a semicolon; only the initial word in each term is capitalized.
- The phrase "Key words:" is italicized, including the colon.
- For example, *Key words:* Allozyme; *Bufo microscaphus*; Southwestern Toad

**The Body of the Manuscript: Text.**—The text should begin after the key words. The text usually includes sections for the introduction (without a heading), materials and methods, results, discussion, and acknowledgments. However, some manuscripts work best with a different arrangement of sections in the text (e.g., separate headings for multiple experiments if they use substantially different methods from one another); authors should use their judgment in this matter.

- Introduction: No heading used for this section; first word in large and small caps; if first word is short then also use small caps for second word (e.g., DEFENSIVE behaviors ..., ENERGY use ..., VIPERID snakes ..., A METHOD for ..., THE THEORY that ..., ONE EFFORT to ..., etc.)
- Headings: Three levels of headings are allowed.
  - Primary: Centered, in small caps and title case (i.e., each major word begins with a large capital letter and all other letters are small caps; e.g., MATERIALS AND METHODS)

- Secondary: Centered, italicized, in title case (i.e., each major word capitalized; e.g., *Study Sites*)
  - Tertiary: Indented, italicized, sentence case (i.e., only first word begins with a capital letter), followed by period and em dash (e.g., *Mountain area.—This site is...*)
  - In any italicized heading, scientific names of species are not italicized so that they stand out from other text
- Sample headings:

MATERIALS AND METHODS

*Experimental Condition 1: Bufo americanus*

*Collection and maintenance.—We collected 50 adults of ...*

- Acknowledgments: The text ends with the acknowledgments.
  - Use a tertiary heading and spell “acknowledgments” with no “e” after “g”
  - Use initials instead of first names for individuals
  - Be as concise as possible
  - E.g., “*Acknowledgments.—We thank K. Wadsworth*” not “*Acknowledgements.—We would like to thank Katherine Wadsworth.*”)

***In-Text Citations and the Literature Cited Section.***—The Literature Cited section follows the acknowledgments. All references cited in the manuscript, including citations of taxonomic authorities, must be given in full in the Literature Cited section, and all references in the Literature Cited section must be cited somewhere in the text of the manuscript. Check that dates and spelling of citations in text match the Literature Cited section.

Beginning in 2012, the formats for in-text citations and the Literature Cited section will be standardized among the *Journal of Herpetology*, *Herpetologica*, and *Herpetological Monographs*. The changes for *Herpetologica* and *Herpetological Monographs* are listed below, followed by the complete new guidelines.

- Summary of changes
  - Use chronological order for in-text citations. This is perhaps the most distinctive change in the new format.
  - No italics for a and b citations. E.g., "(Smith, 2001a,b)" in the text, and "Smith, P. 2001a" in the Literature Cited.
  - Use unformatted text for author names; i.e., no small caps. E.g., Baird, T.A. 2004. Reproductive coloration in female collared lizards, *Crotaphytus collaris*, stimulates courtship by males. *Herpetologica* 60:337–348.
  - No space between author initials. See example above.
  - For online-only journals, follow the format for typical journal papers but also provide the URL for the article. E.g., O'Donnell, R.P., and A.P. Rayburn. 2011. Biases in the protection of peripheral anuran populations in the United States. *Herpetological Conservation and Biology* 6:91-98. [http://www.herpconbio.org/Volume\\_6/Issue\\_1/ODonnell\\_Rayburn\\_2011.pdf](http://www.herpconbio.org/Volume_6/Issue_1/ODonnell_Rayburn_2011.pdf).
  - For the page range of a chapter in an edited book: Use "Pp. 52–65 in ..." E.g., Smith, A.T. 1994. Systematics of frogs and toads. Pp. 52–65 in J. Black, and M. Lee (Eds.), *Systematics of Amphibians and Reptiles*. University of Kansas Press, USA.
  - For chapter in a book, edited book, and book references: Provide the publication country and state (if necessary to identify the publisher properly), but not the city. E.g., Smith, A.T. 1994. Systematics of frogs

and toads. Pp. 52–65 in J. Black, and M. Lee (Eds.), *Systematics of Amphibians and Reptiles*. University of Kansas Press, USA.

- For online reference: Use WebCite® ([www.webcitation.org](http://www.webcitation.org)) to archive the web site. Provide the regular citation, followed by the archival site provided by the service. This is perhaps the second most distinctive change in the new format. E.g., Frost, D.R. 2004. *Amphibian species of the world: an online reference*. Available at <http://research.amnh.org/herpetology/amphibia/index.html>. Archived by WebCite at <http://www.webcitation.org/T8g8UVs14> on 4 July 2011.
- Complete new guidelines for in-text citations
  - Do not use formatted text (bold, underlined, italicized, or small caps).
  - Cite references in chronological order, using a comma to separate author names from dates, and a semicolon to separate citations. Example: “(Smith, 1975; Jones, 1987).”
  - Provide names for up to two authors, e.g., “(Jones and Smith, 1987).” For three or more authors, spell out the name of the first author, followed by "et al." E.g., “(Jones et al., 1990).”
  - If there are multiple same-year references by an author with various coauthors, list single-author references before those with a coauthor. List two-author references first and multiple coauthors last. Example: “(Smith, 1998; Smith and Jones, 1998; Smith et al., 1998).”
  - If there are multiple "et al." references, then list them in chronological order regardless of the number of authors or their identity. Example: “(Smith and Jones, 1848; Smith et al., 1856a,b; Smith and Brown, 1858).”
  - Please limit citation strings to 3 or 4 of the most pertinent references.
  - Papers accepted for publication should be cited as “(Smith, in press)” and placed in the Literature Cited.
  - Do not cite "unpublished data." Instead, observations, data, or manuscripts that have not been accepted or published should be cited as personal observations, e.g., “(A. Smith, personal observation),” and should not be placed in the Literature Cited.
  - Non peer-reviewed sources such as meeting abstracts and most web sites should be avoided if possible. However, dissertations and theses should be cited if the information has not also appeared in refereed form.
  - For all commercial software mentioned in the text, specify the version and source. Example: “(SPSS 13.0, IBM).” Where appropriate, provide a citation in the text (in the case of Program MARK, for example, White and Burnham, 1999) and in the Literature Cited.
  - For all commercial equipment provide the model and manufacturer. Example: “HOBO U23 Pro v2 External Temperature Data Logger (Onset Computer Corporation).” Do not include in the Literature Cited.
  - Peer-reviewed electronic resources should be cited in the same manner as paper-based ones.
  - Use WebCite® (a free service) to archive non-peer-reviewed web sites first. Enter the URL you want to cite at [www.webcitation.org](http://www.webcitation.org). The system will create a "snapshot" of the webpage for future access. Cite as you would other sources. Example: “(Smith and Brown, 2011).” See below for how to format the reference in the Literature Cited section.
  - Whenever possible, place all citations at the end of the sentence rather than interspersed with the text. Example: “Rattlesnakes are excellent subjects for research in many areas of biology (Klauber, 1972; Schaeffer, 1996; Schaeffer et al., 1996; Beaupre and Duvall, 1998).”
  - If taxonomic authorities are cited, be careful to use parentheses around the name or just the year as needed, because parentheses around the author and year indicate that the species was originally described as part of a different genus. Be sure to provide the complete reference in the Literature Cited section.
- Complete new guidelines for the Literature Cited section
  - The Literature Cited is one the largest sources of errors. Carefully follow all format instructions and examples below. Check a recent issue (from 2012 or later) if anything remains unclear.

- Please be sure that all entries in the Literature Cited also appear in the text, and vice-versa. Do not include personal observations or unpublished manuscripts in this section.
- Double space the entire section.
- Do not bold, underline, or italicize text other than scientific names.
- Do not use manual line breaks or tabs. Use the ruler in a word-processing program to create hanging indentations instead.
- List references in alphabetical order, except see below for listing multiple "et al." references in chronological order. Example: Jones comes before Smith.
- References cited in the text as "Smith 2001*a,b*" should be cited in the same order here. Example: Smith 2001*a* preceded Smith 2001*b*.
- If there are multiple same-year references by an author with various coauthors, list single-author references before those with a coauthor. List two-author references first and multiple coauthors last. Example: Smith 1998 precedes Smith and Jones 1998, followed by Smith et al. 1998 is last.
- If the same author collaborated with different coauthors during the same year, order by the name of the junior authors. Example: Smith and Bell 1998 comes before Smith and Jones 1997. Example: Smith, Bell, and Brown 2000 precedes Smith, Bell, and Jones, 2001.
  - If there are multiple "et al." references by the same author, list them in chronological order regardless of the number of authors or their identity. Example: Smith, Bell, Zundermeier, and Jones 1848 comes before Smith, Abrams, and Bell 1856.
  - Author names should be presented as "Smith, A.B." or "Smith, A.B., III." Spell out all author surnames, even if they are repeated from a previous reference.
  - Always insert a comma before the "and" that precedes the last author. Example: "Smith, A.B., and J.F. Bell" or "Smith, A.B., R.Q. Zundermeier, and J.F. Bell."
  - Follow author names with the year of publication. Example: "Smith, A.B. 1769." If you are using a reprinted version, indicate this by listing both years. Example: "Smith, A.B. 1769 [reprinted 1996]." For articles that are accepted, state "In press" in place of the year and provide the journal name after the paper title. Example: "Smith, A.B. In press. How green is your frog? Herpetological Miscellanea."
- Formatting for most common types of references (also see examples below)
  - Article in a print journal
    - Provide the names of journals in full. Do not present issue number. List complete page numbers. Example: "Journal of Herpetology 32:246–257."
    - Example: Baird, T.A. 2004. Reproductive coloration in female collared lizards, *Crotaphytus collaris*, stimulates courtship by males. *Herpetologica* 60:337–348.
  - Article in an online-only journal
    - Follow the format above but also provide the URL for the article.
    - Example: O'Donnell, R.P., and A.P. Rayburn. 2011. Biases in the protection of peripheral anuran populations in the United States. *Herpetological Conservation and Biology* 6:91-98. [http://www.herpconbio.org/Volume\\_6/Issue\\_1/ODonnell\\_Rayburn\\_2011.pdf](http://www.herpconbio.org/Volume_6/Issue_1/ODonnell_Rayburn_2011.pdf).
  - Chapter in a book
    - Provide the publication country and state (if necessary to identify the publisher properly), but not the city.
    - Example: Smith, A.T. 1994. Systematics of frogs and toads. Pp. 52–65 in J. Black, and M. Lee (Eds.), *Systematics of Amphibians and Reptiles*. University of Kansas Press, USA.

- Edited book
  - Provide the publication country and state (if applicable), but not the city.
  - Example: Gans, C., A. d'A. Bellairs, and T. S. Parsons (Eds.). 1969. *Biology of the Reptilia*, Volume 1, Morphology A. Academic Press, USA.
- Book
  - Provide the publication country, but not the city.
  - Example: Smith, A.T., and J. Jones. 1995. *Physiology of Amphibians and Reptiles*. Kluwer, Netherlands.
- Thesis or dissertation
  - Indicate the degree and university; include state only when needed to distinguish university from others with similar names.
  - Example: Smith, A.T. 1991. *Behavioral Ecology of Turtles*. Ph.D. Dissertation, Federal University of Sao Paulo, Brazil.
- Software
  - Provide a named citation to the definitive description of the software, if given in the text.
  - Example: for Program MARK: White, G.C., and K.P. Burnham. 1999. Program MARK: Survival estimation from populations of marked animals. *Bird Study* 46 Supplement:120-138.
- Non peer-reviewed technical report
  - Use only where unavoidable.
  - Example: USGS (United States Geological Survey). 1998. National water quality assessment (NAWQA) program, water quality in the Ozark plateaus. Circular 1158.
- Non peer-reviewed print media
  - Use only where unavoidable.
  - Example: Guam Economic Review. 1998. Statistical highlights. *Guam Economic Review* 20:11–32.
- Online reference
  - Use WebCite® ([www.webcitation.org](http://www.webcitation.org)) to archive the web site. Provide the regular citation, followed by the archival site provided by the service.
  - Example: Frost, D.R. 2004. Amphibian species of the world: an online reference. Available at <http://research.amnh.org/herpetology/amphibia/index.html>. American Museum of Natural History, New York, USA. Archived by WebCite at <http://www.webcitation.org/T8g8UVs14> on 4 July 2011.
- Sample references:

Baird, T.A. 2004a. *Crotaphytus collaris* (Eastern Collared Lizard). Homing after displacement. *Herpetological Review* 35:167.

Baird, T.A. 2004b. Reproductive coloration in female collared lizards, *Crotaphytus collaris*, stimulates courtship by males. *Herpetologica* 60:337–348.

Beaupre, S.J. 2002. Modeling time-energy allocation in vipers: Individual responses to environmental variation and implications for populations. Pp. 463–481 in G. Schuett, M. Höggren, M.E. Douglas, and H.W. Greene (Eds.), *Biology of the Vipers*. Eagle Mountain Publishing, LC, Utah, USA.

Beaupre, S.J., and D. Duvall. 1998. Integrative biology of rattlesnakes: Contributions to biology and evolution. *BioScience* 48:531–538.

Smith, A.T. 1991. *Behavioral Ecology of Turtles*. Ph.D. Dissertation, Federal University of Sao Paulo, Brazil.

Frost, D.R. 2004. Amphibian species of the world: an online reference. Available at <http://research.amnh.org/herpetology/amphibia/index.html>. American Museum of Natural History, New York, USA. Archived by WebCite at <http://www.webcitation.org/T8g8UVs14> on 4 July 2011.

Gans, C., A.d’A. Bellairs, and T.S. Parsons (Eds.). 1969. *Biology of the Reptilia*, Volume 1, Morphology A. Academic Press, New York, USA.  
 Greene, H.W. 1997. *Snakes: The Evolution of Mystery in Nature*. University of California Press, USA.  
 USGS (United States Geological Survey). 1998. National water quality assessment (NAWQA) program, water quality in the Ozark plateaus. Circular 1158.

**Appendices.**—Detailed information not essential to the text (such as “*Specimens Examined*” in taxonomic papers) may be placed in appendices, which follow the Literature Cited section. When used, APPENDIX (numbered I, II, III as needed) would be a primary heading, and *Specimens Examined* would be a secondary heading.

**Citing Tables and Figures in the Text**

- Capitalize but do not abbreviate the word “Table” (e.g., Table 1).
- Capitalize and abbreviate word "figure" (e.g., Fig. 1); except spell out at beginning of a sentence.
- When two figures or tables are cited, use a comma to separate numbers (Figs. 6, 7; Tables 2, 3).
- When a range of figures or tables are cited in the text, use an en dash (Figs. 6–9; Tables 2–4).

**Tables.**—Each table should be double-spaced and on a separate sheet. The table legend should follow the table number and should be on the same page as the table. Legends should not be indented, and should begin with the table number in small caps, followed by a period and an em dash (see example below).

Within the table, only the initial letter of the first word is capitalized (e.g., “Grand average”). Use ruled lines only above and below heading row and at end of table, to isolate column labels if needed, and where separate groups of columns require additional clarification. Refer to a recent issue of the journal for further examples and guidance. Footnotes (indented and indicated by superscripted symbols or numbers) may follow a table when detailed information is needed (such as levels of statistical significance); the footnotes are placed below the table and are indented.

- Sample table:

TABLE 1.—Sample table and legend format for papers published in *Herpetologica* and *Herpetological Monographs*. Note the formatting details (ruled lines, spacing around symbols, and footnote superscript and indentation).

Variable	<i>Genus species</i> <sup>a</sup>		<i>Genus species</i>	
	Mean ± 1 SD	Min–max	Mean ± 1 SD	Min–max
Variable 1	123 ± 45	100–175	321 ± 54	300–375
Variable 2	223 ± 55	200–275	421 ± 65	400–475
Variable 3	323 ± 65	300–385	521 ± 75	500–650

<sup>a</sup> Measurements combined from Author1 (year) and Author2 (year).

**Figures.**—Figure legends should appear on a separate page following Tables. An electronic file of each figure should be submitted along with the manuscript. In preparing graphics, follow the guidelines from Allen Press (summarized below). Before submission, it can be helpful to print figures and inspect them for clarity and size (i.e., to fit within the journal print column).

- Figure legends
  - Grouped together on separate page, indented, double spaced, with three lines of space between legends
  - The word “FIG.” is abbreviated in small caps, followed by number, period, em dash with no spaces, and then the rest of the legend (e.g., FIG. 1.—Mean weekly temperatures...)
  - Legend content: Briefly describe the content of the figure; include names of organisms as needed (e.g., genus, species, etc.). A short sentence at the end of the legend may be helpful in pointing out the major pattern or take-home message of a figure; avoid duplicating text in the manuscript that refers to the figure.
- Figure graphics
  - For graphics specifications (figure styles, electronic file types, resolution, color mode, fonts, compression, etc.), follow the guidelines from Allen Press ([Guide to Digital Art Specifications](#)).
    - Summary of key specifications: grayscale or color images at 300 dpi, line art at 1200 dpi, combination of both at 600 dpi, CMYK color (RGB files are accepted but will be converted to CMYK and may undergo color shifts), TIFF or EPS format or native files for several common programs (e.g., Acrobat, Illustrator, Photoshop, Corel Draw, and others)
    - Be sure to check colors carefully because changing color mode can alter them.
  - Figures should be planned to fit the width of one or two columns in *Herpetologica* or *Herpetological Monographs*.
    - Final dimensions of graphics and artwork must not exceed 21.5 × 28 cm.
    - After reduction, lettering in figures should be 1.5–2.0 mm high and decimals should be clearly visible.
  - If a figure includes more than one image, then the images should be arranged together in one electronic file, with adjacent images butted together, with each image identified by a letter (A, B, C); the parts should be identified clearly in the figure legend.
  - Include a scale to indicate distance or size whenever appropriate.
  - All axes of graphs should be labeled, with a larger font size used for major labels than for minor or quantitative labels.
  - Abbreviations on figures should follow the conventions given in these guidelines, such as for measurement units and statistical abbreviations.

**Footnotes.**—Footnotes are used only to denote present address of an author, e-mail address for correspondence, and to clarify content of tables. Other footnotes are discouraged.

### *General Style and Usage Guidelines*

This section provides general guidance for common word usage, style, punctuation, the use of numbers and mathematical symbols, abbreviations, etc.

**Scientific and Standard Names.**—We now capitalize standard names in *Herpetologica* or *Herpetological Monographs*, following the recommendation of Crother (2008; Herp. Circular 37, SSAR). For standard English names, we recommend using those listed in Crother (2008; Herp. Circular 37, SSAR) for North American taxa and in Liner and Casas-Andreu (2008; Herp. Circular 38, SSAR) for Mexican taxa. Use an appropriate reference, if available, for standard names of taxa in other regions of the world. These lists may also be used for scientific names, or other scientific names that are valid under the [International Code of Zoological Nomenclature](#) may be used as needed for each paper.

Scientific names of genera and species: Genus is capitalized and italicized; specific epithet is lower case and italicized (e.g., *Crotalus atrox*); but not italicized when in a line of other italicized text, such as in secondary or tertiary headings. Examples:

- In text: Western diamond-backed Rattlesnake (*Crotalus atrox*)
- In a heading: *Analysis of paternity in Crotalus atrox*

### ***Other Common Word Usage***

- *Acknowledgments* vs. *acknowledgements*: “Acknowledgments” without an “e” after the “g” is used in American English, and in *Herpetologica* papers, whereas British English uses “acknowledgements” with the “e” after the “g.”
- *Affect* vs. *effect*: “Affect” is usually used as a verb and means “to influence, or have an effect on” whereas “effect” is usually used as a noun that means an outcome or result.
- *Because* vs. *since*: “Because” usually means “for the reason that” whereas “since” usually means “from a time in the past until now.”
- *Data*: The word “data” is plural; “datum” is singular (e.g., The data are presented; The data showed that...; not The data is...)
- *Different from* vs. *different than*: “Different from” is usually preferable, as that usage is consistent with how the word “differ” is typically used (e.g., Item A differs from Item B).
- *Farther* vs. *further*: “Farther” indicates a physical or measurable distance; “further” indicates a figurative distance, such as in advancing, elaborating, or developing an explanation or argument.
- *Infer* vs. *imply*: “Infer” means to deduce or conclude; “imply” means to hint or suggest.
- *That* vs. *which*: Usually, “that” is used with restrictive clauses, and “which” is used with nonrestrictive clauses. Example: The snakes that we captured had all eaten frogs, which are common in the area. (The word “that” restricts the snakes being discussed to those that we captured, whereas the word “which” does not restrict the frogs to any particular ones and simply gives additional information about the frogs being discussed.)
- *Therefore* vs. *thus*: “Therefore” usually means “as a consequence” or “for these reasons” whereas “thus” usually means “in this way” or “in that way.”
- *While* vs. *although*: “While” usually means “at the same time” whereas “although” usually means “in spite of the fact that” or “even though.”

### ***Dashes and Hyphenation***

- “Non” words are not hyphenated (e.g., Nonparametric, not Non-parametric)
- Other common prefixes such as neo-, co-, re-, are not hyphenated except where necessary to prevent misreading or ambiguity (e.g., co-occur)
- Avoid using long hyphenated phrases as adjectives
- Use hyphen (dash) for modifiers and two-word phrases used as an adjective (e.g., 20-ml syringe, 24-hour clock, *t*-test results, or life-history strategy, but 20 ml of water or the life history of bullfrogs)
- Use en dash in the place of the minus sign; to replace the word “to” in ranges of numbers or years, as in snout–vent length and 15–20 g; and in hyphenated phrases in which both sides are equal in importance (e.g., true–false, presence–absence, product–moment correlation).
- Use an em dash to separate independent clauses for emphasis within a sentence, as in “The town—more of a village—is the nearest place to buy supplies.” Alternatively, commas can be used where emphasis is not needed, as in “The town, which is more of a village, is the nearest place to buy supplies.” Also use an em dash to separate a tertiary heading from the initial text.

### ***Italics***

- Used only for names of genera and species, and for appropriate leading terms (e.g., *Key words*) and headings
- Common foreign words are not italicized (e.g., et al., not *et al.*).
- Do not use italics for emphasis; instead, reword sentences to provide appropriate emphasis.

***Numbers***

- Always spell out a number used at the beginning of a sentence (e.g., Twenty species...).
- Spell out all whole numbers less than 10, except as noted below
- Use Arabic numerals:
  - For numbers of 10 or greater
  - When the number is followed by a unit of measurement (e.g., 9 mm; 30°C), except for generalized descriptions of time, numbers of specimens examined, or similar descriptions (examples: we radio-tracked the snakes for six weeks; we dissected nine adult male specimens)
  - When the number is a designator (e.g., Experiment 2)
  - When the number is separated by a dash, as in a range of values (e.g., 2–3 scutes)
  - When numbers of 10 or more are compared to numbers less than 10 within a sentence (e.g., The 7 frogs, 9 salamanders, and 20 lizards that were collected...)
  - For decimal values; if decimal value is less than one, use zero before decimal (e.g., 0.5, not .5)
- Numbers with four digits are not separated by comma (e.g., 5280)
- Numbers with five or more digits use commas (e.g., 15,280)
- Numbers or letters in a list should be fully enclosed in parentheses; e.g., (1), (2), (3); not 1), 2), 3).
- Geographic coordinates can be in any standard format (e.g., decimal degrees, or degrees minutes seconds), without spaces between numbers (e.g., 38°57'56.4"N, 95°13'35.9"W; datum = WGS84). Specify the datum for the geographic coordinates.

***Mathematical Signs and Symbols***

- Punctuating mathematical symbols
  - Mathematical operators are separated by spaces; e.g., equal sign (=), < or > signs, and division (/) sign are separated on both sides by spaces (e.g.,  $\alpha = 0.05$ , not  $\alpha=0.05$ ;  $P < 0.025$ , not  $P<0.025$ )
  - Plus sign or minus sign (en dash) separated from text by spaces when used to indicate mathematical operation (e.g.,  $1 + 1 = 2$ ), but no space is used when the symbol indicates positive or negative values (e.g., +2 is a positive value and -2 is a negative value).
  - Plus-or-minus sign ( $\pm$ ) is separated from text by spaces when used to indicate a mean  $\pm$  SE (e.g.,  $12 \pm 0.02$ ; not  $12\pm 0.02$ ), except that no space after plus-or-minus sign when used to indicate positive or negative values (e.g.,  $\pm 2$  indicates a positive or negative value).
  - Symbols for “similar to” or “nearly equal to” not followed by space (e.g.,  $\sim 12$ ,  $\approx 24$ )

***Measurement Units and Abbreviations***

- Follow the International System of Units (SI), and use SI abbreviations in the text, tables, and figures for units of measured variables or data; however, spell out units of time when using them as generalized descriptions, numbers of specimens examined, or similar descriptions, not as measured data (examples: we measured six specimens; our study spanned seven weeks). Common measurement units and their abbreviations include:
  - Millimeters = mm
  - Centimeters = cm
  - Meters = m
  - Kilometers = km
  - Milliliters = mL
  - Liters = L
  - Grams = g (not gm)
  - Seconds = s
  - Minutes = min
  - Hours = h
  - Days = d (or day)
  - Week = wk

- Month = mo
- Years = yr
- Time of day: use 24-hour clock (e.g., 1300 h)
- Dates: use Day Month Year with no commas (e.g., 7 May 2006)
- Temperatures: Celsius, with a degree symbol and no spaces (e.g., 30°C, no longer 30 C).
- Statistical abbreviations
  - $n$  = sample size; lower case and italicized
  - $\bar{X}$  = mean; capitalized and italicized; or use word "mean"
  - SD = standard deviation, SE = standard error; often indicated as  $\pm 1$  SD,  $\pm 3$  SE, etc.
  - $r$ ,  $r^2$ ,  $T$ ,  $F$ ,  $t$  (as in  $t$ -test),  $U$ ,  $W$  = statistical symbols; all italicized
  - Greek letters (e.g.,  $\chi$  and  $\chi^2$ ) not italicized
  - df = degrees of freedom; not italicized
  - $P$  = probability; capitalized and italicized
  - NS (not significant); capitalized, not italicized, no periods between letters
- Other common abbreviations
  - ca. = "circa" or "around"; lower case, not italicized, followed by period
  - cf. = "compare with"; lower case, not italicized, followed by period
  - e.g., = "for example"; lower case, not italicized, period after each letter, followed by comma
  - i.e., = "that is"; lower case, not italicized, period after each letter, followed by comma
  - N = chromosome number; capitalized, not italicized
  - no. = number; lower case, not italicized, followed by period
  - Ph.D., M.A., M.S., M.Sc., A&M
  - sp. nov. and gen. nov. = "new species" and "new genus"; lower case, no comma before these terms
  - SVL = snout–vent length; define this at first usage
  - vs. = "versus"; can be abbreviated in lower case without italics, or can be spelled out
- Do not abbreviate "male" or "female," "personal communication," dates, or undefined terms.
- States are usually abbreviated using standard postal abbreviations, but can be spelled out; use must be consistent throughout manuscript

### *Special Considerations for Taxonomy Papers*

Consult the International Code of Zoological Nomenclature (<http://www.iczn.org>) for guidelines about the content of taxonomic descriptions. The information below is intended to standardize the overall style and format of taxonomic descriptions appearing in *Herpetologica* and *Herpetological Monographs*. In some cases, it may be preferable or necessary to diverge from this format. In order to facilitate comparisons of species descriptions appearing in recent literature on the group being studied, authors are encouraged to match closely the style, sequence, and terminology of other recent or major works on that group.

Taxonomy papers in *Herpetologica* and *Herpetological Monographs* generally follow the standard sequence of sections (Introduction, Materials and Methods, Results, and Discussion). In the Materials and Methods section, include references to standardized or recently used measurements (e.g., formulae for anuran webbing and tadpole mouth parts), format, and terminology, as well as definitions of all museum abbreviations or codes used in text (for a listing of these codes, see <http://129.128.82.178/ASIH/Codes.htm>). In the Results section, describe the results of analyses (e.g., morphometric, morphological, molecular) that support the proposed taxonomy. The formal description(s) may be included in the Results section, instead of a Results section, or may follow the Discussion as a separate section entitled Species Account(s), or Systematic

Accounts for describing higher taxa. As with the Results section, the Discussion section of taxonomic papers may be used, or in some cases may not be appropriate.

In studies where the discovery and description of the new species is based on a broad review of molecular or morphological variation in a group (e.g., revision of a species complex or analysis of variation in widespread species), it is preferable for such a review to be presented in the manuscript prior to the presentation of the formal species description(s), in which case the analysis of variation can serve as a justification for the recognition of new species.

- In the example below, note that only new name(s) are given in bold (i.e., genus and species in bold if both are new names; only specific epithet in bold if the genus is already established and only the species is new). Other formats may be used as needed; see recent issues of journal for additional examples in relevant taxa.

SPECIES DESCRIPTION

*Uraeotyphlus* ***gansi*** *sp. nov.*

(Figs. 1–4, Tables 1, 2)

*Uraeotyphlus malabaricus* (Beddome, 1870) in part; Boulenger (1882:92)

*Uraeotyphlus malabaricus* (Beddome, 1870) in part; Taylor (1968:697–700)

*Uraeotyphlus malabaricus* (Beddome, 1870) in part; Pillai and Ravichandran (1999:64–66, fig. 31, map VII)

*Uraeotyphlus oxyurus* (Duméril and Bibron, 1841) in part; Pillai and Ravichandran (1999:74–77, map IX)

*Holotype*.—Museum catalog number (and original field number, if available), sex, date, locality information, collector (Fig. reference).

*Paratypes*.—May be organized by sex or geographical locality, whichever is most concise and clear. See recent journal issues for examples using relevant taxa.

*Referred specimens*.—List nontype specimens examined here if the list is brief, or in an Appendix if the list is lengthy.

*Diagnosis*.—Provide a concise summary of the characteristics of the species that distinguish it from other species. Include a section of explicit diagnostic comparisons to other species that will convince the reader of the unique nature of the new species. These may include diagnostic comparisons to related species, sympatric species, or species with which it may be confused. The diagnosis may be given in telegraphic style.

*Description*.—A general description may follow the diagnosis, but is not required. This section should provide concise descriptions of as many characteristics as needed to give a clear mental picture of the organism. The description may also be given in telegraphic style.

*Description of holotype*.—An explicit description of all aspects of the type specimen, following the features, level of detail, and general style and format of other recent, important literature on relevant taxa (e.g., a description of a new species of *Eleutherodactylus* would do well to match the general format and terminology of Campbell and Savage, 2000, *Herpetological Monographs* 14:186–292). Descriptions should be prepared using telegraphic style. Include here (as per style for taxon under study): measurements of the holotype, color in preservative, and other aspects of the holotype deemed important. Note that although it is common to give ratios of measurements in species descriptions, it is important to give linear measurements in addition to the ratios. A substantial literature has demonstrated that ratios usually do not correct for variation due to sex, age, or size, and can in fact render data sets entirely uninterpretable (e.g., Packard and Boardman, 1999, *Comparative Biochemistry and Physiology Part A*, 122:37–44). Hence, because ratios in species descriptions are intended to describe variation among specimens and to be useful for future analyses, it is important to give the linear values or summary statistics for them.

*Variation.*—A summary of evident variation among the holotype, paratypes, and other referred specimens, including reference to sexual dimorphism, geographic variation, or ontogenetic changes. Morphometric variation is usually best summarized in a table.

*Color in life.*—A brief description of color in life, if known. In some cases, descriptions of color may be presented best in telegraphic style. A separate section may be used if needed for color in preservative.

*Etymology.*—Brief description of the origin and meaning of the new name, and perhaps the rationale for choosing it.

*Distribution.*—Relevant summary of and commentary on the distribution, habits, habitats, life history, and ecology of the new taxon. Alternate heading names may be used, such as "Distribution and ecology" or "Natural history," or such headings may be used in addition to one for distribution.

*Tadpole.*—Description of the tadpole or larval stage, if known and relevant, of the new species of amphibians, following recent style and format for the group being described.

*Remarks.*—Concise discussion of any additional aspects of the new taxon that are deemed important, such as evolution and phylogenetic relationships.

*Appendices.*—Appendices should be used for listing specimens examined when this involved a large series of specimens. Include locality data (but not date of collection) and museum numbers of all specimens of both the new species and comparative material used in the study and diagnoses.