

HERPETOLOGICA AND HERPETOLOGICAL MONOGRAPHS

INSTRUCTIONS FOR AUTHORS – 2009 UPDATE

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GENERAL INFORMATION

Herpetologica and *Herpetological Monographs* publish original papers dealing largely or exclusively with the biology of amphibians and reptiles. *Herpetologica* and *Herpetological Monographs* do not publish notes or short communications, although short manuscripts may be considered for *Herpetologica* by the editor on a case by case basis. Manuscripts will be judged on the appropriateness of 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. 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.

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/or 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*, to go <http://herpetologica.allentrack.net>.

For *Herpetological Monographs*, to go <http://herpetologicalmonographs.allentrack.net>.

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, PDF, 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 an revised and corrected manuscript file and separate graphics files.

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 proof 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. Authors are invoiced for line charges; until invoices are paid, subsequent manuscripts from all participating authors will not be considered for review.

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.

Page Charges

Authors who are members of the Herpetologists' League are not required to pay full page charges, although voluntary payment to help reduce printing costs is encouraged, especially for papers that exceed 15 printed pages. Authors who are not members of the Herpetologists' League will be expected to pay full page charges. In the case of multi-authored papers, at least one of the authors must be a member of the society before a manuscript is finally accepted in order to eliminate the requirement of page charges. All authors are assessed costs for any special handling that may be required for their illustrations, such as color photographs.

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, you may also examine the most recent issue of *Herpetologica* or *Herpetological Monographs* or contact the Editor.

In preparing graphics, follow the guidelines below and those provided by Allen Press (www.allenpress.com, under Resources, FAQs and How To, Prepare Digital Art, http://www2.allenpress.com/allen_press/apguides/Digital_Art_Spec.pdf).

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 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 program)
- 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), acknowledgments, literature cited, appendices, tables, figure legends, figures.

Title Page

The 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
- Addresses are centered, italicized, major words capitalized, with postal codes used for states; countries 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

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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 word 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 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, 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 sets 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 D. Smith*” not “*Acknowledgements.—We would like to thank Daphne Smith.*”)

In-Text Citations and the Literature Cited section

The Literature Cited section follows the acknowledgments. All references cited in the text must be listed in the Literature Cited section, and vice versa. Check that dates and spelling of citations in text match the Literature Cited section. References are double spaced and in alphabetical order according to the author’s surname.

- Literature citations in the text
 - Literature citations in parentheses, in alphabetical order of first author's surname
 - Comma between authors and year of publication; semicolon between different citations
 - One or two authors; spell out each name (e.g., Moon and Tullis, 2006)
 - Two or more citations by the same author for the same year of publication are designated by lowercase, italicized letters without spaces and separated by a comma (e.g., Rand, 1967*a,b*)
 - Three or more authors; first author’s name spelled out, followed by et al. (e.g., Moon et al., 2002; note that et al. is not italicized)

- Example: Rattlesnakes are excellent for subjects for research in many areas of biology (Andrade et al., 2004; Beaupre and Duvall, 1998; Beck, 1995; Klauber, 1972; Schaeffer et al., 1996).
- Articles that are accepted and in the process of being printed cited as (Author, in press)
- General formatting for all reference types
 - Author surnames in small caps
 - Initials (after surname) in large caps, separated by periods and spaces.
 - Always insert comma before the “AND” that precedes last author
 - Suffixes: II and III in large caps; JR. and SR. in small caps; all preceded by a comma (e.g., SMITH, A. F., JR., and SMITH, A. F., III).
 - We no longer use dashes for repeat authors. Spell out all author surnames, even if they are repeated from a previous reference; i.e., do not use 3/m dash for repeated author name(s).
 - List complete pages numbers; do not truncate numbers (e.g., *Herpetologica* 64:246–257, not ... 64:246–57)
 - For articles that are accepted and in the process of being printed, state “In press” in place of the year; give the complete name of the journal.
 - Articles that are not published or in press should not be cited in the text or listed in the Literature Cited.
 - References formatted with hanging indent of 0.25 inch or 0.625 cm; no manual line breaks or tabs within a reference
- Formatting for most common types of references (also see examples below)
 - Journals
 - AUTHOR(S). Year. Paper title. Journal Name Vol:pp–pp.
 - No italics or bold
 - No abbreviations. **Spell out all journal names.**
 - No period after journal title
 - Volume number:page numbers; no space after colon
 - Examples listed below: Baird (2004*a,b*)
 - Books, dissertations, and theses
 - AUTHOR(S). Year. Book Title. Publisher or University, City, State (if applicable), Country.
 - No abbreviations. **Spell out all book publisher names.**
 - Do not include the number of pages, except in special cases.
 - All major words start with a capital letter
 - E.g., Springer, New York, New York, USA (Note that there are no periods in USA)
 - All United Kingdom countries abbreviated as UK (Note that there are no periods in UK or other country abbreviations)
 - Examples listed below: Etheridge (1960), Greene (1997)
 - Edited book
 - EDITOR(S). (Ed. or Eds.). Year. Book Title. Volume number (if applicable), Volume Title (if applicable). Publisher, City, State (if applicable), Country.
 - All major words capitalized in book title
 - All editor names: Initials first with periods and spaces, then last name
 - (Ed. or Eds.) follows editor name(s); “Ed.” and “Eds.” capitalized, not italicized
 - Example listed below: Gans et al. (1969)
 - Chapter in edited book
 - AUTHOR(S). Year. Chapter title. Pp. XXX–XXX. *In* D. R. Editor name(s) (Ed. or Eds.), Book Title. Publisher, City, State (if applicable), Country.
 - Only first word capitalized in chapter title; All major words capitalized in book title
 - The word “In” is italicized; not followed by a colon or comma
 - All editor names: Initials first with periods and spaces, then last name

- (Ed. or Eds.) follows editor name(s); “Ed.” and “Eds.” capitalized, not italicized
- Example listed below: Beaupre (2002)
- Internet sources
 - AUTHOR. Year. Title of site. Available at URL. Reference may include “Accessed on Date” at end, but this is not required
 - URL not underlined (i.e., no hyperlink)
 - If known, the publisher or organization, along with city, state, and country, may be listed after URL.
 - Example listed below: Frost (2004)
- For other reference formats follow formatting in a recent journal issue or contact the editor
- Order of citations and references
 - List references by a single author before a reference by that author and a coauthor, and list those references before any references by that first author with multiple coauthors.
 - List references with one or two authors in alphabetical order of surname.
 - List references with three or more authors (i.e., the same first author with two ore more coauthors) in chronological order, so that the order in the Literature Cited section matches the order of citations in the text. Note that references with three or more authors should be ordered chronologically without regard to the number of authors. See examples below.
 - Examples:

<u>In-text citation:</u> (Smith, 2001 <i>a,b</i>) (Smith and Bell, 1998) (Smith and Jones, 1997) (Smith et al., 1996, 2000, 2001)	<u>Order in Literature Cited section:</u> Smith 2001 <i>a</i> Smith 2001 <i>b</i> Smith and Bell, 1998 Smith and Jones, 1997 Smith, Jones, and Bell, 1996 Smith, Bell, Jones, and Brown, 2000 Smith, Bell, and Jones, 2001
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- Sample references:

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

BAIRD, T. A. 2004*b*. 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, Eagle Mountain, Utah, USA.

BEAUPRE, S. J., AND D. DUVALL 1998. Integrative biology of rattlesnakes: Contributions to

biology and evolution. *BioScience* 48:531–538.

ETHERIDGE, R. E. 1960. The Relationships of the Anoles (Reptilia: Sauria: Iguanidae): An Interpretation Based on Skeletal Morphology. Ph.D. Dissertation, University of Michigan, Ann Arbor, Michigan, USA.

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, New York, USA.

GANS, C., A. d'A. BELLAIRS, AND T. S. PARSONS (Eds.). 1969. *Biology of the Reptilia*, Volume 1, Morphology A. Academic Press, New York, New York, USA.

GREENE, H. W. 1997. *Snakes: The Evolution of Mystery in Nature*. University of California Press, Berkeley, California, 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 examples in 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> ^a		<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

^a 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 (linked and summarized below). Before submission, authors 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 ([How To Prepare Digital Art](#)).

- Summary of key specifications: halftone and color images at 300 ppi, line art at 1200 ppi, CMYK color, 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

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. Note that standard names are not capitalized in *Herpetologica* or *Herpetological Monographs*. 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 = capitalized and italicized; specific epithet = 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 phrase 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; 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)

- 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).

Mathematical Signs and Symbols

- Punctuating mathematical symbols
 - Equal sign (=) and < or > signs are separated from text 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 ± 0.02 ; not 12 ± 0.02), except that no space after plus-or-minus sign when used to indicate positive or negative values (e.g., ± 2 indicates a positive or negative value).
 - Symbols for “similar to” or “nearly equal to” not followed by space (e.g., ~ 12 , ≈ 24)

Measurement Units and Abbreviations

- Measurement units: Follow International System of Units (SI), and use SI abbreviations in the text, tables, and figures. 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 space after number and no degree symbol (e.g., 30 C, not °C).
- Statistical abbreviations
 - n = sample size; lower case and italicized
 - X = mean; capitalized and italicized
 - SD = standard deviation, SE = standard error; often indicated as ± 1 SD, ± 3 SE, etc.
 - r , r^2 , T , F , t (as in t -test), U , W = statistical symbols; all italicized
 - Greek letters (e.g., χ and χ^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. or 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/iczn>) 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 and/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 and/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 and/or geographical locality, whichever is most concise and clear. See recent journal issues for example using relevant taxon.

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 salient characteristics of the species by which it may be referred to a particular taxon. Include short descriptions of the unique characteristics and/or a list of descriptions of characters commonly used in systematic treatments of the relevant taxonomic group (e.g., ventral scales in snakes, costal grooves in salamanders). 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 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.

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.—An brief description of and 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 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.