

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

The Prairie Naturalist

Great Plains Natural Science Society

6-2018

A Short Narrative for Writing for The Prairie Naturalist

Christopher N. Jacques

Follow this and additional works at: <https://digitalcommons.unl.edu/tpn>



Part of the [Biodiversity Commons](#), [Botany Commons](#), [Ecology and Evolutionary Biology Commons](#), [Natural Resources and Conservation Commons](#), [Systems Biology Commons](#), and the [Weed Science Commons](#)

This Article is brought to you for free and open access by the Great Plains Natural Science Society at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in The Prairie Naturalist by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

A Short Narrative for Writing for *The Prairie Naturalist*

The first requirement to successful publication of your work is sound data, and a second is to adhere to proper writing protocol (Krausman and Cox 2017). For several years now, many editorials published in scientific journals have concentrated on writing, many of which could lay the foundation for a scientific writing class. For instance, most of the major components of a manuscript have been discussed to facilitate improved writing, including authorship (Merrill 2015a), titles (Merrill and Knipps 2014), abstracts (Krausman et al. 2016), and management implications (Merrill 2015b). Other relevant considerations for writing have been addressed including dual publication and supplemental material (Merrill 2015c,d), the care and use of animals in research (Anderson 2015), and updated author guidelines (Jacques et al. 2012, Krausman and Cox 2017). I (and previous editors of *The Prairie Naturalist*; [TPN]) present this information to improve writing by authors, and in turn expedite the peer-review process because Associate Editors (AE) are familiar with TPN format and well-written manuscripts reflect attention to detail by authors that is greatly appreciated (Krausman and Cox 2017). Nevertheless, there remain issues with many (most?) manuscripts that are avoidable. My objective with this editorial is to provide an abbreviated summary of author guidelines on TPN content and format to assist writers with publication of their work.

First and foremost, whenever you prepare an article for a scientific journal, always refer to the guidelines for authors provided by that journal. Adherence to these guidelines can be the difference between having your paper considered for publication or outright rejection without review because of improper formatting (Krausman and Cox 2017). On the outside chance that an improperly formatted manuscript is sent out for reviews, the assigned AE and reviewers that provide the Editor-in-Chief will probably not be impressed with perceived sloppiness and will likely recommend rejection. Be reminded that AEs and reviewers are evaluating papers looking for weaknesses, and failure to adhere strictly to formatting is immediately apparent. Make sure your paper is in the proper format with sound data presented so that the review process does not begin with a poorly prepared manuscript (Krausman and Cox 2017), and thus one strike against you! Below I offer a brief summary of the key components necessary for successful research articles in TPN. Detailed guidelines are provided in Jacques et al. (2012).

TITLE

While there are no hard and fast rules for titles, numerous opinions exist about the creation of titles (Merrill and Knipps 2014). Current TPN guidelines state that titles should identify manuscript content, short (generally ≤ 10 words), and avoid abbreviations, acronyms, or punctuation. Remember that a title should serve as a study label (vs. a summary) that grabs the attention of the reader. Use of hanging indents or titles posed as questions or statements of facts can pique interest among readers, but above all, be sure to accurately relay information in the paper when drafting your title (Krausman and Cox 2017).

AUTHORS

Authorship can be a sensitive issue that we face when preparing manuscripts for publication that, if considered at the end of the study (which often is the case), can foster awkward situations. Authorship (or coauthorship) is an important professional and ethical responsibility that is weakened when not taken seriously (Merrill 2015a). Many editorials have developed guidelines (using qualitative and quantitative assessments) to justify authorship, though I agree with guidelines developed by Dickson et al. (1978), who justify coauthorship for those who have contributed substantially to some aspect of preparing a manuscript and ≥ 1 of 4 additional components of a study: conception of the research idea, development of study design, data collection, and data analyses (Krausman and Cox 2017). Try to maintain transparency in how you view authorship for yourself and others prior to and throughout the study (Merrill 2015a, Krausman and Cox 2017).

ABSTRACT

The abstract should be written upon completion of the paper. A well-written abstract is a single short (≤ 1 line/page of text), concise, and includes 1) an introductory sentence justifying why the study was conducted, 2) a statement of the principal objectives or hypotheses tested during the study, 3) a brief description of pertinent methods, 4) a summary of significant results, 5) a punchy conclusion, and 6) management implications (i.e., utility of results explaining how, when, where, and by whom data or interpretations can be applied; Krausman and Cox 2017). Keep in mind that abstracts are read more than authors than papers, so should be informative and to the point. Emphasize what is

most important to readers (i.e., translation of your results) rather than providing futuristic statements of research needs (Krausman and Cox 2017).

INTRODUCTION

This section should serve to set the stage for your work and concisely review the literature that leads up to your primary study objectives and associated hypotheses. The initial paragraphs should provide a clear, referenced, logical progression to the primary objectives of the research project. It is not necessary to provide a comprehensive review of every study that has been published on the topic. Instead, cite the literature most relevant to frame your study objectives. Conclude this section by clearly and succinctly state the study objectives and the hypotheses tested (Krausman and Cox 2017).

STUDY AREA

The study area section should be written using past tense (e.g., average annual snowfall was 101 cm, rangelands were characterized by mid-season grasses and limited stands of ponderosa pine). Exceptions include geological formations that have been present for centuries or millennia (e.g., mountain ranges). Be sure to describe where the study was conducted and relevant site-specific information (e.g., weather, elevation, annual or seasonal precipitation/snowfall/temperature, land use practices, overstory/understory vegetation associations, dominant fauna).

METHODS

Use active voice throughout this section. Otherwise, readers are uncertain about who did what. For example stating that “adult female deer were radiocollared” provides no information about who collared them. Stating that “we radiocollared adult female deer” is clear and removes all uncertainty about who did what (Krausman and Cox 2017). In addition, describe how you conducted your study using enough detail to ensure replication by others that read your description of the methods used. In many ways, describing your study design is similar to describing a cooking recipe – if the directions are followed, the intended product will be produced (Krausman and Cox 2017). If not, who knows what you may end up with! Failing to adequately describe your Methods may lead to frustration and an unwillingness by reviewers to continue reading your paper – if they don’t understand your methods they will not be able to accurately evaluate your results and discussion (Krausman and Cox 2017). Authors should cite previously published methods with minimal explanation and explain new or modified methods in detail. Authors should also clearly describe their data analyses, particularly criteria for significance or model support. Provide readers with information about

why you considered model covariates influential predictors of response (dependent) variables, whether it be an alpha value (frequentist approach) or model selection criteria ($\leq 2 \Delta AIC$ from highest-ranked model, model weight $[w_i] \geq 0.90$) if using an information-theoretic approach (Krausman and Cox 2017). Animal-welfare protocols and permits required to conduct research should be included at the end of the Methods section rather than in the Acknowledgments section; protocol (e.g., IACUC) numbers should be included parenthetically following the statement.

RESULTS

Present the important results from your study and indicate whether your hypothesis was supported or not. No more, no less! Avoid redundancy by restating what you were doing (introduction), where your research was conducted (study area), and how you conducted your study (methods). Results are exactly that – what your analysis revealed and whether these findings support (or refute) your hypotheses (Krausman and Cox 2017). Authors should describe the magnitude and direction of biological effects as well as test statistics, these kinds of results can often be produced with prediction statements or reporting odds ratios (Krausman and Cox 2017). For instance, reporting that “parameter X was 50% smaller than parameter Y ($P < 0.015$)” conveys more biologically meaningful information than stating that “parameter X was significantly smaller than parameter Y.” Avoid overusing the terms “significant” and “significantly” when statistical differences can be deduced from test statistics (e.g., P -values); such reporting commonly results in unnecessary length and redundancy when stating results. Avoid repeating results depicted in tables and figures in the text; data presented in tables and figures should support statements used in the text (Krausman and Cox 2017). Authors should avoid the urge to discuss or interpret results as this activity unnecessarily increases the length of this section and commonly results in redundancy or a “re-discussion” of results in the Discussion section of the paper (Brown and Jenks 2009). Results should follow the order of testing of hypotheses and design set forth in the Materials and Methods section. Organization should be arranged for impact, with results listed from most to least significant (Brown and Jenks 2009). Additionally, results should be presented in past tense (e.g., mean spring migration occurred on 14 April).

DISCUSSION

Begin this section by synthesizing results with regard to study objectives and then relate relevant findings to previously published literature and research. Again, authors should provide a synthesis of results with available literature and should avoid simply restating results. Systematic discussion of every aspect of the study leads to unnecessarily long manuscripts. Authors should be concise

and relate their findings directly to their study objectives and hypotheses. Discuss only the most relevant and important results. Reasonable speculation and new hypotheses or scientific questions that are logical extensions of findings and conclusions may be included in the Discussion, otherwise avoid wandering into undue speculation by sticking to the data.

MANAGEMENT IMPLICATIONS

This section should be short (generally about 1 paragraph), direct, and explain important management and conservation issues that are derived directly from the results in the paper – your results rather than those of others (Krausman and Cox 2017). Authors should avoid restating information from the Results or Discussion sections, making recommendations beyond the scope of their study, and citing previously published literature in this section. A concise statement of the problem addressed by the management implications, intended target audience, and focused management recommendations should be included in this section (Merrill 2015*b*, Krausman and Cox 2017).

ACKNOWLEDGMENTS

Please note our preferred spelling of this section, which should begin with any qualifying statements you are required to provide a statement about equipment use or trade names (e.g., any use of trade, firm, or product names is for descriptive purposes only and do not imply endorsement by the U.S. government). Otherwise, begin by thanking sponsors (e.g., Funding was provided by Federal Aid in Wildlife Restoration administered by South Dakota Department of Game, Fish and Parks, Study No. 75103, the National Park Service administered through the South Dakota Cooperative Fish and Wildlife Research Unit at South Dakota State University, the Pope and Young Club, and South Dakota State University). This section should end by simply, clearly, and concisely acknowledging individual who contributed to the study by using 2 initials and a last name (exclude affiliation) and the contribution (e.g., G. C. White and E. O. Garton reviewed an earlier draft of the manuscript).

LITERATURE CITED

You are near the end of a long study and want to submit your paper for publication and not think about it for a few months (a case of out of sight, out of mind!). Admittedly, this section isn't the most exciting to write, but is nonetheless important to be accurate and inclusive (Krausman and Cox 2017). Speaking from personal experience (as I'm sure we all can), it is especially frustrating for reviewers to track down citations that are not accurate, do not appear in the literature cited section, contains misspelled author names (which is

unprofessional), or otherwise misidentifies references by including errors in the title (Krausman and Cox 2017). I know you're anxious to submit, but take your time to ensure that papers you cite are included in this section and are cross-referenced with in-text citations. Examples of citations you may use are included in the current *TPN* guidelines for authors. These are just a summary of the basics. Familiarize yourself with the author guidelines and stay informed of editorial changes by reading journal editorials (Krausman and Cox 2017).

NOTICE TO PROSPECTIVE AUTHORS

The Great Plains Natural Science Society will be accepting abstracts for publication in *The Prairie Naturalist* from completed theses and dissertations (completed after 1 January 2018). The intent of this effort is to provide a venue for research conducted on the Great Plains that may not otherwise be widely circulated, allow researchers on similar topics to network with other professionals, and provide graduates a means to build their resume. Abstracts should be brief (no more than 250 words), but include the following elements: (1) a statement of the problem and objectives, (2) a summary of methods or your research approach, (3) the significance of the proposed topic, and (4) a brief summary of primary findings that can be understood independently from reading the complete thesis or dissertation. Rather than writing this abstract for your dissertation committee or professors, this abstract should be understandable to the general reader, and present the positive and negative implications of the work. The abstract should tell readers whether they want to look at your thesis or dissertation in more detail. Format for these abstracts should follow that currently used for *TPN* articles. Submission of abstracts does not preclude authors from submitting full-length articles to *TPN*. Publication cost will be \$45 per abstract. Authors should submit abstracts and articles via email to *The Prairie Naturalist* (theprairienaturalist@gmail.com).

In closing, if you have any questions, comments, or helpful suggestions for improving *TPN*, please feel free to contact me. After all, this is your journal, and I very much appreciate your thoughts about it. Until next time, Happy Writing everyone!

—Christopher N. Jacques
Editor-in-Chief

LITERATURE CITED

Andersen, D. E. 2015. Reporting animal care and use authorization in manuscripts published in journals of The Wildlife Society. *Journal of Wildlife Management* 79:869–871.

- Brown, M. L., and J. A. Jenks. 2009. Guidance for the Successful Preparation and Submission of Scientific Manuscripts. Chapter 4 *in* Scientific Communication for Natural Resource Professionals. American Fisheries Society Books.
- Dickson, J. G., R. N. Conner, and K. T. Adair. 1978. Guidelines for authorship of scientific articles. *Wildlife Society Bulletin* 6:260–261.
- Jacques, C. N., T. W. Grovenburg, and J. A. Jenks. 2012. Updated manuscript submission guidelines for *The Prairie Naturalist*. *The Prairie Naturalist* 44:111–128.
- Krausman, P. R., A. S. Cox, and A. C. S. Knipps. 2016. Abstract abstracts and other abstractions. *Journal of Wildlife Management* 80:955–956.
- Krausman, P. R., and A. S. Cox. 2017. Abstract abstracts and other abstractions. *Journal of Wildlife Management* 80:955–956.
- Merrill, E. 2015a. Sensitivity and integrity of authorship. *Journal of Wildlife Management* 79:171–173.
- Merrill, E. 2015b. Are management implications for the Journal ceremonial? *Journal of Wildlife Management* 79:1–2.
- Merrill, E. 2015c. Where we go wrong: issues of dual publication and self-plagiarism. *Journal of Wildlife Management* 79:355–356.
- Merrill, E. 2015d. A word about supplemental materials. *Journal of Wildlife Management* 79:1039–1040.
- Merrill, E., and A. Knipps. 2014. What's in a title? *Journal of Wildlife Management* 78:761–762.