

# PROCEEDINGS OF THE NORTH AMERICAN CRANE WORKSHOP

## Author Guidelines

(Revised November 2021)

Manuscripts submitted for publication in the *Proceedings of the North American Crane Workshop* must be written in English and follow the style and format guidelines provided in these Author Guidelines. **Papers not in this style or format will be returned without review.** Submit manuscripts by email to the Editor(s)-in-Chief (EIC) indicated in Instructions to Authors on the North American Crane Working Group website ([www.nacwg.org](http://www.nacwg.org)). If you have any questions related to these requirements, contact the Technical Editor (TE) at [info@nacwg.org](mailto:info@nacwg.org). These guidelines are based on Journal of Wildlife Management and Wildlife Society Bulletin Author Guidelines (Krausman et al. 2016), but there are some specific differences to note.

### SUBJECT MATTER

The North American Crane Working Group (NACWG) accepts manuscripts on original research on the two species of North American cranes, i.e., sandhill and whooping cranes. Papers on other crane species may be accepted at editorial discretion if their subject matter is applicable to issues shared by North American cranes or the study involves cranes in captive propagation facilities. Papers in which bird species other than cranes are the primary topic will not be considered for publication in the *Proceedings*. NACWG may also accept a limited number of less research-oriented manuscripts on specific crane management and conservation issues, public relations, method protocols, or history; these articles are usually most suitable as brief communications (see below). Presentation of the work at the North American Crane Workshop is not a requirement for publication in the *Proceedings*.

## **PREVIOUS PUBLICATION**

Papers appearing in *Proceedings of the North American Crane Workshop* are peer-reviewed publications and as such cannot be published in significantly the same form elsewhere. Prior publication or concurrent submission to other reviewed journals precludes review or publication in the *Proceedings*. 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 >200 copies.
3. Has been published as part of a numbered series by an agency.
4. Is a symposium proceeding. The NACWG will consider symposium proceedings on a case-by-case basis.

A manuscript is not considered published if it:

1. Is a thesis or dissertation, but this needs to be cited in the manuscript.
2. Is a 1-paragraph abstract of a talk given at a professional meeting or symposium.
3. Is an unpublished report required by an agency or sponsors and not distributed as part of a numbered series or in other ways that might result in accession by public libraries.

## **COPYRIGHT**

If a manuscript not in the public domain is accepted for publication, authors or their employers transfer copyright to NACWG. If the manuscript is authored by a United States government employee as part of his or her official duties, the manuscript is in the public domain and is not copyrightable. 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. 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, NACWG retains copyright. Reproduction of articles published in *Proceedings of the North American Crane Workshop* is permissible for non-commercial purposes as long as the source is cited.

## **PAGE CHARGES**

Page charges are mandatory for all manuscripts, and the submitting author is required to accept responsibility for page charges should the manuscript be accepted for publication. Page charges are as follows (as of April 2016):

- \$50 per printed page
- additional \$50 per printed color page
- authors with no agency or organizational funds to cover cost of publication may request a waiver of charges at the time of manuscript submission.

NACWG also reserves the right to charge \$25 per abstract for printing of abstracts of papers that were presented at the Workshop but not published in the *Proceedings*.

## **REVIEW PROCESS**

Upon receipt, the Editor(s)-in-Chief (EIC) will examine the manuscript for proper style, format, and appropriate subject matter. If style and format do not comply with author guidelines, the manuscript will be returned for revision before being sent to reviewers. If subject matter is inappropriate, the manuscript will be returned to the author with an explanatory letter.

The manuscript will be assigned to  $\geq 2$  reviewers. The EIC will add additional comments and recommend to the author: 1) publish without revision (extremely rare), 2) return to author for minor revision 3) return to author for major revision, or 4) rejection. Several revisions may be

necessary before the EIC accepts the paper for publication. Authors must submit revisions within the time stated in the decision letter (usually 3 or 6 months). Final acceptance or rejection of manuscripts is decided by the EIC.

As the last step before publication, the Technical Editor (TE), assisted by proofreaders, may need to make additional changes to correct errors and resolve any remaining style and formatting issues. These will usually require additional correspondence between the authors and TE; it is therefore important that the author conforms to these author guidelines to minimize extra work in this final step before publication. Final or near-final page proofs will normally be sent to the author for final approval along with an invoice for page charges. Authors will be given only a short period (48-120 hours) to review the proofs and bring any errors to the attention of the TE. Only essential changes are to be made to page proofs.

## **COVER LETTER**

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 the journal. The statement ensures that data and findings have not been published previously or submitted elsewhere for simultaneous consideration. Authors requesting waiver of page charges because of no agency or organizational funds to cover cost of publication should do so in the cover letter.

## **FORMAT**

A manuscript must adhere to these author guidelines before it will be approved and sent out for review (see Format Template, Appendix C). There are two categories of papers:

- Full Papers (typically Research Papers) are generally more than 3,000 words and 5 printed pages in length. Approximately 2.5 double-spaced manuscript pages will result in

1 printed page in the *Proceedings*. Instructions presented in these author guidelines generally apply to all submissions but pertain specifically to Research Papers.

- Brief Communications have lower word and page counts and have the following format differences: There is no running head. Note that rules for length of abstract (below) will result in a comparatively shorter abstract than that of full papers. The only main headings are usually Acknowledgments and Literature Cited; however, if needed for clarity, some sections of text may be preceded by a heading using the Subheading format. Otherwise, style and format of Brief Communications are the same as for Full Papers.

### **Page Format**

Email files to the EIC in the following order:

1. Cover letter
2. Text file (.doc or .docx) arranged as follows: manuscript text, Literature Cited, figure captions (not figures), and tables.
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. Figure files in only the following formats are accepted: .tif, .jpg, .doc, docx, .xls, .xlsx, .ppt., and .pptx.

General guidelines:

1. Double space all text except for the contact information at the top of the first page. Be sure to double space all other sections, including 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. Avoid use of italic or boldface type for emphasis in text, tables, or figures. Bold may be used sparingly to highlight significant numbers in tables or increase legibility of small print in figures.
5. Maintain margins of 2.5 cm (i.e., 1 inch) on all sides of the page.

### **Title Page: Running Head, Title, and Authors**

The following guidelines apply to all text files. Single-space the following information in the upper left corner: date (update with each revision) and the corresponding author's name, address, telephone, and e-mail. 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, notify the editorial staff.

Type the running head (RH) on the first line following the correspondent's address. The RH is limited to 50 characters (including spaces). Left-justify and capitalize the RH. The RH is followed by a dot and the italicized last name(s) of  $\leq 2$  authors. For  $\geq 3$  authors, use the name of the first author followed by "et al." For example: RH: SANDHILL CRANE DISTRIBUTION IN CALIFORNIA • *Ivey et al.*

The title follows the RH and is left-justified and capitalized in bold font. 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 small case. The affiliation is usually where the author was employed during the study. Indent the second and subsequent lines of an author's address using the hanging

indent function. In each address, use available United States Postal Service (USPS) or Canada Postal Code 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 for authors starts with a numerical superscript.

### **Abstract**

Begin with the word ***Abstract*** (left-justified) in italicized bold font followed by a colon. The abstract text begins after a regular letter space on the same line and is 1 paragraph not exceeding 1 line per page of manuscript text (3% of length of text), not 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 (keep the methods brief unless a new, greatly improved method is reported). Include the study period and location of the study.
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 problems or contribute to knowledge of crane biology and conservation.

## **Key Words**

Key words follow the abstract. The phrase **Key words:** (left-justified, 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, 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.

## **PAGE AND LINE NUMBERING**

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 (Page Layout-Line Numbers-Continuous). 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.

### **RESULTS**

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

### **Abundance**

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

*Roost counts*.—Third-level heading: indented, italicized, and followed by a period and em dash (MS Word character 2014). Text follows directly after the heading on the same line.

## **MAJOR SECTIONS OF MANUSCRIPT**

Articles include the *Abstract*, **Key words**, and Introduction (the introduction has no heading) followed by the following first-level headings: **STUDY AREA**, **METHODS**, **RESULTS**, **DISCUSSION**, **MANAGEMENT IMPLICATIONS**, **ACKNOWLEDGMENTS**, and **LITERATURE CITED**. Please do not combine Results and Discussion. Most articles will include all major sections, but some sections may not be appropriate for all articles.

The introduction (no heading) starts below the **Key words** and contains a concise synthesis of literature specific to the manuscript's main topic. The end of the introduction should state clearly and concisely the objectives of the study and hypotheses tested or issues addressed. 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 clear, concise, 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 thresholds for significance (e.g.,  $\alpha = 0.05$ ) or specific model selection criteria (e.g.,  $\Delta AIC < 2$ ,  $\sum w_i > 0.9$ ) if applicable. Include compliance with appropriate animal welfare protocols.

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 comparisons to other studies or situations. 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 spelling) section appears immediately before Literature Cited. This section should be brief and include 2 initials (rather than first names) of individuals cited. Acknowledgments should be straightforward without ornate and qualifying adjectives or personal remarks, and those funding the study should be included at the end.

## **LITERATURE CITED**

*See also: Citing Literature in Text*

Type the Literature Cited immediately following the Acknowledgments, and do not insert a page break (see Appendix A for specific examples). Double-space Literature Cited and use 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 for each citation instead of using dashes for authors in multiple citations.

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 Citations for the Same First Author" 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., Sim, R. R., and B. K. Hartup). Use 2 initials (where appropriate) with 1 space between each initial. Only reverse the name order of the first author (e.g., Hartup, B. K., G. H. Olsen, and N. M. Czekala). 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.]).

## **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. 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 must 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 B). 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 common name of the species or subject of the data studied and when and where (region or state and country) the data were collected, but omit country if USA. 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 should be avoided. If a table includes a list of species, order species taxonomically or by topical order of importance (e.g., abundance) and not alphabetically.

## Figures

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 must 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. Label and mount figure parts (e.g., Fig. 3A, Fig. 3B) together into 1 figure as they are meant to appear in print.

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. Photographs 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 1 figure if prints are the same width and will fit in a space 85 mm × <177 mm when reduced for printing, but please mount them together prior to submitting the figure. Images in each figure must have a resolution of >300 dots per inch (dpi) at final printing size.

For maps of areas >40,000 km<sup>2</sup>, use a conic projection, e.g., Albers Equal Area Conic. Do not use a cylindrical projection, e.g., Mercator, unless special justification to do so is provided.

Consider whether a drawing can be printed column width (85 mm) or is so detailed that it must be printed page width (177 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  $\geq 1.5$  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 and Appendix B). 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 ( $\leq 8.5$  cm) printing. If the table will not fit in one column width, construct it for page-width printing ( $\leq 17.7$  cm). Some extra-wide tables can be printed vertically, but such tables usually waste space. Provide justification for including extra-long or extra-wide tables.

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 sandhill cranes), and 4) location(s) and date(s). Do not include statistics or statements of results (e.g., *P*-values) in the title. Do not use abbreviations in table title (e.g., AIC), except within parentheses after defining the abbreviation. However, use standard abbreviations and symbols (Appendix B) in the table body and in footnotes.

Start on a new page using the Table function in Word (not simple text or an embedded picture) immediately following the table title (see Appendix C, p. 41, for an example table). Enter one datum per cell, i.e., do not separate entries with spaces or tabs. Merge cells as needed to appropriately nest column headings and subheadings.

Do not use lines to join the means in multiple-range tests. Use Roman upper-case letters instead (e.g., 12.3A<sup>a</sup>, 16.2A, and 19.5B) where the superscript “a” references a footnote (e.g., <sup>a</sup>Means with the same letters are not different [ $P > 0.10$ ]). 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. For column- and row-headings, only capitalize the first word and proper nouns (e.g., No. times detected in Nev.), 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<sub>c</sub>,  $K$ ), single spacing, and incomplete titles.

## **APPENDICES**

Include appendices in the text file after all figure captions and tables. Use first-level headings for appendix titles. Appendices are printed at the end of the article and are used to add understanding to the manuscript without disrupting the flow of the text.

## **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). Use a direct and concise writing style and minimize repetition among sections of your manuscript.

Avoid using 1-sentence paragraphs. Many problems can be corrected by having your manuscript critically reviewed by colleagues before submission for publication. First person and active voice are preferred, e.g., instead of writing “ground cover was estimated” write, “we estimated ground cover.” However, active voice should only be used in statements which describe actions attributed solely to the authors. Otherwise, passive voice is permissible to avoid misrepresenting credit for work performed by other individuals.

## **NUMBERS AND UNIT NAMES**

Use digits for numbers (e.g., 7 and 45) unless the number is the first word of a sentence, is used as a pronoun (e.g., We conclude one would benefit from...), or appears in a title or subtitle, in which case the number is spelled out. However, use numerals for 0 and 1 only when they are connected to a unit of measure, when they are used as an assigned or calculated value, or when they are part of a series or associated with count values other than 0 and 1 (e.g., 0 of 4 subspecies; 2 applications instead of 1 ...). Otherwise, spell out zero and one (e.g., zero-based budgeting, on the one hand). Indicate units after each item unless it is a number other than the last in a series (e.g., elevations ranged 3,000 m to 5,000 m, or elevations ranged 3,000-5,000 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). 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 doing so misrepresents precision.

Hyphenate number-unit phrases used as adjectives (e.g., 3-m<sup>2</sup> plots and 3-yr-old M) but not those used as predicate adjectives (e.g., plots were 3 m<sup>2</sup>, 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-m<sup>2</sup> 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).

#### **TIMES 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 B). Report degrees of freedom used in a statistical test as subscripts to the relevant test statistic (e.g.,  $t_2 = 1.45$ ). 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  $\chi^2$  [found in the symbol directory], as opposed to  $X^2$ ). Use the minus sign from the symbols menu (Unicode character 2212 (–)) 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. Commonly used symbols can be copied from the separated .doc file associated with these guidelines.

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 (177 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: ( $t_1 = 2.47, P = 0.013$ ), ( $F_{3, 12} = 33.10, P = 0.01$ ), ( $\chi^2_{10} = 22.1, P = 0.029$ ), or ( $\bar{x} = 7.8, SE = 3.21, n = 46$ ). Present  $P$ -values  $<0.001$  as  $P \leq 0.001$ . Along with the mean, report the standard error (SE) rather than the standard deviation (SD) unless justification for using the latter is provided. Along with AIC (or  $AIC_c$  for small sample sizes) minimally report  $\Delta AIC$  (difference from lowest AIC),  $K$  (number of parameters), and  $\omega_i$  (Akaike weight). 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 or using the Equation tool (insert-equation). 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  $\varphi$  and  $\phi$ , 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 ( $\bar{x}$ ). 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  $\{[()]\}$  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, and certain measurement units (Appendix B). 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). 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-predator study” and “a study of small predators” are both correct but have a different meaning than “a small predator study”); 2) a modifier containing a number is usually hyphenated (e.g., 2-km study area, a 6-yr-old crane); and 3) a 2-word modifier containing an adverb ending in -ly is not hyphenated (e.g., a carefully preserved specimen, spatially explicit model).

Avoid ambiguous use of nouns as modifiers (e.g., crane researchers, women 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., radio-telemetry locations of subadults in spring, not spring subadult radio-telemetry locations).

Closing quotation marks are 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 of an appropriate word that is otherwise missing in a quotation or title).

Usually use a slash (/) only to indicate “divided by” or “per.” However, a slash may also be used to avoid excessive or confusing use of hyphens in some terms (e.g., costume-rearing/gentle release). Use trademarks (i.e., <sup>TM</sup>, ®) 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).

### **COMMON AND SCIENTIFIC NAMES**

Continue to use *Grus* as the genus for sarus, brolga, white-naped, and sandhill cranes (*G. antigone*, *rubicunda*, *vipio*, and *canadensis*, respectively). Recently, Birdlife International recommended and American Ornithologists' Union removed these 4 species from the genus *Grus* and reassigned them to a new genus *Antigone*. NACWG and the IUCN Crane Specialist Group considers this reclassification premature and will retain the use of *Grus* for these species until nuclear DNA data from more individuals of each species have been analyzed and the results support reclassification.

Do not capitalize common names of species except words that are proper names (e.g., American alligator [*Alligator mississippiensis*], Ross' geese [*Chen rossii*], and whooping crane [*Grus americana*]). 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; for example, “We studied sandhill cranes (*Grus canadensis*) and whooping cranes (*G. americana*).”

Do not use subspecies names unless needed to identify specific subject taxa (i.e., Mississippi sandhill crane [*Grus canadensis pulla*]), 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 wetland was dominated by a species of willow (*Salix* sp.) and several species of sedges (*Carex* spp.).” Use the most widely accepted nomenclature for all species mentioned in your manuscript (e.g., American Ornithologists’ Union Check-list [checklist.aou.org]; but see note on use of *Grus* above). 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 (Appendix B). Place a space between numbers and units or symbols (e.g., 10 m) except for degrees of temperature (e.g., 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 diameter, and 2 mm wide; see section on Punctuation). Use English units (or, rarely, another type of scientific unit) in parentheses following a converted metric unit only in cases that may misrepresent the statistical precision of the original measurement or the correct interpretation of the results.

However, these non-SI units are permitted:

1. Area: hectare (ha) in lieu of  $10^4$  m<sup>2</sup>;
2. Energy: calorie (cal) in lieu of Joule (J);

3. Temperature: Celsius (C) in lieu of Kelvin (K), and use degree (°) symbol (MS Word character 00B0);
4. Time: minute (min), hour (hr), day, in lieu of seconds (sec);
5. Volume: liter (L) in lieu of dm<sup>3</sup>.

### **CITING LITERATURE IN TEXT**

In most cases reference citations parenthetically at the end of a sentence; e.g., “The remnant wild flock of whooping cranes nests mainly in Wood Buffalo National Park in a remote marsh complex along the Sass and Klewi Rivers (Allen 1956).” Cite published literature by author and year; e.g., Jones (1980), Jones and White (1981). Use “et al.” for publications with  $\geq 3$  authors; e.g., (Jones et al. 1982). For multiple citations by the same lead author and  $\geq 2$  co-authors in the same series, list the lead author followed by “et al.” only once, even if the co-authors are not the same in each citation. Do not separate the author(s) 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., (Peek et al. 1968*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., Krebs 1989:216).

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. Much valuable and informative work on cranes also appears in reports that have not been published or otherwise made widely available (i.e., “gray” literature). These references should be included in the Literature Cited but identified as unpublished reports.

### **UNPUBLISHED SOURCES THAT SHOULD BE CITED IN TEXT**

Unpublished data, manuscripts in progress, field notes, and personal communications and observations should be referenced in the text only. Avoid overusing these types of unpublished information because their credibility cannot be assessed and inclusion will make your text cumbersome. Cite these unpublished references in the text as follows:

1. Personal communication: (T. V. Stehn, U.S. Fish and Wildlife Service, personal communication).
2. Personal observation by author of the paper: (G. L. Ivey, personal observation).
3. Unpublished data (including annual survey reports or manuscripts in review): (J. Bergens, Indiana Department of Natural Resources, unpublished data).

Include the affiliation in the first citation except when citing one of the authors of the paper, but do not repeat the affiliation in subsequent references by the same authors. Do not list >2 authors for an unpublished source cited in the text.

### **CITING EQUIPMENT AND STATISTICAL SOFTWARE**

For field equipment, note the manufacturer name and location parenthetically the first time you mention the equipment in the text (e.g., Advanced Telemetry Systems, Isanti, MN, USA).

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 another 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, state [if applicable], and country of manufacture) immediately following the first use of the statistical product name (e.g., SAS Institute, Inc., Cary, NC, USA; Environmental Systems Research Institute, Inc., Redlands, CA, USA). 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 3.2.3, [www.r-project.org](http://www.r-project.org), accessed 6 Jan 2016).

## **APPENDIX A. LITERATURE CITED**

A list of example citations follows.

### ***Book: General Format***

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

Burnham, K. P., and D. R. Anderson. 2002. Model selection and multimodel inference: a practical information-theoretic approach. Second edition. Springer-Verlag, New York, New York, USA.

Johnsgard, P. A. 1983. Cranes of the world. Indiana University Press, Bloomington, USA.

Meine, C., and G. W. Archibald. 1996. The cranes: status survey and conservation action plan. International Union for Conservation of Nature, Gland, Switzerland.

### ***Book: More than One Publisher***

Tacha, T. C., S. A. Nesbitt, and P. A. Vohs. 1992. Sandhill crane, *Grus canadensis*.

Account 31 in A. Poole, P. Stettenheim, and F. Gill, editors. The birds of North America. Academy of Natural Sciences, Philadelphia, Pennsylvania, and American Ornithologists' Union, Washington, D.C., USA.

***Book: More than One Volume***

Harrison, G. H., and T. L. Lightfoot, editors. Clinical avian medicine. Volume 2. Spix Publishing Inc., Palm Beach, Florida, 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***

Drewien, R. C., and E. G. Bizeau. 1977. Cross-fostering whooping cranes to sandhill crane foster-parents. Pages 201-222 in S. A. Temple, editor. Endangered birds: management techniques for preserving threatened species. University of Wisconsin Press, Madison, USA.

***Congressional Testimony***

White, K. 2015. Zero accountability: the impacts of politicized science. Testimony before the Natural Resources Committee, Subcommittee on Oversight and Investigations, U.S. House of Representatives. 29 April 2015. <<http://docs.house.gov/meetings/II/II15/20150429/103432/HHRG-114-II15-TTF-HartnettWhiteK-20150429.pdf>>. Accessed 25 Sep 2015.

### ***Court Cases***

Cite complete title and year of case in text only.

### ***Foreign Language Publication***

Mewes, W., and M. Rauch. 2012. Hatching success of crane *Grus grus* clutches in an area in Mecklenburg-Western Pomerania between 2003 and 2012. *Vogelwelt* 133:109-119. [In German with English abstract.]

### ***Government Publication***

Lucas, A. M., and C. Jamroz. 1961. Atlas of avian hematology. U.S. Department of Agriculture, Washington, D.C., USA.

### ***Government Publication: Part of a Numbered Series***

Harris, R. B., S. G. Fancy, D. C. Douglas, G. W. Gardner, S. C. Amstrup, T. R. McCabe, and L. E. Pank. 1990. Tracking wildlife by satellite: current systems and performance. U.S. Department of Interior, Fish and Wildlife Service Technical Report 30, Washington, D.C., USA.

### ***Government Publication: Agency as Author***

U.S. Fish and Wildlife Service. 2007. Mississippi Sandhill Crane National Wildlife Refuge comprehensive conservation plan. U.S. Fish and Wildlife Service, Atlanta, Georgia, USA.

### ***Journals: General Format***

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

Converse, S. J., J. A. Royle, and R. P. Urbanek. 2012. Bayesian analysis of multi-state data with individual covariates for estimating genetic effects on demography. *Journal of Ornithology* 152(S2):561-572.

Pugesek, B. H., M. J. Baldwin, and T. V. Stehn. 2013. The relationship of blue crab abundance to winter mortality of whooping cranes. *Wilson Journal of Ornithology* 125:658-661.

***Journals in Press: Year and Volume Known***

Hayes, M. A., and J. A. Barzen. 2016. Dispersal patterns and pairing behaviors of non-territorial sandhill cranes. *Passenger Pigeon* 78:in press.

***Journals in Press: Year and Volume Unknown***

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

Krapu, G. L., D. A. Brandt, K. L. Jones, and D. H. Johnson. In press. Geographic distribution of subspecies and subpopulations of the mid-continent population of sandhill cranes and related management implications. *Wildlife Monographs*.

***Multiple Citations for the Same First Author***

*Note:* List all citations with only one author chronologically and before citations with two or more authors. List all remaining citations in alphabetical order by second author (then third, fourth, ...), then chronologically for identical authorship.

Nesbitt, S. A. 1992. First reproductive success and individual productivity in sandhill cranes. *Journal of Wildlife Management* 56:573-577.

Nesbitt, S. A., and J. W. Carpenter. 1993. Survival and movements of greater sandhill cranes experimentally released in Florida. *Journal of Wildlife Management* 57:673-679.

Nesbitt, S. A., M. J. Folk, S. T. Schwikert, and J. A. Schmidt. 2001. Aspects of reproduction and pair bonds in Florida sandhill cranes. *Proceedings of the North American Crane Workshop* 8:31-35.

Nesbitt, S. A., M. J. Folk, M. G. Spalding, J. A. Schmidt, S. T. Schwikert, J. M. Nicolich, M. Wellington, J. C. Lewis, and T. H. Logan. 1997. An experimental release of whooping

cranes in Florida – the first three years. Proceedings of the North American Crane Workshop 7:79-85.

Nesbitt, S. A., and J. L. Hatchitt. 2008. Trends in habitat and population of Florida sandhill cranes. Proceedings of the North American Crane Workshop 10:40-42.

Nesbitt, S. A., and A. S. Wenner. 1987. Pair formation and mate fidelity in sandhill cranes. Pages 117-121 *in* J. C. Lewis, editor. Proceedings of the 1985 Crane Workshop. Platte River Whooping Crane Habitat Maintenance Trust, Grand Island, Nebraska, USA.

Nesbitt, S. A., and K. S. Williams. 1990. Home range and habitat use of Florida sandhill cranes. Journal of Wildlife Management 54:92-96.

***Multiple Citations for the Same First Author and Year***

*Note:* Add letters in italics (*a, b, c*, etc.) to year separately for citations in three categories: single author, two authors with identical authorship, and three or more authors (cited as first author *et al.* in text). Order letters in italics as they appear in the literature cited-- not the order they appear in text.

Urbanek, R. P., L. E. A. Fondow, and S. E. Zimorski. 2010*a*. Survival, reproduction, and movements of migratory whooping cranes during the first seven years of reintroduction. Proceedings of the North American Crane Workshop 11:124-132.

Urbanek, R. P., L. E. A. Fondow, S. E. Zimorski, M. A. Wellington, and M. A. Nipper. 2010*b*. Winter release and management of reintroduced migratory whooping cranes *Grus americana*. Bird Conservation International 20:43-54.

Urbanek, R. P., S. E. Zimorski, A. M. Fasoli, and E. K. Szyszkoski. 2010*c*. Nest desertion in a reintroduced population of migratory whooping cranes. Proceedings of the North American Crane Workshop 11:133-141.

### ***Newspaper, Newsletter, and Magazine Articles***

Eisler, P. 1996. Voters to get a shot at hunting laws. USA Today. 25 April 1996; section A:4.

Gambino, M. 2011. A call to save the whooping crane. Smithsonian, November 2011.

<<http://www.smithsonianmag.com/arts-culture/a-call-to-save-the-whooping-crane-107277115/>>. Accessed 30 March 2017.

Sikes, D. 2013. New whooping crane count, method draw different responses from groups.

Corpus Christi Caller-Times, 21 February 2013. <<http://www.caller.com/news/new-whooping-crane-count-method-draw-different-responses-from-groups-ep-358083845.html>>. Accessed 15 Mar 2016.

Szyszkoski, E. 2016. Louisiana whooping crane update. Unison Call 27(1):8-9.

*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).

### ***Online Journal with DOI but no Page Numbers***

Lacy, R. C., P. S. Miller, P. J. Nyhus, J. P. Pollak, B. E. Raboy, and S. L. Zeigler. 2013.

Metamodels for transdisciplinary analysis of wildlife population dynamics. PLoS ONE 8:e84211.

Rioux, S., J.-P. L. Savard, and A. A. Gerick. 2013. Avian mortalities due to transmission line

collisions: a review of current estimates and field methods with an emphasis on applications to the Canadian electric network. Avian Conservation and Ecology 8: doi: 10.5751/ACE-00614-080207.

### ***Software Package***

R Core Team. 2015. R: a language and environment for statistical computing. R Foundation for

Statistical Computing, Vienna, Austria. <<http://www.R-project.org>>. Accessed 1 Oct 2016.

SAS Institute. 2008. Version 9.2. SAS Institute, Inc., Cary, North Carolina, USA.

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

***Symposia and Proceedings: Complete Volume***

Lewis, J. C., editor. Proceedings of the 1985 crane workshop. Platte River Whooping Crane Habitat Maintenance Trust, Grand Island, Nebraska, USA.

***Symposia and Proceedings: Individual Article***

Smith, E. R., Jr. 1979. A wintering flock of sandhill cranes in central Louisiana. Pages 149-150 in J. C. Lewis, editor. Proceedings of the 1978 crane workshop. Colorado State University Printing Service, Fort Collins, USA.

***Symposia and Proceedings: Part of a Numbered Series***

Stehn, T. V., and T. E. Taylor. 2008. Aerial census techniques for whooping cranes on the Texas coast. Proceedings of the North American Crane Workshop 10:146-151.

***Symposia and Proceedings: Complete Volume (Not Part of a Numbered Series)***

J. Harris, editor. 2012. Proceedings of the cranes, agriculture, and climate change workshop at Muraviovka Park, Russia, 28 May-3 June 2010. International Crane Foundation, Baraboo, Wisconsin, USA.

***Symposia and Proceedings: Individual Article (Not Part of a Numbered Series)***

Spalding, M. G., H. S. Sellers, B. K. Hartup, and G. H. Olsen. 2004. Infectious bursal disease virus associated with a wasting syndrome in released whooping cranes in Florida. Page

73 in C. K. Bauer, editor. Proceedings of the American Association of Zoo Veterinarians, American Association of Wildlife Veterinarians, and Wildlife Association Disease Joint Conference, 28 August-3 September 2004, San Diego, California, USA.

### ***Theses and Dissertations***

Fondow, L. E. A. 2013. Habitat selection of reintroduced migratory whooping cranes (*Grus americana*) on their wintering range. Thesis, University of Wisconsin, Madison, USA.

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

### ***Web Citation***

Krausman, P. R., D. A. Haukos, A. S. Cox, A. S. C. Knipps, J. L. Wallace, and T. E. Boal. 2016. *Journal of Wildlife Management* and *Wildlife Society Bulletin* author guidelines.

<<http://wildlife.org/wp-content/uploads/2014/05/TWSGuidelines2016-1.pdf>>. Accessed 10 Apr 2017.

National Audubon Society 2010. The Christmas Bird Count historical results.

<<http://www.christmasbirdcount.org>>. Accessed 1 Jun 2014.

National Weather Service. 2009. Weather of West Texas.

<[http://www.srh.noaa.gov/lub/?n=events-2009-20091231\\_summary](http://www.srh.noaa.gov/lub/?n=events-2009-20091231_summary)>. Accessed 1 Sep 2011.

Ratti, J. T., and L. M. Smith. 1997. Manuscript guidelines for the *Journal of Wildlife*

*Management*. <<http://www.webpages.uidaho.edu/wlf448/jwmguidelines.pdf>>. Accessed 10 Apr 2017.

**APPENDIX B. REQUIRED ABBREVIATIONS FOR TABLES, FIGURES, AND PARENTHETIC EXPRESSIONS**

Abbreviate the following terms when used within parentheses, table bodies, and figures (not table titles and figure captions unless used parenthetically). 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
Amount	amt
Approximately	~
Calorie	cal*
Celsius	C*
Chi-square	$\chi^2$
Coefficient	coeff.
Confidence interval	CI
Confidence limit	CL
Correlation, simple	<i>r</i>
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	<*
<i>F</i> ratio	<i>F</i>
Gram	g*
Gravity	<i>G</i>
Hectare	ha*
Height	ht
Hotelling's $T^2$	$T^2$
Hour(s)	hr
Joule	J*
Kilocalorie	kcal*

Lethal concentration, 50%	LC <sub>50</sub>
Lethal dose, median	LD <sub>50</sub>
Liter	L*
Logarithm, base <i>e</i>	ln or log <sub><i>e</i></sub>
Logarithm, base 10	log <sub>10</sub>
Male	M
Maximum	max.
Meter	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	<i>N</i>
Probability <sup>a</sup>	<i>P</i>
Sample size	<i>n</i>
Sample mean (of <i>x</i> )	$\bar{x}$
Second	sec
Spearman rank correlation	$r_s$
Standard deviation(s)	SD
Standard error(s)	SE
Student's <i>t</i>	<i>t</i>
Temperature	temp
Variation	CV
Versus	vs.
Volt	V*
Volume: liquid, book	vol, Vol.
Weight	wt
Wilcoxon test	<i>T</i>
Year(s)	yr
Z-statistic	<i>Z</i>

---

<sup>a</sup> 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]).

Abbreviations for United States and Canadian political units. Spell out geographic locations given parenthetically in the text or in the LITERATURE CITED, but use ANSI abbreviations in tables, figures, and footnotes. Use U.S. Postal Service (USPS) abbreviations only in addresses with zipcodes (e.g., author addresses). A blank means do not abbreviate. From Ratti and Smith (1997).

Unit	ANSI	USPS	Unit	ANSI	USPS
U.S. and territories			U.S. and territories (continued)		
Alabama	Ala.	AL	Oklahoma	Okla.	OK
Alaska	Alas.	AK	Oregon	Oreg.	OR
American Samoa	Am. Samoa	AS	Pennsylvania	Pa.	PA
Arizona	Ariz.	AZ	Puerto Rico	P.R.	PR
Arkansas	Ark.	AR	Rhode Island	R.I.	RI
California	Calif.	CA	South Carolina	S.C.	SC
Canal Zone		CZ	South Dakota	S.D.	SD
Colorado	Colo.	CO	Tennessee	Tenn.	TN
Connecticut	Conn.	CT	Texas	Tex.	TX
Delaware	Del.	DE	Trust Territory Trust	Territ.	TT
District of Columbia	D.C.	DC	Utah	Ut.	UT
Florida	Fla.	FL	Vermont	Vt.	VT
Georgia	Ga.	GA	Virginia	Va.	VA
Guam		GU	Virgin Islands	V.I.	VI
Hawaii	Haw.	HI	Washington	Wash.	WA
Idaho	Id.	ID	West Virginia	W.Va.	WV
Illinois	Ill.	IL	Wisconsin	Wis.	WI
Indiana	Ind.	IN	Wyoming	Wyo.	WY
Iowa	Ia.	IA			
Kansas	Kans.	KS	Canadian provinces and territories		
Kentucky	Ky.	KY	Alberta	Alta.	AB
Louisiana	La.	LA	British Columbia	B.C.	BC
Maine	Me.	ME	Manitoba	Manit.	MB
Maryland	Md.	MD	New Brunswick	N.B.	NB
Massachusetts	Mass.	MA	Newfoundland	Newf.	NF
Michigan	Mich.	MI	Northwest Territories	Northwest Territ.	NT
Minnesota	Minn.	MN	Nova Scotia	N.S.	NS
Mississippi	Miss.	MS	Ontario	Ont.	ON
Missouri	Mo.	MO	Prince Edward Island	Prince Edward Isl.	PE
Montana	Mont.	MT	Quebec	Que.	PQ
Nebraska	Nebr.	NE	Saskatchewan	Sask.	SK
Nevada	Nev.	NV	Yukon Territory	Yukon Territ.	YT
New Hampshire	N.H.	NH			
New Jersey	N.J.	NJ	Other		
New Mexico	N.M.	NM	United States	USA	
New York	N.Y.	NY	New Zealand	N.Z.	
North Carolina	N.C.	NC	United Kingdom	U.K.	
North Dakota	N.D.	ND			
Ohio	Oh.	OH			

## APPENDIX C. FORMAT TEMPLATE

- 1 Date  
2 Name of corresponding author  
3 Affiliation  
4 Address  
5 Phone 000/000-0000  
6 email address  
7  
8 RH: RUNNING HEAD Capitalized • *Last Name et al.* ITALICIZED (limit to 60 characters  
9 including spaces)  
10 **MANUSCRIPT TITLE Capitalized (no more than 15 words)**  
11 AUTHOR NAME,<sup>1</sup> Affiliation, address text  
12 text text text  
13 AUTHOR NAME,<sup>2</sup> Affiliation, address text  
14 text text text  
15 **Abstract:** Begin abstract text here. Limit to 1 paragraph not exceeding 1 line per page of  
16 manuscript text (3% of length of text), including Literature Cited.  
17 **Key words:** keyword or phrase 1, keyword or phrase 2, ... keyword or phrase 8.  
18 Begin the introduction text immediately after key words with no heading. It should  
19 contain a concise synthesis of literature specific to the manuscript's main topic. In the latter part  
20 of this section, state clearly and concisely the objectives of the study and the hypotheses tested  
21 (if applicable). Do not summarize methods or results in the Introduction section. Use
- 

<sup>1</sup> E-mail: correspondingauthor@institution.edu

<sup>2</sup> Present address: Department of Wildlife Ecology and Conservation, University of Florida, P.O. Box 0430, Gainesville, FL 32611, USA

22 chronological order for citations in a series; e.g., (Jones 1980, Wolf and Kendrick 1986, Merrill  
23 et al. 2002).

## 24 **STUDY AREA**

25 Include (as relevant to the study) location, climate, elevation, land use, seasons, other  
26 species, topography, and major vegetation. Use past tense for Study Area descriptions (e.g.,  
27 average annual precipitation was 46 cm, vegetation was primarily grass). Exceptions include  
28 geological formations that have been present for centuries (e.g., mountains).

## 29 **METHODS**

30 Methods should be brief and include dates, sampling schemes, duration, research or  
31 experimental design, and data analyses. Include in the methods your specific model selection  
32 criteria (e.g.,  $\Delta AIC < 2$ ,  $\sum w_i > 0.9$ ) or significance threshold ( $\alpha$  value). Methods must be  
33 described in adequate detail for a reader to duplicate them if initiating a new study, but cite  
34 previously published methods without explanation. Include animal-welfare protocols or human  
35 subjects protocols in the Methods section (not in Acknowledgments), including protocol  
36 numbers parenthetically following the relevant statement. Avoid using acronyms for species  
37 names or variables measured (e.g., use “canopy” rather than “CAN\_COV”).

### 38 **Second-Level Heading** (capitalize all important words in heading)

39 Reduce or eliminate the need for subheadings by writing clearly and logically. Avoid  
40 writing sections that consist of only 1 paragraph.

41 *Third-level heading.*—If third-level headings are necessary, indent and punctuate as  
42 shown and only capitalize the first word.

43

44

45 **RESULTS**

46 Describe the magnitude of the biological effect in addition to the results of statistical  
47 analyses. For example, stating, “*A* was 25% larger than *B* ( $P < 0.001$ )” conveys more  
48 information than simply stating, “*A* was significantly larger than *B*.” Present Results in past tense  
49 (e.g., body mass loss occurred during winter). Reserve comments on interpretation of results for  
50 the Discussion.

51 **DISCUSSION**

52 Begin the Discussion by synthesizing your results with regard to your objectives and then  
53 relate your work to other literature and research. Systematic discussion of every aspect of  
54 research leads to unnecessarily long manuscripts; be concise and relate your findings directly to  
55 your overall project goal, objectives, and hypotheses as appropriate. Reasonable speculation and  
56 new hypotheses to be tested may be included in the Discussion. Do not repeat results in this  
57 section, and comment on only the most important results.

58 **MANAGEMENT IMPLICATIONS**

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

64 **ACKNOWLEDGMENTS**

65 This section should be brief and include initials (rather than first names) of individuals  
66 thanked.

67

68 **LITERATURE CITED**

- 69 Burnham, D. E., and D. R. Anderson. 2002. Model selection and multimodel inference: a  
70 practical information-theoretic approach. Second edition. Springer-Verlag, New York,  
71 New York, USA. (book; note space between author initials for all entries)
- 72 Curro, T. G., J. A. Langenberg, and J. Paul-Murphy. 1992. A review of lameness in long-legged  
73 birds. Pages 265-270 *in* Proceedings of the Association of Avian Veterinarians, 1-5  
74 September 1992, New Orleans, Louisiana, USA. (proceedings, not crane workshop)
- 75 Mirande, C. M., G. F. Gee, A. Burke, and P. Whitlock. 1996. Egg and semen production. Pages  
76 45-57 *in* D. H. Ellis, G. F. Gee, and C. M. Mirande, editors. 1996. Cranes: their biology,  
77 husbandry, and conservation. U.S. Department of Interior, National Biological Service,  
78 Washington, D.C., and International Crane Foundation, Baraboo, Wisconsin, USA. (book  
79 chapter)
- 80 Pearse, A. T., G. L. Krapu, D. A. Brandt, and P. J. Kinzel. 2010. Changes in agriculture and  
81 abundance of snow geese affect carrying capacity of sandhill cranes in Nebraska. *Journal*  
82 *of Wildlife Management* 74:479-488. (journal article)
- 83 Tacha, T. C. 1981. Behavior and taxonomy of sandhill cranes from mid-continental North  
84 America. Dissertation, Oklahoma State University, Stillwater, USA. (use Dissertation to  
85 denote Ph.D. ; use Thesis to denote M.S. or M.A.)
- 86 U.S. Fish and Wildlife Service [USFWS]. 1999. Endangered species database.  
87 <<http://www.fws.gov/angered/>>. Accessed 7 Oct 1999. (website)

88

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

91

92 Figure 1. Table headings and figure captions must allow the figure to be self-explanatory,  
93 describing the variables displayed, species studied, and the date(s) and location(s) at which the  
94 data presented were gathered. Define acronyms in tables and figures even if they have already  
95 been defined in the text.

96

97 Figure 2. Format figures according to these guidelines: Only capitalize the first word and proper  
98 nouns on axes labels and legends (e.g., Daily nest survival, Sandhill crane, Study area). Ensure  
99 that the minimum height for letters, numbers, and other characters will be  $\geq 1.5$  mm tall after  
100 reduction for printing (to 85 mm in width for most figures and up to 177 mm in width for large  
101 figures) and resolution is  $>300$  dots per inch (dpi) at final printing size. Create and submit graphs  
102 in an active Microsoft format (e.g., Word) rather than as a flat file (e.g., .jpg) so that the TE can  
103 make minor format corrections if necessary.

104

105 Start on a new page using the Table function in Word (not simple text or an embedded picture)  
 106 immediately following the table title. Enter one datum per cell, i.e., do not separate entries with  
 107 spaces or tabs. Merge cells as needed to appropriately position headings and subheadings over  
 108 appropriate columns.

109

110 Table 1. When possible, minimize the use of abbreviations, especially with long lists of variables  
 111 (e.g., use tree density rather than TR\_DEN). Define abbreviations and terms in each table title or  
 112 as footnotes (e.g., AIC<sub>c</sub>, K, ANOVA). Table titles should describe the variables displayed,  
 113 species studied, and the date(s) and location(s) at which the data presented were gathered.

Land-use category <sup>a</sup>	Pre-fledged chick season				Post-fledged/no chick season			
	Home range composition (%)		Telemetry locations (%)		Home range composition (%)		Telemetry locations (%)	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Developed	3.5	1.1	2.0	0.9	5.4	1.3	3.1	1.0
Upland forest	8.8	1.7	6.2	2.1	12.5	1.9	6.1	2.0
Row crop	19.7	5.2	20.8	6.2	24.6	3.5	26.3	5.1
Short crop	6.2	2.4	6.2	2.4	11.1	2.8	20.5	5.4
Tall grass	6.9	1.9	4.6	2.0	6.2	1.6	4.6	1.8
Wetland	43.0	4.5	50.1	4.9	30.3	2.3	30.6	3.2

114

115 <sup>a</sup>For footnotes, use lower-case, Roman letters.

116 \*Use asterisks for probability levels.

## QUICK GUIDE TO AVOIDING COMMON ERRORS

1. Use only 1 space, not 2, between the period at the end of a sentence and the first letter of the next sentence.
2. Use numerals except in the title, to spell the number “one” when used as a pronoun, and in limited other situations.
3. Use 4 digits to indicate a year except when referring to a winter that spans 2 calendar years, e.g., Dec 2005-Feb 2006 could be indicated by winter 2005-06.
4. Add the scientific name the first time that the common name is used in Abstract and the first time that the common name is used in body of paper. Do not use scientific name in title, elsewhere in text, or in tables and figures.
5. All dates are in day (numeral)-month (spelled out)-year (4-digit numeral) format in text. Use this same format in tables, figures, and in parentheses except use 3-letter abbreviation for month.
6. Capitalize only the first word in axis titles in figures.
7. In figures, do not add unlabeled border lines at top and right side (in addition to the axes at left and bottom); i.e., do not create a box.
8. Spell out names of states and provinces except when abbreviations are needed in tables and figures to save space (then use abbreviations in Appendix B). Use postal code only when state or province is part of a mailing address.
9. Use 2 initials, not first names, before last names in Acknowledgments.
10. Closely follow Literature Citation style in these Author Guidelines.
11. Follow NACWG style (e.g., Proceedings 11-13) for capitalization and italicization of titles, headings, and subheadings.
12. Do not combine “from” and a hyphen to specify end points of a range, e.g.: “from 4 January to 7 March” and “during 4 January-7 March” are both correct. “from 4 January-7 March” is incorrect.
13. Do not repeat name of state after city in citations for books or theses if state name is already in name of publisher.
14. Use different symbols for dash, long dash, hyphen, and minus sign as follows:  
Hyphen: Use hyphen on keyboard (-).  
Dash: In MS Word use General Punctuation Figure Dash, Unicode character 2012 (–).  
Long (em) dash: (MS Word character 2014, use only in third-level heading)  
Minus sign: In MS Word use Mathematical Operator, Unicode character 2212 (−).
15. Indent all paragraphs 0.25 inches.
16. For a list of 2 names of rivers or counties, capitalize the words “Rivers” or “Counties”. For list of 3 or more names, do not.
17. Use a hyphen (-) with no surrounding spaces between dates and page numbers.
18. Use commas, not semicolons, to separate first order table, figure, or literature references in parentheses. Use semicolons to separate higher order groups containing references separated by commas.
19. In cases where JWM and Proceedings of the NA Crane Workshop differ, used the latter style.
20. Use standard error (SE), not standard deviation (SD), as the measure of variation around a mean unless justification to use SD is provided.

21. Note that the citation format for the first 5 *Proceedings of the North American Crane Workshop* is different from *Proceedings* 6 and later (see examples in these Author Guidelines). *Proceedings* of the first 5 workshops were published by each sponsoring organization. Beginning with the sixth workshop, NACWG published the *Proceedings* and the workshops became part of a numbered series.
22. Unlike JWM style, do not add “USA” to location names in titles of Tables and Figures.